

A Bibliography of Publications about Bitcoin and Digital Cash Systems

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: <https://www.math.utah.edu/~beebe/>

05 May 2025
Version 1.128

Title word cross-reference

\$1.2M [McM13]. **\$10** [Pop17a]. $100\times$ [CEN14]. **\$145** [Cim19]. **\$190** [McK19]. **\$1m** [Sou13]. **\$2** [Goo18]. **\$28.5** [Gre13]. **\$3.3** [Cim18a]. **\$37** [Lee13]. **\$400** [Nak18]. **\$400M** [Gal18]. **\$530** [YWW⁺18, YWS⁺18]. **\$62m** [Nic17]. **\$735** [Osb18b]. $+$ [ZY21]. δ [LL17b, LL17c]. *PCS* [KLR⁺17a]. *N* [ZGR17]. $n/2$ [XHST20]. *t* [PCP20].

*** [SKNM21].**

-Bitcoin- [BS17a]. **-privacy** [LL17b, LL17c].

/ACM [TODM19].

1 [BH15]. **150** [Woo14]. **16th** [Ker12]. **'17** [ACM17c]. **17th** [Sad13]. **18-Month** [De18]. **19** [ACKJ22, CTM22a, HSJ⁺21, WKD22, ZKU⁺23].

2.0 [AMLH18, SI16, Six17b, SALY17, Uli16]. **2014** [Uni14]. **2019** [TODM19]. **20th** [GP17b]. **256** [BBDN21, FA21].

3.0 [DM20]. **34th** [OF15]. **3rd** [ACM17d].

4.0 [EHA22, GSF⁺20, MAAAW⁺22].

5.0 [GRM22]. **500** [SS19]. **5G** [ICGB21, KGA⁺22, LM20, NPDS20, Ser21, SJ21, WHY⁺21, XCZ⁺21, ZGR⁺22]. **5G-enabled** [ICGB21].

'83 [CRS83]. **8th** [Jue04].

ABE [GLY⁺21, HLF⁺21, SJB22]. **Ability** [SGF⁺17]. **abnormal** [HYWY22, LTB⁺22]. **Abstract** [BLMR14, DNSY14, Hil14, Hul17]. **abstracted** [YML⁺22]. **absurd** [Fai19]. **Abu** [ACM17a, ACM17b, ACM17d]. **Abuse** [VBC⁺17]. **Academic** [LHZ17, NC17b]. **Accelerated** [SPS⁺21]. **Accelerating** [GADO17, SZ13, Yan21]. **acceleration** [Dev14]. **Acceptance** [Hut17]. **Access** [DMR17b, DMR19b, HHK18, ISM17, OEO16, OEO17, TSY⁺21, ARL20, AAC⁺19a, AAC⁺19b, AGK22b, CMJ21, Cim19, DSN17, DHH⁺22, GGJ22, Gir18, LGCY22, LHH⁺18, LQZ⁺20, PDJ22, RGB20, SI16, SJB22, SJSY21, ZLH⁺20, dAdSM⁺22]. **Account** [CLJ⁺21, ZWQ⁺16]. **Accountability** [GP17a, HM16, KAR⁺15, NSNF17, CLT⁺20, CCH21]. **Accountable** [BNM⁺14, GGJ22, VR15, vdHEM⁺17, HLF⁺21]. **Accounting** [Bys19]. **Accounts** [CLJ⁺21, Dre17k]. **Accreditation** [BK22]. **Accumulator** [SALY17]. **Accumulator-Based** [SALY17]. **acéphale** [TFG17]. **Achieving** [GAdFGMA21, GLY⁺21, GWF⁺21]. **ACIDRain** [WB17]. **ACM** [ACM17a, ACM17b, ACM17d, TODM19, MFR⁺21]. **ACNS** [IKY05]. **Acquire** [RS14]. **Across** [BGPW16, GCL16, WXH21, AAC⁺19a, GDKJ22, Tre22, ZAE20]. **act** [Pec15]. **active** [Goo18, HZT⁺22]. **Activities** [ME17, WPC⁺22, NBP⁺21]. **Activity** [BLMR14, CTM19, KFBI22, LTC⁺19, RRM18, Smi18, YNS16, IFD⁺19]. **Activity-Based** [YNS16]. **Actors** [DWS21]. **Ad** [CGFH16, KT18, LMH16, RLS⁺21, NAR⁺22b]. **Ad-Hoc** [RLS⁺21, CGFH16, KT18, LMH16, NAR⁺22b]. **Adaptable** [LX17]. **Adaptive** [XWY⁺21, AAGX⁺22, RZJ20]. **Added** [WLSZ17]. **Adding** [DGHK17, Dre17z]. **Address** [EPY17, FPKH17, FPD⁺21, HM16, NH17, WLY17, WTW⁺23, CAS21, Goo18, SPZ⁺20]. **Addresses** [Cha81, GCL16, FBGMPS23]. **Addressing** [DNP17]. **Adhocracies** [Uli16]. **adjacency** [LX21]. **Adjusting** [KJ17, KJ18]. **admin** [Cim19]. **administration** [AR15]. **adopting** [AZR⁺20]. **Adoption** [AA20, BBBB15, Böh13, Fug19, Gou19, Mei18, PZZ⁺20, SVL17, Str18, KVP21, MAAN19, WCX16]. **advanced** [CAMS20, GLTS22]. **advancement** [PC21]. **advances** [AKT21, MKY⁺21, CRS83, OF15]. **Advancing** [BLBS17]. **advantage** [PR16]. **adversarial** [ZSGB⁺22]. **adversaries** [KDF13]. **Adversary** [RKTv22, XHST20]. **Adversary-resistant** [RKTv22]. **advice** [Far18b]. **aerial** [LGL⁺22]. **Affect** [Mic14]. **affected** [FB17a]. **affine** [CS15]. **Affinities** [KD16]. **Afford** [BBH⁺13]. **Affordances** [Vel16]. **After** [KKS⁺17d, KKS⁺17c, LL18, McK19, YWW⁺18, YWS⁺18, YCP⁺21, Abe18, Cim19, K.13]. **again** [Cim19]. **Against** [ABL⁺18a, HYP⁺22, JLG⁺14, ZP17b, Bee16, Boi18, EGB18, FTS⁺20, MLYL20, SGM20, YSLH17]. **Age** [Tay13, Fin17b, VC15a]. **Agenda** [GK14, CRdK16]. **Agent** [CTM19, LUBS18, PSY21, SJ21, Sko19]. **Agent-Based** [LUBS18]. **Agile** [IPL⁺18]. **aging** [BBDN21]. **agree** [PCM⁺21]. **Agreement** [SL20, WHW22, BZK⁺21, NAR22a, NAR⁺22b, XLL⁺21]. **Agri** [CMT⁺21]. **Agri-Food** [CMT⁺21]. **agricultural** [RWG21]. **AI** [BT18a, BKS19, DT18, KGTK20, Liu18, MSA⁺22, TNJJ22]. **aided** [AC19, BKV22, Sko19, SZM22]. **aim** [Sal18]. **Air** [Ro13]. **Aircraft** [Ale18a, WLN⁺21]. **Aktuelle** [Six17a]. **Algorand** [CM19]. **Algorithm** [DLL97, DCY⁺22, MGS22, Pop16a, SYB14, Ste17, XCW⁺22, Che18, DLL00, DXW21, FWP21, HZLH19, ML20, XHP⁺21, XWZ21, XLZ20, XBX⁺22, ZWH⁺20]. **Algorithm-Based** [MGS22]. **Algorithmic** [BT18a, Coh20, LN15, Lus18, Roi18, GS15a].

Algorithms [Bik16, DRS22, Gou19, LWL+22b, XCW+22, vM18, FCH21, Fin17b].
Alle [GH17]. **Alleged** [Gre13]. **alliance** [LYZ+21]. **Allocating** [BERHE19].
Allocation [HYP+22, JWNS19, RKTv22, BKV22, BSF22, QL22, YZC22, ZZW+21, ZGR+22, ZLS+22]. **Almost** [Coe08, IM16].
along [Mei18]. **Also** [RS21a]. **Alternative** [Bhe17a, BLNN17b, But13a, GCD16, Gri11, Hil14, Kel15, KH17]. **Am** [AABM17, XGS+20]. **amalgamation** [KGTK20]. **Ambient** [FAC22]. **Among** [Dre17g, MPJ+13, CK16, HS19a, LGK+22, MPJ+16, SWY+21, YZC22]. **Amortizable** [Bac02b]. **Amortizing** [KB16]. **Amounts** [AK14]. **Amplifying** [ABF+16]. **Análisis** [RSR17]. **Analysing** [Web21, YCP+21].
Analysis [ALGK19, AS14, Ano21a, AC17, BRS17, BP17a, BSB19, BP14, Bri21, CLZ+20, Chr13, Cor19, DNP17, EKK+17, FNP17, Gao17, GS20b, GS20a, GHJ21, GZ18, Gos17, HQ15, HBJB14, JLG+14, JCG17, JLLK23, KM20, KFB12, KKM14, KKS+17a, KFTS17, KKS+17b, LJG15, Leo20, LBS+15, LKL+14, LZZ21, LPS20b, LSH13, MMR16, Mah18, MKS+19, MC13, Nav17, NAH16, NWGF20b, OO19, Ort16, PSS17, Pop16a, RT20, RH11b, RH11a, RH13, RSR17, RS13, Ros11, SLS20, SIDV14, SL18, SS19, Suk19, Swe16, TDW+22, TSL+17, TOM17, Tre21, VTM14, WCY19, WLW22, WPC+22, Wey19, ZWLS18, ZZ16, ZDL17a, dBHC17, AABE20, ASB+21, ALMLS16, BCCS20, Cap15, CA21, DMR17a, DMR18, FRF+19, GKL15, GC08, GHG+21, JB21, KAK21, KSA22, Li14a, Li14b, LZDA16, LTBY20, LHL21, LWZ+21b, MYSZ19, MM17, MSMH21]. **analysis** [NPB+21, NAH15, NWGF20a, SC21, wScCcS21, SGK21, Ün21, WdLY+19, YS20, YS21, EH24, MLM16, ZDL17b]. **analytic** [WLW+19]. **Analytical** [KK17a, KT18, KK17b]. **Analytcs** [BLPB17, BS17a, Moh19, TSHI22, VRK21, VMMA17, XAZY17, XAZY18, DNZ+19, UHK+21]. **Analyze** [CTM19]. **Analyzing** [DWC+17, FSW14, GDP+17, GGS19, GGS20, KLM17, LSO+15, LF16, Liv20, OAS+21, dSR21, ZP17a, GKJ+20].
anchored [NNGV19]. **Ancient** [Ber17]. **andere** [Six17e]. **Andrew** [Ano16c, SM-16].
Android [Chi13, Duc13, Seg18].
Announcement [SPB17]. **Announces** [Men19]. **Annual** [OF15]. **Anomaly** [Bog17, KPJ22, MGE20, WLZ20].
Anonymity [BLSD17, BNM+14, HJ15, JMM14, KL18a, KKM14, OKH13, RH11b, RH11a, RH13, SMD14, VFV17a, VFV17b, VFV17c, WLY17, AAGA19, BSK+20, DKJG19, MB17b, ZSGB+22].
Anonymization [WBK+17, MB17b, XWY+21].
Anonymizing [DS15, WLS+16].
Anonymous [BSCG+14, BK17c, CLJ+21, Chr13, GCH+22, GM17, HBG16, Ibr17, MGGR13, ML14, Muf16, SCG+14, WCX21, LLC+20, LCZL21, MBK+21, MY11, SJX+20, ZLL+19a, ZMH+17, ZMH+18].
answer [Pec12]. **Answers** [Pav18]. **Anti** [Alz19, Bra13, AB20, AHC+21].
Anti-BIUFF [AHC+21].
Anti-Counterfeiting [Alz19, AB20].
Anti-Theft [Bra13]. **Anwendung** [WLS17].
Anwendungsfall [FRSU17]. **anything** [Nor17a]. **apologizes** [Gal18]. **App** [BCM16, MCS+21]. **apparent** [Osb18a].
Appetite [Pop18a]. **Applicability** [Scr18, Älv18]. **Application** [Bik16, But13b, CDD17, DXR+17, GGN16, HG15, HHO+21, IM21, Jas18, KTCI21, Kue18, KPJ22, OOF+17, Son18, Swe16, Zam19, AAE19, Ano21c, DSM+17, GL16, IFD+19, KTA+20, Sar21, WMD+21, XWZ21, ZTSS20, ACW17, WLS17].
Application-Specific [Son18].
Applications [ACA+19, Ant21, Big20, BLNN17a, BLNN17b, CM16, CGT+21, FAC22, GH05, HSS+20, HLC+17a, Kat16,

LLH⁺20, MGM⁺17, McC18, NVWF14, OF15, Pan18, PRS22, SG19, SHL⁺20, SC20, VSE21, VMMA17, WDLS17, WB17, ZMKR22, Zha19, ZDW21, Ano21b, BTS⁺21, BLB⁺21, CK16, CXLC18, CXC⁺20, DMH18b, DM20, ES16, GKL15, HAZ21, JYTW21, KAP20, KSLC21, LTW⁺21, MPSW19, MBF⁺20, MCLH19, MFE⁺20, Pil16, TPE20, TVK⁺20, TLS⁺21, VD21, WDL⁺18, WMHL21, XLL⁺19, ZWH⁺20, ZWC21, ZZ16, dORM⁺20, HYL21]. **Applied** [KT22, Wu19, IKY05]. **Apply** [Int14]. **applying** [NML19]. **Approach** [CXS⁺17, DH17, EZR⁺22, GMH21, GWF⁺21, HZ21, HRF17, JSKV16, KK17a, LWZ⁺21a, Liu19, LSH13, MZWX21, Mis17, MMT16b, NSNF17, Nia19, Not19, PRS22, RAH⁺15, RFM⁺18, SCYP17, SOA17, XWL⁺19, Yan21, AAGX⁺22, Bar17, BS20, CLS19b, CLS20, CBST22, DMR19b, DTK20, FOA17, GLW⁺20, HLF⁺21, HVM⁺18, LCSR21, LLC⁺20, LDM⁺21, LZZ⁺20, MAM22, MFE⁺20, URC20]. **Approaches** [DPN⁺22, EBD⁺20, SPZ⁺20, AMME21, JO13]. **Appropriation** [KD16]. **Approval** [AH12]. **Approver** [Hal21]. **Approximate** [DDX17, VDK16]. **Approximation** [ZY21]. **April** [ACM17a, ACM17b, ACM17d, JRB⁺17, OF15, Sad13, Uni14]. **AR/VR** [Per20]. **Architectural** [AS14, WLL⁺13]. **Architecture** [AMGBK22, AS14, CCH⁺20, GANT21, LLH⁺20, LST⁺17, PPR⁺20, RBL⁺17, SRP20, SNKG20, VDG19, WXH21, Wer18, ZGY⁺21, Ano21b, Ano21d, CSKP21, ESP22, GDA⁺21, HSGY20, KAP20, LML⁺19, PGS⁺21, PSY21, PK22, RKP19, STN22, SJB21, YLM21]. **Architectures** [BLB⁺21, FS16, dSR21]. **Archival** [LS17]. **Area** [BL22, HCB⁺22, LZZ⁺20]. **Areas** [CGFH16]. **Argentina** [McL13]. **arithmetic** [TML⁺22]. **Arms** [Mat14, Pec13]. **arrest** [Ano18i]. **Art** [DPS⁺21, Swe16, Zei16, GGDK20, NPDS20, SCP⁺20]. **Artificial** [LZC⁺17, SG19, SRP20, Che18, DAT21, DXW21, DNZ⁺19, GS20b]. **Arvind** [Ano16c, SM-16]. **AS-level** [FSW14]. **Asia** [ACM17a, ACM17a]. **ASIC** [KZVT17, MKGT16a, MKGT16b, TVK⁺20]. **ASICs** [Bon14b]. **Aspects** [Dre17v, Eva14, Sch98]. **Assessing** [LX20, MSA⁺22, SBL19, YCMM20]. **Assessment** [Ano18g, BBH18, Mai18, CPSGAA20, Gof19, GKA⁺21]. **Asset** [BW17, GZH⁺14, KMOD17, YF22, Fan22, LTW⁺21, PBHM21, WMD⁺21, Wij16]. **Asset-Based** [KMOD17]. **Assets** [COE⁺20a, JYKA19, NCS17, WLW22, WSZN18, CAMS20, MKL⁺22, Nor17c, WHJ17, WHJ20]. **Assignments** [HYP⁺22]. **Assistance** [LR22]. **Assistant** [NTRK22]. **Assisted** [DNY17, FAC22, SJ21, ARL20, MISS22, MLTT20, XLL⁺21, ZSL21]. **Associated** [Van14b]. **Assurance** [LN17, HS20]. **Asymmetric** [BK17b, SKG22]. **Asymptotic** [GFLS21]. **Asynchronous** [FZG⁺22, PSS17]. **Atomic** [MPSP17, ZAE20]. **Atomically** [MCHM17, MHM17]. **Attack** [AMEF21, BS16, BRS17, EHA22, Kam17, Ker18b, KKS⁺17b, RS21b, So19, SPB17, SOA⁺21, TSL⁺17, WWZ⁺22, ZL19, Bee16, HS20, PR16, SSV22, WLS22, WdLY⁺19]. **Attacked** [Sou13]. **Attacker** [Goo18, Osb18a]. **Attackers** [Kan18]. **Attacking** [ZSGB⁺22]. **Attacks** [ABL⁺18a, AMGBK22, AZV17, ABC17, AV22, CGGN17, CPNX20, EH24, GZ18, GAK17, JLG⁺14, Ker18a, KKS⁺17d, KKS⁺17c, LJG15, MSH17, SCN⁺22, SRB20, SGDT19, VTM14, WB17, WLLH21, Ano18e, Ano18k, CEW15, CSC16, FTS⁺20, Fir18, Ker18b, KKS⁺17a, KKT⁺22, MLYL20, NAH15, QHW⁺20, SKNM21, SGM20, Xu16, XGS⁺20, YTLD19, ZLL⁺18]. **Attention** [HZ21, HSB17d, HSB18h]. **attorney** [Far18b]. **Attribute** [SZM22, AGK22b, GGJ22, XWY⁺21].

Attribute-based

[SZM22, AGK22b, GGJ22]. **Attributes** [CDD17, NTKS17]. **AttriChain** [SJX⁺20]. **Auction** [JWNS19, NT21, QL22, BKV22, CLXW22, MXW22, SZdLZ22, ZLS⁺22].

auction-based [BKV22]. **auctioneer**

[DB16]. **Auctions** [Dim19, DB16]. **Audio** [NPG⁺22]. **Audit**

[Bon16b, RSGA⁺21, SS17b, ASM19, ZBF22].

Auditable

[AGK22b, Bac02b, CMM⁺22, SBHD17, DMR19b, HSX⁺21, PMP19, Yue20].

Auditing

[CCH⁺20, ECdO17, YMHY21, FBL⁺20, HAZ21, HZY⁺19, LKP⁺21, XCZ⁺22].

auditor [CFM⁺22]. **AUGChain** [PCC22].

augmented [Pou20]. **August** [CRS83].

außerhalb [WLS17]. **Auswirkungen**

[Blo18]. **Authenticated**

[MSCH15, ZCC⁺16, Yue20].

authenticating [PL20]. **Authentication**

[CCC19, DGP17, GADO17, GPPB⁺21, IK17, JLY⁺19, Kri19, Kue18, LN17, LLW17,

ML15, XJY17, CHL19, EFFM21, FA21,

HHBS18, HZ20, LCZL21, LHH⁺18, ML17,

NML19, PCC22, PHH⁺20, SI16, VD21,

WLC⁺22a, XZL⁺22, XLL⁺21]. **authorities**

[YYN⁺20]. **Authority**

[LN15, Lus18, Gon17]. **authorization**

[MHL20, WLC⁺22a, YWX⁺22].

Authorized [LWL⁺22a]. **Authorizing**

[Dre17a]. **Automata** [ADM14b, DCK17].

Automated [Bik16, EMEHR17, GDP⁺17,

Nar19, NPS⁺17, YW18, HFP⁺22, KBTT20,

MISS22, ML20, PdWWS16]. **Automatic**

[CK16, EPY17, Ler14b, LTBY20, ADZ23,

HS19b]. **Automation**

[BT18a, CCH⁺20, NNGV19]. **Automotive**

[FS16, SDK⁺17, Ano21e]. **Autonocoin**

[Abr16]. **Autonomous** [DAAY22, HYLY19,

KUBS22, NST⁺17, NOT15, Shi19, YMHY21,

DMSCA20, KGA⁺22]. **Autoregressive**

[HG15]. **Availability** [ASB⁺21, LST⁺17,

LDH17, JO13, MOM22, ZLX⁺17]. **available**

[RST11]. **Average** [Smi18, LX21]. **Avoid**

[KKS⁺17d, KKS⁺17c]. **Avoidance**

[Hea13, SFMC21]. **AWAP** [XWY⁺21].

aware [BK22, PK21, RDDB19, SSSJ19].

Awareness [SOA17].

B [DRS22, DHH⁺22]. **B-DAC** [DHH⁺22].

B-IoV [DRS22]. **B2C** [Blo18, Blo18]. **B2H**

[GRM22]. **B3** [Mor17f, Mor17g]. **B4SDC**

[LDY⁺22]. **B5G** [WQGX22]. **B5G-driven**

[WQGX22]. **BA** [SZM22]. **BA-RMKABSE**

[SZM22]. **BACI** [AAC⁺19b]. **back**

[Fai19, Gra20, Sha17]. **Backbone**

[GKL17, Ler14b, GKL15]. **Backed**

[WB17, GMS17]. **Background**

[Du21, HSB18a, HSB18c, HSB18d, HSB18b,

SBA21]. **Backpage** [PHD⁺17]. **Backward**

[ZP17b]. **Backward-Compatible** [ZP17b].

Badger [MXC⁺16]. **BAFL** [FZG⁺22].

Bakery [CMT⁺21]. **Balanced** [WXH21].

Balances [AK14]. **Balancing** [LWL⁺22b].

Balloons [BDOZ11, BDOZ12]. **bang**

[Kel15]. **Bank** [CMS21, LLHW20, LP18c,

LP18d, RRD17, Nis16b, Son14]. **Banken**

[KFR17, KFR18, Möl13]. **Banking** [CPM17,

Doz18, Eya17, MDAP16, MAP16, PP16,

Sch14a, GL16, Ito18, LGCY22, WMD⁺20].

banknotes [Nis16a]. **banks**

[KFR17, Möl13]. **bans** [K.13]. **BARA**

[BKV22]. **Barbados**

[BBMS14, CSN14, CMR⁺16, GP17b].

Barbara [CRS83]. **Based**

[ARBK17, AVA21, Als23, ABL18b, AAD⁺21,

BL22, BK17b, BMSS17, BK17c, Bri21,

BLNN17b, CR17, CXS⁺17, CGLR19,

CTM19, CMT⁺21, CTM22b, DFKU20,

DMR17b, DCY⁺22, DHES16, Eti19,

FZG⁺22, GPPB⁺21, GSF⁺20, Gya21, HS16c,

HLC⁺17a, HTCW17, HTCW18, HLC17c,

HYP⁺22, HM19, HP19, HRF17, IGRS16,

JCHSR16, JL17, Kad18, KFN⁺17, KK20a,

KXSS21, KMOD17, KKS14, KET⁺17,

KUEE17, KUEE18, KLL⁺15, Ksh20, Ksh21,

LMWL17, LUBS18, LLW17, LWY⁺19,

Lin21, LZC⁺17, LLP⁺20b, LLL⁺21b,
 LGGB⁺21, LX17, LSH13, LZZ⁺22, ME17,
 MGS22, Mer88, Muf16, Nar19, NPG⁺22,
 OEO16, OEO17, PPR⁺20, PTPR17,
 PTPR18, PYC21, RC19, RSGA⁺21, RBB19,
 RBL⁺17, RBS17, SNM17, SBRS16, Ses18,
 SW21, SY22, Shi19, SNKG20, SL20,
 SCZ⁺21, SGDT19, SALY17, Van14b, Vas17,
 WMG⁺21, WL21, WHW22, WLSZ17, Wör16,
 WDS21, XAZY17, XSC⁺17, XAZY18].
Based [XWL⁺19, XNC21, YNS16, YPFY21,
 Yan21, YW18, YMHY21, ZWW⁺17, ZzH21,
 ZY21, ZG15, ZGY⁺21, ACKJ22, AKA⁺22,
 AHSZ21, AB17, ABB⁺19, AAJ21, ASK⁺21,
 AAC⁺19a, AAC⁺19b, AHH20, AZDF22,
 Ano21e, AAGA19, AGK22b, ANMM22,
 BYR⁺20, BAS⁺22, BK22, BKV22, BJ20,
 BAJ20, BLSD17, BPT⁺22, BTS⁺21, Bhe17c,
 BSF22, BS20, CLT⁺20, CA21, CSKP21,
 CJA⁺19, CAA⁺22, CJW17, CLC⁺19,
 CLS19a, CXWY21, CFM⁺22, CLXW22,
 CLS⁺19c, CLH⁺20, Coe08, CHL19,
 CMM⁺22, DFKP13, DMSCA20,
 DSPSNAHJ20, DDPS22, DMR19b, Dim20,
 DSC21, DAV20, ESP22, ES16, FOA17,
 FSY⁺19, FWP21, FLL⁺22, FY19, FYZ⁺21,
 FA21, GS20a, GWL20, GLC⁺22, GRU22,
 GLF20, GGJ22, GAdFGMA21, GCH⁺22,
 GKA⁺21, GLY⁺21, HHBS18, HCB⁺22,
 HSC21, HSGY20, HFP⁺22, HLF⁺21, HYL21,
 HYLY19, HAZ21, HLP⁺21, HZT⁺22,
 HCW⁺18, HLC19, HZY⁺19, HZX⁺20, HZ20,
 HSX⁺21, HS19b, Hul17, IFD⁺19, JMK17].
based
 [JB21, JLX⁺19, JGL⁺20, JAK19, KBTT20,
 KOM⁺20, KOS⁺21, KOM⁺22, KGA⁺22,
 KRK21, KMAJ21, KAP20, KAK20,
 KKK⁺21, KAK21, KUE17, KGS⁺19, KK21,
 Kra15, Kra16a, KKM19, KBS⁺21, KSLC21,
 KTM⁺21, LDWS17, LCSR21, LL16, LL17a,
 LM20, LLH21, LCL⁺22, LCB⁺20, LMH16,
 LLCF21, Lev17, LTMW19, LHL20, LWQ⁺21,
 LCZL21, LLCH21, LWA21, LZY22, LGL⁺22,
 LST⁺17, LWZ⁺21a, LGCY22, LHH⁺18,
 LHZ⁺21, LT17, LDM⁺21, Liu18, LHO⁺20,
 LLZY20, LZZ⁺20, LHL21, LLL⁺21a, LX21,
 LWCX21, LSZ⁺21, LYZ⁺21, LQZ⁺20,
 MHL20, MXW22, MKY⁺21, MZA⁺20,
 MBK⁺21, MISS22, Mea19, MTR⁺21,
 MAM22, MLYL20, MLTT20, MNB⁺17,
 Mö22, MGN⁺22, MyPLK22, ML20,
 NAR⁺22b, NSNF17, NT21, ÖY17, PHRH21,
 PCC22, PGS⁺21, PSY21, PK22, PMP19,
 QHNL21, RGB20, RRF22, RKP19, RLQ⁺21,
 RLS⁺21, RS21b, RSH22, RSJP19, SGM20,
 SPB⁺22, SCE21, Sar21, SBA21, SBHD17,
 SAS⁺21, SMM⁺20, SJB21, SWG21, SJB22].
based [SWY⁺21, SLG⁺21, SSL⁺19, SK18,
 SV19, SSSJ19, SZM22, Sub18, SYZ16,
 SYCC21, TADS20, TGC⁺21, TPE20,
 TKBK22, TLS⁺21, TMTB19, URC19,
 VBST21, VMMA17, WGC19, WMD⁺20,
 WHA⁺20, WCX21, WCZ21, WWZ⁺21,
 WHY⁺21, WLL21, WLS22, WLC⁺22a,
 WWZ⁺20, WMHL21, XHP⁺21, XWZ21,
 XLZ20, XWW17, XZL⁺22, XJB⁺17,
 XLL⁺19, XCZ⁺21, XLL⁺21, XZZ21,
 XCZ⁺22, YKJK21, YCX18, YZL⁺19, YL20a,
 YLM21, YWX⁺22, YL20b, YLN⁺19, YZL22,
 YLZ⁺20b, ZCJ⁺21, ZWH18, ZSM22, ZW15,
 ZWS⁺20, ZTSS20, ZWH⁺20, ZLH⁺20,
 ZNX⁺21, ZYL22, ZZB⁺22, ZGR⁺22, ZLT⁺19,
 ZWX⁺19a, ZWX⁺19b, ZSL21, ZWY⁺21,
 ZDL17a, ZDL17b, ZWGC19, ZGZ21, ZLW19,
 ZTJ⁺21, dAdSM⁺22, dORM⁺20]. **Basic**
 [Gar17, Lei16, Ber13]. **Basics**
 [Dre17b, BP17b]. **Basis**
 [HQ15, LLHW20, Six17e, Spr13, RBM17].
BASM [Hal21]. **batch** [HYLY19, RLS⁺21].
Batching [SS12, SS13]. **Batters** [Chi13].
Bayesian [Alz19, DH17, JL17, JSKV16,
 PCP20, SZ14, SZdLZ22]. **BC** [DKJ19].
BCC'17 [ACM17b]. **BCDN** [AC19].
BCEdge [ZSL21]. **BCON** [AAC⁺19a]. **Be**
 [AP20, Kan18, KKS⁺17d, KKS⁺17c, Bon14b,
 CAMS20, CEN14, EHA22, Fai17, PW17a].
beast [Fai17]. **beat** [Pec16]. **become**
 [CRdK16, Nor17b]. **bee** [DXW21]. **Beef**

[RBB19]. **before** [Far18a, Uni14]. **befuddled** [Bar14]. **beginner** [BDP17a, Pro13, Pro14]. **Beginners** [Ale18b, KRL17]. **Behavior** [HLC⁺17b, LHL21, LGGB⁺21, AZR⁺20, KOM⁺22, HWW⁺20]. **Behavioral** [ESLB20]. **behaviours** [DMR17a]. **Behind** [KD20, LZDA16, Gei16, TT16, TTC16]. **Behold** [DMH18a]. **being** [Far18a, Lew15]. **Belief** [Abr16, NVE⁺21]. **Bell** [BW17]. **Benchmarks** [vM18]. **Beneath** [ZWW⁺17]. **Benefit** [FS16, HB14]. **Benefits** [HJHBG22, Uni14]. **Bespoke** [Tay13]. **Best** [Hal21, Rao14, WK19, CJA⁺19]. **Best-coins** [Rao14]. **bet** [Ito18]. **Betfunding** [JCHSR16]. **Betrayal** [Mez19]. **Better** [BBSU12, Spo17, WM18, Lew15]. **Between** [Chi18, HJHBG22, LJG15, Nar19, Nis16b, BSKR21, FAS21, GTMP14, HZ21, JYKA19, JJ21, KLDS20, KCS⁺14, SKG22, WLW22]. **Beware** [MC13]. **Beyond** [Bec18, BdL13, GCD16, HS16b, HS16a, Øln16, Tro15a, TS16, Uli16, Ano21b, BGPW16, Bre17, BT18b, CV18, Ext15, NPDS20, Und16, ZGR⁺22]. **BFT** [FWP21, MXC⁺16, Sal22, Vuk16]. **BGP** [XWW17]. **BGPCoin** [XWW17]. **bi** [CTGJ22]. **bi-directional** [CTGJ22]. **bias** [Cra17]. **bibliometric** [FRF⁺19, GHG⁺21]. **bid** [CLXW22, QL22]. **bid-rigging** [QL22]. **bidding** [CLXW22, LLJ21, SCE21]. **Bidirectional** [ZFW24]. **bifolded** [JB21]. **Big** [CSZ⁺21, CGLR19, Dre17q, Ito18, Liu16, Pav18, TSCT18, Wol18, XWL⁺19, Cha85, CLS19a, DPN⁺22, ESP22, HLP⁺21, Kel15, Lee15, LP17b, LP17c, LP18b, Tun18, UHK⁺21]. **BigFoot** [Sal22]. **Billionaires** [Mez19]. **billions** [Gei16]. **BIM** [CTM22b]. **Binance** [Ano19a]. **Binary** [KJ17, KJ18]. **Biomedical** [MGDEK17, MGDEK18]. **Biometric** [PPR⁺20, Sar21]. **biometric-based** [Sar21]. **Biometrics** [KFN⁺17, BILN21]. **BIPS** [Sou13]. **Birthday** [BK17b, Lar13]. **bis** [MG16]. **Biscotti** [SFYB21]. **BiSign** [AAGA19]. **Bit** [Sza08]. **BitAnalysis** [SXYL23]. **BitBeat** [Vig15]. **BITCOIN** [BCJR15, CSN14, CMR⁺16, JRB⁺17, ADQH22, ALGK19, AGK22a, Als23, Ano18a, AZR⁺20, Ape14, Ara21, AW18, AAPZ19, AKWW19, AV22, ARL19, BM20, BLZ20, BLMZ20, BLMZ22, BCV19, Bec14, BSKR21, BDF⁺22, BGN⁺22, BdL13, BW14, BS17a, BBMS14, BSF22, BERHE19, CAS21, CLS19b, CLS20, Cim18a, CTM22a, Coh20, CELR18, CMS21, DWS21, DSW14, DSBPS⁺18, DMR19a, Dir19, Dus14, EHA22, EH24, EZR⁺22, Ext15, ES18, FGHM17, FPD⁺21, FS20, GMH21, GTMP14, GHJ21, GHJ22, GBE⁺18, GZ18, GB22, GKKT16, GGS19, GB21, GGKR21, GAF18, GLG19, Gya21, HS20, HSS⁺20, HZ21, Han13, HJHBG22, HSY⁺21, Ibr17, IST19, IM21, JYKA19, JW18, JSKV16, JLLK23, KM20, KL18a, KYLA22, KKJG⁺16, Kol22, KK21, Koo18, KL18b, KO22, Ksh22, KPJ22, KT18, KKS⁺17d, LS21]. **Bitcoin** [LL18, LS20, LUBS18, Leo20, LLC⁺20, LLWH21, LPS⁺20a, LLYL19, LLL⁺21a, LLL⁺21b, LZZ21, LPS20b, LX20, LZZ⁺22, MG16, MF19, MGS22, MPC⁺23, Mez19, MAAAW⁺22, MB17b, NSB19, NTRK22, NBP⁺21, NVWF14, OFA22, OTS⁺21, PCHD19, PASA22, PMMP19, Per22, PPW⁺15, RS21a, RRF22, RSV15, RC19, RH11b, SCN⁺22, SG21, SKG22, Sat18, Sem22, wScCcS21, SY22, SMB22, Six17f, So19, SA20, SGK21, SS20, SS19, SYH22a, SYH22b, SXYL23, TDW⁺22, TNJJ22, TB17, TSHI22, US23, VLAF21, VFV17a, WDLL19, WWQ⁺18, WGL19, WCY19, WYZ⁺20, WLW22, WPC⁺22, WTW⁺23, WKD22, WA15a, WKEM20, WPXZ20, YF22, YCP⁺21, ZLMR19, ZWLS18, ZL19, ZzH21, ZLL⁺18, ZZS⁺20, ZKU⁺23, ZSGB⁺22, ADZ23, AAGA19, Bre17, Cal21, CA21, Cha14, Cra17, DTK20, FBGMP23, GWL20, GGS20, Gon17, Hol18, IKC21, JFG18, MYSZ19, NPB⁺21, RSR17]. **bitcoin**

[Sal18, WHJ20, WQHX20, WdLY⁺19, XWZ21, XWY⁺21, RT20, ADMM13, Aro12, CSG⁺18, CRdK16, ABL⁺18a, AABE20, ALP15, ACM15, Ali15, AMLH15, AMLH18, AS14, AF16, ALMLS16, ALPBT17, And14, AKR⁺13, AK14, ADM14a, ADM14b, ADMM14, ADMM15, ADMM16, AM15, Ano13b, Ano14a, Ano14b, Ano17b, Ano17a, Ano17c, Ano17d, Ano18b, Ano18i, Ano18k, Ano21a, Ant16, Ant15, AZV17, Ast16, AMVA17, ACC⁺17, BDOZ11, BDOZ12, BMTZ17, BS16, BRS17, BDWW14, BSK⁺20, BHMW16, BBSU12, Bar17, BHI⁺14, BH15, Bar14, BP17a, BZ17, BLP17, BBP19, BSB16, BDP⁺15, BBBB15, Bec18, BBH⁺13, Bee16, BS15, Bel18, BSCG⁺14, BK14, BLMR14, Ber15, Ber13, Bik16, BKP14, BP15, BOLL14, BMSS17, Bla18, BP14, Böh13, BCEM15, BB14, BR16, Bon16a, Bon14a, BNM⁺14, Bon14b, BMC⁺15, BC16a].

Bitcoin

[Bra15a, Bra13, Bra15b, Bra17, BOS15, BC16b, BDW17, BW17, BT18b, Cae15, CV18, CC16, Cap12, Cap15, CKWN16, Car15, Cas12, CK16, CF15, CJW17, CSLD17, Chi13, CP17a, Chu15, CE12, CTM19, CM14, CP17b, CGR18, CBST22, CEN14, CGN14, CEW15, Cou16, CSC16, Cou13, CS15, Cus14a, Cus14b, DBB⁺15, DSM⁺17, DNP17, De18, DW13, DW14, DW15, DGSW15, DSW16, DVRM16, DSPSHJNA18, DSPSNAHJ20, Dev14, DMH18i, DMR17a, DMR18, DS17b, Dim17, Dim19, Dix17, DSN17, DNSY14, DNY17, DPSHJ14, Dru22, DS15, Duc13, EDS15, Ede14, Edw15, EBHBL16, ECA⁺20, ECA⁺21, EPY17, EBSC15, ECHL16, Eva14, ES14a, ES14b, EGSvR15, FOA16, FOA17, Fai17, FTS⁺20, Far18a, Far18b, FNP17, FSW14, FPKH17, Fin17a, Fox17, Fra14, FB17a, FMR⁺16, FMR⁺19, Fri14, FS16, G.17]. **Bitcoin** [GHMO17, GCL16, GKL15, GKL17, GS15a, Gei16, GGN16, GMS17, Ger16, GKČČ14, GČKG14, GRKČ15, Gev16, GK14, Gia15,

GCR16, GCR18, Gim16, GAK17, GZH⁺14, GK17, God15, GGK⁺14, Gom16, GDTP17, Gri11, GS15b, HQ15, HS19a, HS16b, HS16a, HWDD17, HLC⁺17a, HC12, Hea13, HBG16, HG15, HBJB14, HJ15, HJPS16, Hil14, Hil15, Hob13, HM18, Hou14a, Hou14b, Hou16, HCW⁺18, HB14, Hur16, Hut17, IM16, JL17, JKKX16, JMM14, JZLL17, JLG⁺14, Joh19, JSK⁺17, K.13, KAČ12, KAR⁺15, KA16, Kar16, Kat17, KBS17, KK17a, Kay17, KRL17, Kel15, Ker14, KCD17, KSCD16, Kha19, Kha15, KH17, KT15, KFB122, KKS14, KH16, KPW19, KCS⁺14, KKM14, KKS⁺17a, KD16, KL17, KDF13, KJGW17, Kru13, KB14, KMB15, Kün16, KK17b, KKS⁺17b, KKS⁺17c, LB18]. **Bitcoin** [LMLA17, LJG15, LSZ22, Lee13, Lee15, LW16, LD17, LBS⁺15, Li14a, Li14b, LZDA16, LKL⁺14, LT17, LF16, LZC⁺17, LLZ⁺17, LSH13, LN15, Lus18, Lut17, LSP⁺15, CFvdPS15, MMR16, MG16, ML15, ML17, Mat13, Mat14, MLM15, MLM16, MHH⁺16, MPSW19, MSCH15, MMSH16, MSH17, MO15, Men19, Mic16, Mic14, MGGR13, ML14, MKKS14, MJS⁺14, MKKS15, Mil15, MB17a, MM17, MK15, MSMH21, Möl13, MMT16b, MMT16a, MC13, MCS18, MBB13b, MBB14, MB15, MES16, MBB13a, Mul14a, Mul14c, Mul14b, Mul14e, Mul14d, Mul14f, Mul14g, Mul14h, NC17a, Nak08a, Nak08b, NBF⁺16, NC17b, Nav17, NHM16, NAH15, NAH16, NH17, Nic17, Nis16a, Nis16b, NWGF20b, NWGF20a, OM14, OKH13, Øln16, Ort16, Peo13, Pav18, Pec13, Pec15, Pec16, P16, PS16, PSDSNAHJ19, PCP20, PR16, Pla13, Pop15, Pop16b, Pop17a, Pop17b]. **Bitcoin** [Pop18a, Pop18b, PHD⁺17, Pro13, Pro14, PSHW20, RAH⁺15, RJK⁺17, Ras13, RC17, Rec19, RH11a, RH13, RRM18, Riz16, Ro13, Roi13, RS13, RS14, Ros11, Rot17, RMSK14, RMS17, SBL19, SCYP17, SOA17, SI16, San14b, San14a, SSZ17, SK14, SK15, SK17, SCG⁺14, Sat20, SMD14, Sch13, SBBR17,

SBRS16, SZ14, Sha17, SGF⁺17, Shi16, Sid14, SCAA13, Sir16a, Sir16b, Six17a, Six17b, Six17d, Six17c, Six17h, Six17f, Six17i, Six17j, SLY15, Sml18, SPB17, SZ13, SZ15, SZ17, SZ18, Son14, Son16b, SKG12, SKG13, Sou13, SMZ14, Ste17, Swa15a, SVS18, TFG17, TT16, TTC16, Tay13, Tay17, TD17b, TOM17, Tre22, TS16, Uni14, Und16, Ün21, UJ16, Uri17, Urq17, VR15, VG17, Van14a, VCLK17, Van14b, VGJ15, VTM14, VM15, VBC⁺17, Vas17, Vel16, VTL17]. **Bitcoin** [VfV17b, VfV17c, VC15a, Vig15, VC15b, VDK16, VD17, VX17, VSM⁺19, Vra17, Wad18, WL15, WLY17, WHJ17, WQH17, WLGL19, WLS⁺16, Wij16, WA15b, WvB14, Wör16, WZQ⁺17, Wu19, YK15, Yeo15, YV17, YSLH17, YTL19, YSZ⁺19, ZW15, ZP17a, ZP17b, ZWL22, ZG15, ZC16, ZWQ⁺16, ZGGT16, ZDL17a, ZMH⁺17, ZMH⁺18, Zoh15, ZGR17, dBHC17, dre14, vO21, Ano16c, SM-16]. **Bitcoin-Based** [Van14b, Vas17, HCW⁺18]. **Bitcoin-Exchange** [MC13]. **Bitcoin-Handbuch** [MG16]. **Bitcoin-Like** [KL18a, SG21, VGJ15]. **bitcoin-mining** [Hol18]. **Bitcoin-Netzwerks** [Six17h]. **Bitcoin-NG** [EGSV15, NWGF20b, NWGF20a]. **Bitcoin-Ökosphäre** [Six17a]. **Bitcoin-refunded** [BSF22]. **Bitcoin-Related** [KCD17]. **Bitcoin-Systems** [Six17i, Six17j]. **Bitcoin/US** [ZKU⁺23]. **Bitcoin/USD** [HG15]. **Bitcoinages** [Ano15]. **BitcoinHeist** [ALGK19]. **Bitcoins** [BSB19, DL17, Rao14, ZDL17b, ALB21, AF16, AFMdM14, BDE⁺13, Brü17, Cap15, ES16, Gre13, Hol15, MY11, McL13, McM13, MPJ⁺13, MPJ⁺16, RKS15, Six17e, ZGH⁺15]. **BitConduite** [KFBI22]. **BitConeView** [BDP⁺15]. **BitExTract** [YSZ⁺19]. **BitFlow** [HGDD20]. **BitIodine** [SMZ14]. **bitstrings** [HS97]. **Bitter** [BBSU12]. **bivariate** [PCP20]. **BIX** [Muf16]. **Blackchain** [vdHEM⁺17]. **blacklist** [WLS22]. **blamed** [Ano18k]. **Blind** [Cha83, BTS⁺21, WZQ⁺17]. **Blindcoin** [VR15]. **Blinded** [VR15]. **Blindly** [HBG16]. **Block** [BS16, BRS17, BM20, CKWN16, Dim19, HS19a, MAAAW⁺22, NSB19, OAB⁺17, PZZ⁺20, SPB17, TSL⁺17, YLZ20a, ZP17a, CZX⁺21, GS20b, GK17, GPM18, HS20, Ler14a, PB17, WdLY⁺19, ZWL22]. **block-chains** [Ler14a]. **Block-Withholding** [SPB17]. **BlockA** [CHL19]. **BlockAudit** [ASM19]. **BLOCKBENCH** [DWC⁺17]. **Blockchain** [ACM17b, AK17, ADQH22, ATZ⁺21, ABR17, AKP17, AKP18, ASSK21, ACA⁺19, AMGBK22, AP20, AMEF21, ALGK19, AGK22a, ACW17, AH19, AS18, AIM19, ARBK17, AAJ21, AA20, ASK⁺21, ARL20, Ale18a, Ale18b, AvM18, AAC⁺19b, Ali19, AAAO20, AVA21, Alz19, AAKJ22, Ami21, ABL18b, Ano18c, Ano19c, Ano21b, Ano21e, AGT⁺22, AAD⁺21, ARK20, ATD17, AMVA17, AHWB20, ACC⁺17, AC17, ARL19, Bai19, Ban18, Ban19, BK22, BABD17, BGM20, BT18a, BLPB17, BART17, Bec18, Bee18, BVGC22, Bel18, BBGP19, BR17, BAJ20, BD19, BDP17a, Ber17, BLSD17, BKS19, BSV17, BK17a, BK18, BPT⁺22, BTS⁺21, Bhe17a, Big20, BL22, BSLM20, Blo18, BCM16, BSF22, BS20, BAR21, BKM⁺17, BATB20, BC16a, BO17, BLKD20, Bri21, Brü17, BFS17, BFS18, BLNN17a, BLNN17b, But19, Cae15, CSZ⁺21, Cal22]. **Blockchain** [CDD17, CIL⁺21, CCH⁺20, CLT⁺20, CS20, CCMN17, CG16, CSKP21, CR17, CBWF17, CJA⁺19, CAA⁺22, CJW17, CXS⁺17, CQLL18, CLC⁺19, CGLR19, CXC⁺20, CMR⁺21, CTNS21, CFM⁺22, CLXW22, CLJ⁺21, Chi18, CGC21, CGT⁺21, Cob17, COE⁺20a, CPM17, CMT⁺21, CTM21, CTM22b, CCA⁺20, Coe20b, CMM⁺22, Cor19, CPMM21, CXW⁺21, CDS⁺19, Dan17a, DAAY22, DNP17, DFKU20, DW18,

DMSCA20, DTM20, DCZ⁺21, DDPS22, DMH18b, DMH18c, DMH18d, DMH18h, DMH18k, DMR17b, Di 17, DNZ⁺19, DT18, DSC21, DPS⁺21, Doz18, Dre17b, Dre17m, Dre17p, Dre17x, DF17b, Du21, DXR⁺17, DP18, DF17a, DAV20, ET17, EHA22, ESP22, ESLB20, EZ17, EZ18, Esc18, Eti19, EGSvR15, Eya17, EN19, Fai17, FNP17, FYZ⁺21, FZG⁺22, FAC22, FBHS19, Fot17, FRSU17, FZG⁺22, Fug19, GPPB⁺21, Gao17, Gar17, GANAHHJ17, GBPDW17, GBSAS17]. **Blockchain** [GDA⁺21, GSF⁺20, GLD⁺18, Gen17, Ger16, GR17, GCD16, God15, GCH⁺22, GSWV20, Gos17, Gou19, GWF⁺21, GL16, Hal18, Hal21, bAHRAK17, bAHRAK18, HL16, HSJ⁺21, HM20, HSY⁺21, HFP⁺22, HBG16, HHK18, HJPS16, HSB17b, HSB17a, HSB17c, HSB17d, HSB18d, HSB18f, HSB18e, HSB18g, HSB18h, HSB18i, HWCL17, HP17, HP18, HH22, HV20, HTCW17, HTCW18, HAZ21, HLC17c, HLC19, HWW⁺20, HHO⁺21, HSX⁺21, HYZ⁺24, HW16, HS19b, Hul17, Hur16, HM19, HP19, HWJ22, HRF17, IPSP17, IGRS16, IK19, JB17a, JB17b, JB18a, JB18b, JMK17, JYTW21, JL17, Jas18, JJFC22, JBK⁺19, JCG⁺22, JGL⁺20, JBH⁺22, JWNS19, Joh18, JJ21, Kab17, KDS⁺20, KBT20, Kad18, KFN⁺17, KGA⁺22, Kan20, KTCI21, KT22, KPP⁺20, Kar16, KC18, KRK21, KK17a, KG17, KAP20, KAS⁺22, KTA⁺20, KKKT16, KJ17, KJ18, KK20a, KXSS21, KLZ⁺21]. **Blockchain** [Kla19, KET⁺17, KUEE17, KUEE18, Koe17, KVP21, KAKC20, Kön20, KFR18, Kri19, Ksh17a, Ksh17b, Ksh18a, KV18, Ksh20, Ksh21, Kue18, KVL19, KFTS17, KGTK20, Kuz19b, KK17b, LLH⁺20, Las17, Lau17, LCSR21, LL16, LL17a, LMWL17, LM20, LLHW20, LQYG19, LMH16, LN17, LMR17, LLW17, LZY⁺17, LABK17, LWY⁺19, LWQ⁺21, LWL⁺21, LFZ⁺21, LST⁺17, LK17, LGCY22, Lim18, LSM17, LHZ⁺21, LP17b, LPW17a, LP17c, LP18a, LPW18, LP18b, Liu16, Liu19, LHO⁺20, LLP⁺20b, LZZ21, LDY⁺22, LTB⁺22, LWL⁺22b, LPS20b, LGGB⁺21, LX17, LX20, LSZ⁺21, Lus18, Luu17, MHL20, MZLW20, MXW22, MMR16, Mah18, Mai18, MKY⁺21, Mal18, ME17, MHH⁺16, MSC15, MCLH19, MCS⁺21, MZWX21, Mer19, MCJ17, MHWK16, MKL⁺22, MK15, Mis17, MMR⁺21, Moh19, MFR⁺21, MRR⁺20, Mor17a, Mor17b, Mor17f, Mor17d, Mor17c, Mor17e, Mor17i, MZ19, MG17]. **Blockchain** [MGDEK17, MGDEK18, NRP⁺20, NNGV19, Nar19, NPG⁺22, NGS⁺19, NSNF17, NPDS20, NT21, Nia19, àNOE17, NGHS17, NML19, NYZ⁺20, NCS17, Not19, OO19, OOF⁺17, OA17, Øln16, ØJ17, OEO16, OEO17, ÖY17, PPR⁺20, PK19, PDJ22, Pan18, PSS17, PS17, PTPR17, PTPR18, PGS⁺21, PZZ⁺20, Pec17a, PL16, PS16, Per17, PB17, PP16, PYC21, Pil16, PRS22, PS18, PK22, PPMT17, Pou20, PRO⁺18, PSGM22, QFLM17, QUG⁺23, RGB20, Raj18, Raz19, RSGA⁺21, RC16, ROH16, RKT19, RFM⁺18, RBB19, Rin18, RS17, RBL⁺17, dSR21, RE18, Rou18, RS21b, RDL⁺20, RKY⁺20, SPJ⁺17, SNM17, SD16a, SDT17, SLS20, SPB⁺22, STG⁺20, SBA21, Sch19a, Sch19b, Scr18, SS17a, SRB20, Ses18, SG19, SBHD17, SAS⁺21, SYK17, SJB20, SJB21, SJB22, SJ21, SD16b, SFYB21, SW21, SJZG19, SWY⁺21, Shi19]. **Blockchain** [Shu17, Shu19, SW17, SFMC21, SL18, SV19, SRP20, SNKG20, SPZ⁺20, SC20, SL20, Smo18, Son18, SCZ⁺21, SJSY21, SGDT19, SZJ17, Str18, SSSJ19, SZM22, Suk19, SYZ16, SALY17, SXZ⁺21, Sup16, SS17b, Sve17, Swa16, SVS18, Swe16, Tac17, TADS20, Tam19, TSY⁺21, TPE20, TT16, TTC16, TT19, TNM17, THF17, TS20, TODM19, TSL⁺17, THFI21, Tre21, TBY17, TMTB19, Und16, VBST21, Via16, VSE21, VMMA17, VFS⁺19, Vuk16, Wad18, WHI⁺21, Wal18, WDLS17, WLXC17, WXH21, WCL17, WMD⁺20, WLZ20, WCX21, WMG⁺21,

WLN⁺21, WZ21, WL21, WLS22, WHW22, WXR⁺16, WWZ⁺20, WLC⁺22b, Wer18, Wey19, WLS17, WLSZ17, WA15a, WA15b, WM18, WK19, Wu17, WDS21, WPG⁺22, XJY17, XLZ20, XWW17, XCW⁺22, XJB⁺17, XAZY17, XLM⁺17, XZK⁺17, XCG⁺17, XSC⁺17, XAZY18, XRS⁺19, XLW⁺19, XZY⁺21, YMRS18, YKJK21, YPFY21, YCX18, YYN⁺20, Yan21, Yew18, YW18].

Blockchain

[YLZ20a, YMHY21, YWJ⁺16, YLZ⁺20b, ZLMR19, Zam19, ZMKR22, Zei16, Zha19, ZXL19, ZY21, ZYL22, ZLT⁺19, ZDW21, ZDP⁺22, ZWY⁺21, ZGGT16, ZGY⁺21, ZLW19, ZHZ⁺22, dKW17, dORM⁺20, vM18, AHSZ21, AAGX⁺22, AC19, AMME21, ABB⁺19, AKT21, AHH20, ASB⁺21, Älv18, AB20, AZDF22, AAE19, AC21, And18, AHC⁺21, Ano16a, Ano21c, Ano21d, Ant20, AGK22b, ANMM22, BYR⁺20, BAS⁺22, BTF⁺21, BAK22, BKV22, Bar16, BVCH22, BJ20, BILN21, BP17b, Boi18, Bre17, BLB⁺21, BZK⁺21, BF20, CZ16, CG20, CSG⁺20, CCG21, CXLC18, Che18, CLS19a, CW20, CXWY21, CGHC21, CWCC21, CZX⁺21, CLS⁺19c, CTGJ22, CLH⁺20, CMJ21, CCH21, CPSGAA20, DCB⁺21, DSM⁺17, DAT21, DPN⁺22, DXW21, DAGK20, DCK21, DMR19b, DKJ19, DLK⁺21, DTK20, DGP20, DHH⁺22, EFFM21, EA_vM20, FSY⁺19, FBL⁺20, FWP21, Fan22, FLL⁺22, FY19, FHZ⁺19, FZC⁺20, FCH21, FD20b]. **blockchain** [FRF⁺19, FA21, GS20a, GLC⁺22, GLF20, GLO⁺22, GGJ22, GGDK20, GRM22, GAdFGMA21, Gir18, GKKT16, GK17, Gof19, Gon17, GKA⁺21, Gra20, GH17, GLW⁺20, GLY⁺21, GHG⁺21, GRHS20, GDKJ22, HHBS18, HCB⁺22, HSC21, HSGY20, HYWY22, HLF⁺21, HGDD20, HYL21, How20, HYLY19, HLP⁺21, HLC⁺17b, HZY⁺19, HZX⁺20, HZL⁺20, HZ20, HTLY21, ICGB21, IFD⁺19, JCG⁺21, JB21, JJ22, JLX⁺19, JLX21, JZLL17,

JAK19, KOM⁺20, KOS⁺21, KOM⁺22, KA16, KMAJ21, KS18, KAK20, KKK⁺21, KAK21, KSA22, KRDO17, KW20, KUE17, KGS⁺19, KK20b, KOJ⁺20, Kra15, Kra16a, KKM19, KBS⁺21, KSLC21, KTM⁺21, KKT⁺22, Kuz19a, LLP20a, LLH21, LCL⁺22, LCB⁺20, LLCF21, Lev17, LFX⁺20, LHL20, LJC⁺20, LLWH21, LCZL21, LLCH21, LYW⁺21, LLJ21, LWA21, LZD21, LZY22, LDLS22, LGL⁺22, LWZ⁺21a, LHH⁺18, Liu18, LML⁺19, LTBY20, LZZ⁺20, LHL21, LX21, LKP⁺21, LPGBD⁺19, LXL⁺19, LTW⁺21, LWCX21, LYZ⁺21, LQZ⁺20, MZA⁺20].

blockchain

[MRG18, MBK⁺21, MISS22, Mea19, MAM22, MOM22, MDN⁺18, MLYL20, MLTT20, MNB⁺17, MFE⁺20, MGE20, MKS⁺19, MGN⁺22, MyPLK22, NAR22a, NAR⁺22b, NPB⁺21, NVE⁺21, NQ20, Nor17a, Nor17b, Nor17c, OHJ20, Olu21, OdVP20, PHRH21, PCC22, PL20, PR21, PHH⁺20, Pec16, PM17, PW17a, Per20, PW17b, PBHM21, PSY21, PCM⁺21, PC21, PSHW20, PMP19, QHNL21, QL22, QNM⁺19, RS21a, RIMP22, RWG21, RLQ⁺21, RLS⁺21, RSR17, RSGHGC21, Rot17, RDDB19, RCD⁺19, RSH22, RSJP19, SGM20, SI19, SG21, Sal18, Sal22, SC21, SCE21, Sar21, Sei20, STN22, SMM⁺20, SJX⁺20, SWG21, Sha18, SHL⁺20, SLG⁺21, SZdLZ22, SSL⁺19, SK18, SCP⁺20, SMHK21, SRA⁺22, SSV22, Sko19, Sto20, Sub18, SYCC21, TGC⁺21, TYY⁺19, TKBK22, TDS⁺22a, TDS⁺22b, TBB21, TLS⁺21, URC19, URC20, UHK⁺21, VDVC21, VD21, VG20, Wal19, WQGX22, WCX16, WDL⁺18, WHA⁺20, WLC⁺20].

blockchain

[WSC⁺20, WMD⁺21, WCZ21, WWZ⁺21, WHY⁺21, WLL21, WGL⁺21, WLC⁺22a, Wat17, WWML21, WMHL21, XZL⁺22, XLL⁺19, XHST20, XCZ⁺21, XLL⁺21, XZZ21, XZXP21, XBX⁺22, YZL⁺19, YCMM20, YL20a, YLM21, YYDC21, YWX⁺22, YPDC20, YSD⁺20, YL20b,

YLN⁺19, YS20, YS21, YP21, YZL22, Yue20, ZCJ⁺21, ZSM22, ZW17, ZWS⁺20, ZWX20a, ZTSS20, ZWH⁺20, ZLH⁺20, ZZW⁺21, ZDM⁺21, ZNX⁺21, ZZB⁺22, ZGR⁺22, ZLS⁺22, ZBF22, ZFW24, ZFY16, ZFY17, ZWX⁺20b, ZWC21, ZWX⁺19a, ZWX⁺19b, ZLJW20, ZSLY20, ZZ16, ZWGC19, ZGZ21, dAdSM⁺22, dS17a, AKA⁺22, CHL19, DKJ17, ACKJ22, AAC⁺19a, Ano16b, BP17b, BLMQ19, DRS22, DM20, Dim20, Dix17, DKJG19, ELFCFL20, GH17, KFR17, LP20, LP17a, LPW17b, MAAN19, MBF⁺20, McC18, PK21, RKP19, Ser21, Sto17, Swa15b, Uli16, VDG19, YNS16, ZSL21, SKNM21].

blockchain-adaptive [AAGX⁺22].

Blockchain-aided

[SZM22, AC19, BKV22, Sko19].

Blockchain-as-a-Service [Yew18].

Blockchain-assisted [ARL20].

Blockchain-Based [AVA21, ABL18b, BL22, Bri21, CGLR19, CMT⁺21, DFKU20, FZG⁺22, GSF⁺20, HM19, HRF17, KET⁺17, KUEE17, KUEE18, Ksh20, Ksh21, LWY⁺19, LLP⁺20b, LX17, NPG⁺22, RSGA⁺21, RBB19, RBL⁺17, Ses18, SW21, Shi19, SL20, SGDT19, WMG⁺21, WLSZ17, XAZY17, XAZY18, XWL⁺19, YW18, YMHY21, ZY21, ZGY⁺21, ASK⁺21, BK22, BAJ20, BLSD17, BPT⁺22, CLT⁺20, CJA⁺19, CAA⁺22, CJW17, CFM⁺22, CLXW22, DMSCA20, DDPS22, DSC21, ESP22, HFP⁺22, HAZ21, HLC19, HSX⁺21, HS19b, JMK17, JGL⁺20, KBTT20, KGA⁺22, KRK21, LL16, LL17a, LM20, LMH16, LWQ⁺21, LST⁺17, LGCY22, LHZ⁺21, LHO⁺20, LSZ⁺21, MHL20, NSNF17, NT21, ÖY17, RGB20, RS21b, SPB⁺22, SBHD17, SAS⁺21, SJB21, SJB22, SWY⁺21, SSSJ19, SYZ16, TPE20, TMTB19, VBST21, VMMA17, WMD⁺20, WCX21, WLS22, XWW17, XJB⁺17, YKJK21, YCX18, YLZ⁺20b, ZYL22, ZWY⁺21, ZLW19, AHSZ21, AHH20, AZDF22].

blockchain-based [BYR⁺20, BAS⁺22, CXWY21, FSY⁺19, FWP21, FLL⁺22,

GLC⁺22, GAdFGMA21, HHBS18, HCB⁺22, HLF⁺21, HYLY19, HLP⁺21, HZX⁺20, IFD⁺19, JLX⁺19, KOM⁺20, KOS⁺21, KOM⁺22, KKK⁺21, KAK21, KUE17, Kra15, Kra16a, LLH21, LLCF21, Lev17, LLCH21, LWA21, LGL⁺22, LHH⁺18, LQZ⁺20, MZA⁺20, Mea19, MNB⁺17, MGN⁺22, MyPLK22, PHRH21, PCC22, QHNL21, RSH22, RSJP19, Sar21, SMM⁺20, SLG⁺21, Sub18, TLS⁺21, WHA⁺20, WHY⁺21, WLL21, WLC⁺22a, WMHL21, XZL⁺22, XLL⁺19, XCZ⁺21, XLL⁺21, XZZ21, YZL⁺19, YLM21, YWX⁺22, YL20b, ZCJ⁺21, ZSM22, ZWGC19, dAdSM⁺22, ACKJ22, Dim20, RKP19, ZSL21].

Blockchain-Driven

[HSB17b, HSB17a, HSB17d, HSB18f, HSB18e, HSB18h, TDS⁺22a].

Blockchain-Empowered

[HWCL17, CSKP21, LWL⁺21, TSY⁺21].

Blockchain-Enabled

[AAAO20, DCZ⁺21, Du21, KV18, Las17, LQYG19, LN17, MZLW20, BKM⁺17, CMR⁺21, CGC21, FYZ⁺21, Hal21, HH22, LTb⁺22, MXW22, NML19, QUG⁺23, SRP20, GDKJ22, KKT⁺22, MRG18, MLTT20, MFE⁺20, PCM⁺21, WQGX22, YPDC20, ZWX20a, ZZW⁺21, ZGR⁺22, ZBF22].

blockchain-enhanced [HZL⁺20].

Blockchain-IoT [CTNS21, ANMM22].

Blockchain-LI [YNS16].

Blockchain-native [MKL⁺22].

Blockchain-Ökosysteme [Sto17].

Blockchain-oriented

[IPSP17, PPMT17, ICGB21].

Blockchain-Powered

[QFLM17, AMME21].

Blockchain-supported [BAR21].

Blockchain-Technologie [DF17b, DF17a, HP17, HP18, TNM17, BP17b].

BlockchainDB [EHBA⁺19]. **Blockchained** [AJA⁺22, Lei16, LTMW19]. **Blockchains** [ADA17, AV22, BNMH17, BLBS17, BDP17b, BS17b, BS18, Bog17, BTvdH20, Bys19,

CZQ⁺21, CDZ⁺20, CDE⁺16, DdFP18, DL17, DCY⁺22, DWC⁺17, EMEHR17, EBD⁺20, EN17, GvRS17, GKW⁺16, Gos17, GG17, HS16c, HM16, Her17, Her19, HYP⁺22, KD20, LSFk17, LR22, LGK⁺22, LDH17, LNZ⁺16, MDAP16, MAP16, MBC17a, MWV⁺18, MPC⁺23, Moh17, NMH16, O'C17, Pec17b, PdWWS16, QXC⁺21, RV21, RKTv22, RM19, RBS17, Six17e, Spo17, SDK⁺17, Vuk17, Web21, Yer17, ZZJ17, van20, Ano18a, BAPS22, BHMB21, BANT20, CV18, Cro18, EHBA⁺19, FD20a, GRU22, HZLH19, LLZY20, LLL⁺21c, MTR⁺21, MÖ22, NAK⁺22, Nor17c, SKA⁺20, Vra17, WSL⁺19, WM19, WZW⁺20, WLLH21, XHP⁺21, Xu16, XCZ⁺22, YZC22, ZAE20, PdWWS16, RBM17]. **blockchange** [Gal18]. **blocked** [Tun18]. **blocking** [EAvM20]. **BlockIoTIntelligence** [SRP20]. **BlockNDN** [JZLL17]. **Blocks** [Abr18, DCK17, GRKČ15, JSK⁺17, Swe16, BAPS22, Bra15b, FZC⁺20, WLW⁺19]. **BlockSecIoTNet** [RKP19]. **BlockSim** [AvM18]. **Blocktime** [Swa16]. **Blocktrees** [JCG17]. **Bloom** [GČKG14]. **Bloomberg** [Ro13]. **blossoming** [PM17]. **Blueprint** [Swa15a, Swa15b]. **Blues** [K.13]. **BlueWallet** [BDWW14]. **BIUFF** [AHC⁺21]. **Boards** [CGJ⁺17]. **Body** [HCB⁺22]. **Bolt** [GM17]. **Bonaire** [Ker12]. **Bond** [LS17]. **Bonds** [HJHBG22]. **Bonneau** [Ano16c, SM-16]. **Book** [Ano16c, Lev17, SM-16, Cha14]. **Book-smart** [Lev17]. **Boom** [Pop17a]. **Botcoin** [HDM⁺14]. **bother** [Pal18]. **Botnet** [DH17, Goo18, LLCf21]. **Botnets** [AMLH15, SGDT19, AMLH18]. **bound** [Dry14, Tro15b]. **Boundaries** [MDAP16, MAP16]. **Bounding** [LL17b, LL17c]. **Bounty** [JCHSR16]. **Bounty-Based** [JCHSR16]. **bow** [DMR19a]. **BPKI** [ZSM22]. **BPS** [HZL⁺20]. **Brain** [VBC⁺17]. **Branch** [SK18]. **Breach** [LKL⁺14]. **Breaking** [LP18c, LP18d, NC17a]. **Breaks** [GCR18]. **Breast** [Shu17]. **Bribery** [EH24]. **Bridging** [Dan17a]. **Brief** [SPB17]. **Briefing** [Ano18j]. **Bringing** [Dre17c, FDT17, FMR⁺16, MBB⁺15]. **Brixton** [Hil14]. **Broadcast** [MPSP17]. **Broader** [YWS⁺18]. **broke** [Ste17]. **Broken** [GCR16, GCR18, Rou18]. **brother** [Cha85]. **Browser** [Abr18]. **BSeIn** [LHH⁺18]. **BSI** [JCG⁺22]. **BSRA** [VDG19]. **BTC** [EZR⁺22]. **BTNC** [ZWS⁺20]. **BTSM** [Hal21]. **Bubble** [God15, Kru18, Pop18b, LL18]. **Bubbles** [HHBS18, CF15, GTMP14]. **Bubbling** [WM18]. **bucks** [Tun18]. **Bug** [Chi13, WLXC17]. **Bugs** [Cou16, WZS19]. **Build** [IM16, LSM17, YF22, Per22, RST11]. **Building** [CCH⁺20, CTM22b, DFKP13, How20, Spo17, Swe16, WWZ⁺22, LLL⁺21c]. **Builds** [dCdCM14]. **Bulgaria** [OF15]. **Bullet** [McG18]. **Bulletin** [CGJ⁺17]. **Burn** [PBHM21]. **Burn-to-Claim** [PBHM21]. **Business** [BART17, CWL17, GBPDW17, LSN21, Liu18, ME17, MWV⁺18, Mor17f, WXR⁺16, Ant20, BHMB21, Hal18, LPGBD⁺19, LTW⁺21, PSHW20, RBM17, TT16, TTC16, Uni14, ZW15, ZW17, ZFY16, ZFY17]. **businesses** [CZ16]. **Buy** [ECHL16, GAF18, Ito18, PW17a]. **Buyer** [HWDD17, HSB18a, HSB18b]. **Buyer-Led** [HSB18a, HSB18b]. **Bytecode** [ABBS18]. **Byzantine** [BDF⁺22, BSV17, CV21, Coe20b, Gra20, LSP82, ML14, TYY⁺19, VG20, XZY⁺21]. **C2B** [Blo18]. **C4** [JW16b]. **C5** [JW16a]. **Caching** [SNM17]. **Calculus** [Kam17]. **California** [CRS83]. **Campaign** [Cim18b, Men19, Seg18]. **campaigns** [CGR18]. **Can** [AP20, BBH⁺13, Ber17, CRdK16, CAMS20, EHA22, GP17a, HSB17b, HSB18f, Ksh17a, Ksh17b, MBC17a, Tre22, KFR17, Lew15, Pec17a, SYZ16].

Cancer [Shu17]. **Canonical** [Ort16]. **Can't** [McK19]. **Capacity** [KJ17, KJ18]. **CAPER** [AAE19]. **Capital** [DMH18l, McL13, PF18]. **Capitalism** [Bhe17b, Bhe17e, DdFP18]. **Capitalizations** [Ano18f]. **Capture** [WXH21]. **Car** [ANMM22]. **Car-sharing** [ANMM22]. **Carbon** [CE12, GB22]. **card** [Per22]. **Care** [BSLM20, Chu15, DMH18c, LP18c, LP18d]. **Careers** [Nor17b, Per20]. **carrier** [LML⁺19]. **Case** [BATB20, CMT⁺21, FRSU17, Fug19, HS16d, HSB18i, KPP⁺20, LX17, LN15, LSP⁺15, RRD17, Str18, WXH21, WKEM20, Yew18, ANMM22, CSLD17, GRU22, HS20, KOJ⁺20, XLL⁺19, YP21]. **Cases** [CDZ⁺20, Nav17, SG19, Raj18]. **Cash** [Ano17a, KL18a, MGGR13, OO91, WvB14, Bac97, Bac01, BB15, HGDD20, Nak08a, Nak08b, Pan96, Pec12, WLS17]. **cash-flow** [HGDD20]. **casino** [Ano21b]. **Casinos** [Mat13, Pia16]. **Categorization** [GDP⁺17]. **Catena** [TD17b]. **Caterpillar** [LPGBD⁺19]. **Causality** [HZ21, Ün21]. **Causality-in-Quantiles** [HZ21]. **CBDCs** [JJ21]. **CBT** [GANAHHJ17]. **CCS'17** [ACM17a]. **CDN** [AC19]. **Cecoin** [QHW⁺20]. **cellular** [WLN⁺21]. **cellular-connected** [WLN⁺21]. **censors** [RS21a]. **Censorship** [RC19]. **Central** [CMS21, Nis16a, Son14]. **centralisation** [LPS⁺20a]. **Centralised** [Lei16]. **centralization** [BS15]. **Centralized** [KAKC20, WSZN18]. **Centrally** [LDH17]. **Centric** [ACC⁺17, Hul17, LQZ⁺20, NAR22a, NAR⁺22b]. **CEO** [Sid14]. **Certificate** [KKM19, XZK⁺17, AHSZ21, CCMN17, LCB⁺20]. **Certificateless** [WHW22]. **Certificates** [LWL⁺22a, Muf16, ACKJ22]. **Certification** [KLR⁺17a, KLR⁺17b, Wey19]. **Certified** [AFMdM14, BDF⁺22]. **CertLedger** [KKM19]. **CFO** [SLS20]. **Chain** [Ape14, BAR21, CTM21, Cou14, HSB17b, HSB17a, HSB17c, HSB17d, HSB18a, HSB18b, HSB18f, HSB18e, HSB18g, HSB18h, HSB18i, Kra16b, Kri19, Ksh21, Nia19, RKT19, WCL17, Wu17, XRS⁺19, XZY⁺21, YPFY21, Che18, DF17b, DAV20, GS20b, How20, JJ22, KOM⁺22, MFE⁺20, NNGV19, PB17, PC21, STN22, SCZ⁺21, SYCC21, XZZ21, XZXP21, FY19]. **Chaining** [ET17]. **Chains** [GKL17, JSK⁺17, KPJ22, WDLL19, Älv18, AHC⁺21, Ler14a, PCM⁺21, SZ13]. **Chaintegrity** [ZWX20a]. **Challenge** [DAAY22, Tzi18, LWA21, MLYL20]. **challenge-based** [LWA21, MLYL20]. **Challenges** [ACM17c, ASSK21, AAKJ22, BGM20, Big20, BMC⁺15, CDZ⁺20, CCA⁺20, DCB⁺21, DPS⁺21, EBD⁺20, HHK18, HJ15, HJPS16, KTCI21, KAKC20, KGTK20, LZD21, MWV⁺18, Mul14a, Nav17, PS16, PPMT17, PSGM22, RDD17, SK17, Van14b, ZMKR22, ZDW21, ZHZ⁺22, dCdCM14, ACA⁺19, ASK⁺21, AKT21, And18, CWCC21, CXY21, FFL21, GGDK20, HYL21, JCG⁺21, KS18, MKY⁺21, MAAN19, MCLH19, PC21, SPZ⁺20, SJSY21, URC19, VDVC21, ZFW24, ZSLY20]. **challenging** [VC15a, VC15b]. **Chancen** [Ker14, San14a]. **Change** [FWB15, KRL17, KYLA22, Mor17c, Kel15, Pec17b]. **changing** [Pal18, TT16, TTC16]. **Channel** [AGGM16, BDW17, EKK⁺17, MMSK⁺17, RLT17, TWFO20, ZY21, ECA⁺21, ZLL⁺19b]. **Channels** [ABF⁺16, DW15, GM17, Kra16b, NT21]. **Chaos** [LB18]. **character** [MLTT20]. **Characteristics** [KLDS20, WLXC17, WKD22, ZKU⁺23]. **Characterizing** [CLS⁺21, GCL16, IST19, MPJ⁺13, MPJ⁺16]. **charging** [HZLH19, KUE17]. **charity** [SPB⁺22]. **Charles** [G.17]. **chart** [Pec17a]. **CHChain** [TDS⁺22b]. **check** [Pal18]. **Checking** [WTC24, WHY⁺21]. **Checkpointing** [AV22]. **Checks** [YWS⁺18]. **Chemotherapy** [Shu17]. **Cheque** [SV19, KBTT20]. **China**

[CSZ⁺21, CP17a, JLX21, K.13, RS21a, Son14, Sto20, Ün21, ZZ16]. **Chinese** [Son14]. **Choice** [Kan18]. **choices** [KVP21]. **Choosing** [Dre17d, WK19]. **Choreography** [CMM⁺22]. **Choreography-based** [CMM⁺22]. **Christ** [BBMS14, CSN14, CMR⁺16, GP17b]. **Church** [BBMS14, CSN14, CMR⁺16, GP17b]. **circulation** [MKL⁺22]. **Cisco** [Ker18a]. **citation** [YS21, YP21]. **Cities** [IPSP17, LHZ⁺21, Mis17, SNKG20, CGC21, HTLY21, JYTW21, KMAJ21, KTA⁺20, LYZ⁺21, MKY⁺21, MZA⁺20, MLTT20, Pou20, Sto20, SYZ16, Ser21]. **Citizens** [Chi18]. **City** [De18, CSKP21, CGHC21, KAP20, PGS⁺21, ZWH⁺20]. **CitySense** [IPSP17]. **civilizations** [dS17a]. **Claim** [PBHM21]. **Class** [BW17]. **Classification** [ATZ⁺21, Als23, GMH21, JJFC22, TT19, DCK21, FBGMPS23, GDA⁺21, SKG12, ZSGB⁺22]. **clearance** [KBTT20]. **Clearing** [SV19]. **Client** [BC16a, LR22, XCG⁺17, JLX⁺19]. **Client-Assistance** [LR22]. **Clients** [BKP14, GČKG14, McK19, VCLK17]. **Clinical** [ACV17, BR17]. **clipboard** [Pal18]. **clipboards** [Bar18]. **clock** [FSY⁺19]. **cloning** [KOJ⁺20]. **closed** [LZDA16]. **closing** [MF19]. **Closure** [MCS18]. **Cloud** [BJ20, ECdO17, HS16c, JWNS19, Kue18, LQYG19, LST⁺17, Mal18, RSV15, RBB19, SJB20, SV16, SL18, SL20, TSL⁺17, WPG⁺22, ZHZ⁺22, ABB⁺19, AGK22b, CSKP21, DSC21, GGJ22, HZY⁺19, HZL⁺20, HSX⁺21, JO13, KGTK20, MXW22, MRG18, PR21, PK22, RLQ⁺21, SJB21, SJB22, SZdLZ22, WWZ⁺20, WLL⁺13, YCX18, YZL22, YLZ⁺20b, ZYL22, ZWGC19, ESP22]. **Cloud-Based** [HS16c]. **Cloud/Fog** [JWNS19]. **Clouds** [KZVT17, MKGT16a, MKGT16b, HH22, TVK⁺20]. **Clustering** [EZ17, EZ18, EPY17, FOA16, NH17, WTW⁺23, HLC⁺17b, Sal18, Urq17]. **CMOs** [KPP⁺20]. **CNN** [CA21]. **CNN-based** [CA21]. **Co** [Blo18, GR17, BBBB15]. **Coalitions** [MKKS14, MKKS15]. **Code** [FB17b, KOJ⁺20, SCAA13, DW18, Ger16]. **coded** [ZWL22]. **Codes** [LSO⁺15, Pie20]. **Coding** [RV21]. **Coefficient** [WPXZ20]. **Coercion** [Dim20]. **Coercion-free** [Dim20]. **Coexist** [GP17a]. **Coffee** [ECHL16]. **Cognitive** [SKA⁺20, Che18]. **Cohort** [LZZ21]. **Coin** [Ale18b, Dir19, IPL⁺18, KPW19, KJGW17, RMSK14, Goo18, SYH22a, SYH22b, DFKP13, THF17]. **Coinbase** [Far18b, GCD16, KRL17]. **Coincheck** [Gal18, Nak18, WREK18, WSZN18, YWW⁺18, YWS⁺18]. **CoinDash** [Os18a]. **CoinDesk** [Sup16, Vig15]. **CoinParty** [ZGH⁺15]. **Coins** [Ros12, RKS15, Rao14]. **Coinsecure** [Cim18a]. **CoinShuffle** [RMSK14]. **CoinTerra** [BH15, BHI⁺14]. **Collaboration** [NOT15, XZL⁺22]. **Collaborations** [Chi18, LSN21]. **Collaborative** [RBL⁺17, SGDT19, And18, KKK⁺21, LTMW19, LWA21, MLYL20, MGE20]. **Collapse** [K.13, Sch14b]. **Collateral** [KT15, MB17a]. **collected** [Cha14]. **Collection** [AAD⁺21, LDY⁺22, CJW17, ICGB21]. **Collective** [IM16, KPP⁺20, KKJG⁺16]. **Collisions** [Lar13]. **Collusion** [YTLD19]. **colony** [DXW21]. **Colored** [Ros12]. **Column** [Wel18]. **Combat** [OOF⁺17, RAH⁺15, CW20]. **Combatting** [DN93]. **combination** [HSC21]. **Combinatorial** [GZ18, MXW22]. **Combinatorial-Probabilistic** [GZ18]. **Combining** [Raz19]. **ComboJack** [Bar18, Pal18]. **ComChain** [VG20]. **come** [Ker18b]. **Coming** [Tre22]. **Comments** [Sar21]. **Commerce** [DCZ⁺21, GWF⁺21, Pan96, SXZ⁺21, XLM⁺17, ZWY⁺21]. **Commercial** [Ger16]. **Commissioning** [HS16c]. **commit** [EAvM20]. **CommitCoin**

[CE12]. **commitment** [CS15, ZAE20].
Commitments [CE12]. **committee**
[CFM⁺22, LLZY20]. **committee-based**
[LLZY20]. **CommLedger** [Moh19].
Commodity [BW14]. **Common**
[DDX17, PCM⁺21]. **communicate** [SM20].
Communication
[Alz19, BLSD17, FDT17, FF17, LZZ⁺22,
WCL17, vdHEM⁺17, AR15, FA21, HZL⁺20,
LCB⁺20, SWG21, VD21, YYDC21].
Communications
[ACM17a, Bra13, CGC21]. **Communities**
[Bel18, WXH21, ACA⁺19]. **Community**
[FPD⁺21, Kee16, RRM18, VGJ15, BB14,
SWG21, XWY⁺21]. **Compact**
[NSB19, SBRS16, SALY17]. **Company**
[SLS20]. **Comparative**
[SL18, WLW22, DSM⁺17]. **Comparing**
[Kön20]. **Comparison** [CTM19, SCAA13,
SS19, GDA⁺21, IKC21, Kat17, PASA22].
Compatibility [SBBR17, ZGR17].
Compatible [ZP17b]. **competition**
[HVM⁺18]. **Complaint** [MAAAW⁺22].
Complete [Wil13]. **Complex** [FPD⁺21,
TDW⁺22, VA15, FD20b, MKL⁺22].
Complexity [Bhe17b, ZKU⁺23].
Compliance
[ECdO17, HV20, PYC21, Lyn14].
Compliant [Ban18]. **Components** [SD16a].
Composable [BMTZ17, JKKX16].
compraventa [HA15]. **Comprehensive**
[LGK⁺22, RMS17, SRB20, NBF⁺16].
Computation [CGJ⁺17, DCZ⁺21, ET17,
EL14, HS20, KB16, KVV16, LSP⁺15,
BHH19, XCZ⁺21, ZGR⁺22].
Computational
[BBDN21, HWCL17, SC20, Li14a, Li14b].
Computationally [BLZ20].
Computations [ADM14a, ADMM14, KB14,
vdHKZ14, ADMM16, Bee16, HCW⁺18].
Compute [But13a]. **Computer** [ACM17a,
LTKS15, Son16a, Wör16, vO20, vO21].
computers [Goo18, Hol18]. **Computing**
[AAJ21, Bee18, BS20, BATB20, DMH18g,
Her17, JWNS19, Kol22, Kue18, LQYG19,
LSH13, TMTB19, Wel18, ZHZ⁺22, BKV22,
DSC21, EFFM21, FWP21, Fin17b, Her19,
HLC19, HS19b, IFD⁺19, KAP20, KGS⁺19,
LZD21, LDLS22, LGL⁺22, MGN⁺22, QL22,
SLG⁺21, TB17, WQGX22, XCZ⁺21,
ZZW⁺21, ZFW24, ZSL21].
computing-based [KAP20].
computing-enabled [EFFM21].
concentration [LP18c, LP18d]. **Concept**
[HSB17a, HSB18e, Shu17, SDK⁺17, AC19,
wScCcS21]. **Concepts** [KAKC20, BGPW16].
Conceptual [PRS22]. **concern** [Ole18].
concerned [Far18b]. **concerns** [CX21].
Concluding [Gev16]. **Conclusion**
[HSB17b, HSB18f, Mor17g]. **Concurrency**
[DGHK17, Kad18, MMSK⁺17, WB17,
CZX⁺21]. **Concurrency-Related** [WB17].
Concurrent [OR17, RLT17, XZY⁺21].
Condensed [JW16a]. **Conditional**
[FYZ⁺21]. **conditionally** [LLC⁺20].
Conditions [KYLA22, GKJ⁺18].
Conference [ACM17a, ACM17c, GP17b,
Ker12, OF15, Sad13, IKY05, Jue04].
Confidence [MG17]. **Confidential**
[CZJ⁺17, NMt16, RMS17]. **Confidentiality**
[OR17, ZHC⁺20, FLL⁺22].
Confidentiality-Preserving [ZHC⁺20].
Configuration [WK19]. **Configurations**
[RC16]. **Confirmation** [KK17a, OAS⁺21,
ZGGT16, ECA⁺20, GHJ22, GGKR21,
Koo18, PSDSNAHJ19, SGK21]. **Conflict**
[NOT15, AAC⁺19a]. **Conflict-Resolution**
[NOT15]. **Conflicts** [LMLA17].
Congestion [KJ17, KJ18, HVM⁺18].
Congressional [Dus14]. **CONIKS**
[Bon16b, MBB⁺15]. **Connected**
[DAAY22, RSJ21, WLN⁺21]. **connection**
[ZWS⁺20]. **Connections** [HBJB14].
Connectivity [CGFH16]. **conscience**
[Os18a]. **Consensus** [BLP17, BDF⁺22,
CV21, CZQ⁺21, CCA⁺20, Coe20b, Cor19,
JBH⁺22, JSK⁺17, Kwo14, LLH⁺20, LFZ⁺21,
LPS20b, LTKS15, ML14, MHWK16, PS18,

Poe14, QXC⁺21, RZJ20, SYB14, SXZ⁺21, XCW⁺22, XLM⁺17, XNC21, ZP17a, vM18, ASB⁺21, AB20, Bre17, BF20, FWP21, FZC⁺20, FCH21, Gra20, HWJ22, JB21, KKS⁺17a, Kra15, Kra16a, LZY22, LTC⁺19, LX21, LLL⁺21c, Pou20, PCM⁺21, PC21, Sal22, WLC⁺20, WSC⁺20, XHP⁺21, XBX⁺22, YLN⁺19, ZWH⁺20, dORM⁺20]. **Consensuses** [AMEF21]. **consent** [KK20b]. **conservation** [How20]. **considerations** [Dus14]. **Considering** [NSB19, YP21]. **Consistency** [DSW14, DSW16, KKJG⁺16, MZWX21, Sal18, Sir16a]. **Consistent** [LPS20b, RST11]. **Consortium** [KPP⁺20, MZWX21, PYC21, WCX21, AC21, CZX⁺21, HZLH19, JB21, KMAJ21, LCZL21, WZW⁺20, XHP⁺21, XCZ⁺22, Yue20, ZTSS20]. **Constant** [BZ17, Coe08]. **Constant-Deposit** [BZ17]. **Constant-Effort** [Coe08]. **constellation** [XZL⁺22]. **Constrained** [HS16c, MMR⁺21, vdHEM⁺17]. **constraints** [KAK20]. **constructing** [Gim16]. **Construction** [Bel18, HJHBG22, LLL⁺21b, CGHC21, LDLS22, LLL⁺21a]. **consumer** [Blo18]. **Consumers** [Ede14]. **Consumption** [Bon14a, Dru22, DLV⁺22, GB21, KSA22]. **Contact** [HSJ⁺21]. **Contained** [Pia16]. **Content** [KT15, MHH⁺16, XJB⁺17]. **Contention** [MPC⁺23]. **Contest** [Dim17]. **Context** [DPS⁺21, EZR⁺22, KLL⁺15, Nia19, KO22]. **Contingent** [CGGN17]. **continue** [Ker18b]. **Continuous** [GMH21, YMHY21, DB16, SJ21]. **Contra** [SKNM21]. **Contra-*** [SKNM21]. **Contract** [AB17, ABBS18, BCM16, But13b, CS20, CXL⁺22, GLG19, HLC17c, JS20, LP20, Pia16, Pie20, ROH16, Swa16, THF17, XJY17, XSC⁺17, CXY21, FBL⁺20, HLC19, KF19, LCL⁺22, LML⁺19, LTB⁺22, LWZ⁺21b, LWCX21, ML20, NAR22a, NAR⁺22b, SJSY21, VDVC21, WM19, THF17]. **Contract-based** [AB17, ML20]. **ContractCheck** [WTC24]. **contracting** [AAGX⁺22]. **Contracts** [ACM17b, ADM14b, ABC17, BNMH17, BDLF⁺16, BKT17, Blo18, BS17b, BS18, CXG⁺18, CLS⁺21, CXLG22, DGHK17, EMEHR17, Gao17, GLD⁺18, HBG16, IGRS16, JKS16, KPP⁺20, KUEE17, KUEE18, Kün16, LCO⁺16, Mor17j, NMH16, NPS⁺17, PP16, RBL⁺17, SY22, SW17, SC20, VTL17, WTC24, ZCC⁺16, ZHC⁺20, ZGY⁺21, AHH20, Ano21d, BLMZ20, BLMZ22, BZK⁺21, DAT21, DLV⁺22, GRU22, Gia15, GKJ⁺18, GKJ⁺20, GLTS22, HYL21, KOJ⁺20, Lev17, Liv20, LKP⁺21, MMMV21, OHJ20, PHH⁺20, SPZ⁺20, Tam19, WZS19, WGC19, YML⁺22]. **contractual** [AAGX⁺22]. **contribute** [SYZ16]. **Contributions** [KTCI21]. **Control** [BLBS17, DMR17b, DMR19b, LGGB⁺21, MLD19, McL13, MCJ17, OEO16, OEO17, PRS22, TSY⁺21, YWJ⁺16, AAC⁺19b, AGK22b, CMJ21, DHH⁺22, GGJ22, Ker18b, Kra15, Kra16a, LGCY22, LHH⁺18, LQZ⁺20, PDJ22, RGB20, SJB22, SJSY21, ZLH⁺20, AAC⁺19a]. **controllability** [TDS⁺22a]. **Controllable** [ZWGC19]. **Controlled** [CR17]. **Controlling** [BBDN21]. **Controls** [Smo18]. **Conventional** [Mer88]. **convergence** [FFL21, JCG⁺21]. **convolution** [ZGZ21]. **Convolutional** [FYZ⁺21, WLZ20]. **Cooperative** [LS21, LBS⁺15, WCZ21]. **coordinator** [VB08]. **Copyright** [NPG⁺22, Sha18]. **Core** [Dre17f, KAKC20, BSF22, VCLK17]. **core-based** [BSF22]. **CORFU** [MBD⁺12]. **Corporate** [Yer17]. **corporations** [RS21a]. **Correct** [KB14]. **Correction** [SYH22a]. **correctly** [SAL20]. **Correctness** [CXG⁺18, Sut20]. **Correlation** [ZWLS18, GFLS21, VX17]. **Correlations** [WKD22]. **Correspondence** [FPD⁺21]. **Cost** [Ast16, Bac02b, CPMM21, LDH17,

KW20, LML⁺19, SA20]. **cost-effective** [LML⁺19]. **Cost-Functions** [Bac02b]. **cost-saving** [KW20]. **Costs** [CPM17]. **Could** [CEN14, DXR⁺17, NH17, FS16, KH16, LP18c, LP18d, Mea19, RS21a, Tun18]. **counter** [Bac02a]. **Counterfeit** [GWX⁺21, STG⁺20, AHC⁺21]. **Counterfeiting** [Alz19, AB20]. **Countering** [Koe17, SKNM21]. **Countermeasures** [AAG17, LKL⁺14, WHI⁺21, WLLH21]. **Counting** [Fin17a]. **Countries** [Ano18d, Ksh21, OA17, AR15]. **Coup** [MK15]. **Coupling** [ARL20]. **Course** [JW16a, JW16b]. **Covenants** [CP17b, MES16]. **Covert** [LZZ⁺22]. **COVID** [ACKJ22, CTM22a, HSJ⁺21, WKD22, ZKU⁺23]. **COVID-19** [ACKJ22, CTM22a, HSJ⁺21, ZKU⁺23]. **CP** [SJB22]. **CP-ABE-based** [SJB22]. **Cracking** [VSM⁺19]. **Crash** [JW16a, JW16b, Edw15, VLAf21]. **Created** [Pav18]. **creates** [Ole18]. **Creation** [BM20, FZC⁺20, VG17]. **creator** [Cha14]. **Credential** [BK22]. **Credentials** [CDD17, Sar21]. **Credit** [Bys19, Kat16, Per22, ZTSS20]. **credit-card** [Per22]. **Crier** [ZCC⁺16]. **Crime** [Gre22, Far18a, UJ16]. **Crimes** [KCD17]. **Criminal** [JKS16, Hol18, Tun18]. **Criptoalute** [Cap15]. **Critical** [Mis17, PF18, STG⁺20, CPSGAA20, ZSLY20, dCdCM14]. **Cross** [LWZ⁺21a, OOF⁺17, SMHK21, WCL17, WKD22, ZWLS18, ZzH21, AAE19]. **cross-application** [AAE19]. **Cross-blockchain** [LWZ⁺21a]. **Cross-Chain** [WCL17]. **Cross-Correlation** [ZWLS18]. **Cross-Correlations** [WKD22]. **Cross-domain** [SMHK21]. **Cross-Market** [ZzH21]. **Crowd** [BLNN17b, SVL17]. **Crowd-Based** [BLNN17b]. **CrowdBC** [LWY⁺19]. **Crowdfunding** [BO17, JCHSR16, ZZ16]. **Crowdsensing** [KK20a, KOM⁺20, YZL⁺19]. **Crowdsensing-Based** [KK20a]. **Crowdsourced** [Mue18, HYWY22]. **Crowdsourcing** [LWY⁺19, FY19, KOS⁺21, KOM⁺22, MHL20, SYCC21, TDS⁺22b]. **Crude** [ZzH21]. **CRYPTO** [CRS83, Ale18b, Ano18e, CXS⁺17, Cou14, CPMM21, DMO⁺19, GCR18, Gom16, Kan18, Ker18a, KN12, Lin15, McK19, US23, WSZN18, YF22, BHI⁺14, Cae15, FCH21, RSW96]. **Crypto-Asset** [YF22]. **Crypto-currencies** [Ano18e, Cae15, FCH21]. **Crypto-Currency** [DMO⁺19, Ker18a, KN12, CXS⁺17, BHI⁺14]. **Crypto-Hotwire** [CPMM21]. **cryptoanarchist** [Pec12]. **Cryptoassets** [BT18b]. **cryptocoin** [Tun18]. **CryptoCubic** [Ape14]. **Cryptocurrencies** [ACM17b, AS14, AZV17, BNMH17, BBBB15, BSKR21, BMC⁺15, CR16, Dzi15, GANAHHJ17, GGDK20, GCR18, HQ15, JB17a, JSK⁺17, Ksh18b, Ksh20, MLD19, NMH16, RC16, Tzi18, Zoh17, Ano13a, Ano18a, BEM⁺20, CV18, Cro18, Ext15, FD20a, G.17, GDA⁺21, GPP18, Kug18, PCP20, Rot17, Wea18, ZLL⁺19a, Cap15]. **Cryptocurrency** [Abr16, Ano16c, Ano17e, Ano18f, Ano18g, Ano18m, Ano19a, BH15, Ber18, BBM⁺18, BHM20, BBH18, CCMN17, Eya17, GWX⁺21, Gre22, Ker18b, KLZ⁺21, Kin13, LHZ17, Leo20, LSS14, LPSP20, Men19, Osb18a, RM19, Roo18, SM-16, SLY15, Smu18, SL17, SALY17, TWFO20, VC15b, WREK18, WKEM20, YNS16, YWW⁺18, YWS⁺18, Abe18, Ano21b, AAGA19, Ant20, Bar18, CCH21, Cim19, DAGK20, DTK20, Gal18, Goo18, HVM⁺18, Ito18, NBF⁺16, Ole18, Osb18b, Pal18, Per22, RS21a, SM20, VC15a, Abr18]. **Cryptocurrency-Executive** [WREK18]. **Cryptocurrency-stealing** [LSS14]. **Cryptoeconomic** [BSB19]. **cryptoeconomics** [BDP17a]. **Cryptographic** [AHWB20, GADO17, GCR16, GP17a, GG17, HV20, JW16a,

JW16b, Muf16, OF15, WSL⁺19].

Cryptography

[Alz19, CSN14, DH76, Fra14, JRB⁺17, Ker12, Sad13, BBMS14, BCJR15, CMR⁺16, GP17b, IKY05, Jue04, McC18, WHJ17, WHJ20].

cryptojacking [Ker18b]. **CryptoLocker**

[LZDA16]. **Cryptology** [CRS83, OF15].

cryptomining [Seg18]. **cryptosystems**

[Mer80]. **Crystallization** [KL17, KL18b].

Cuckoo [Tro14a, Tro15b, Tro14b]. **Cultural**

[KD16, SG21]. **Cure** [JZS⁺17]. **Currencies**

[Ano18d, Cou14, CMS21, GK14, GM17, Hil14,

JW16a, JW16b, Mor17h, Pas15, Spr13, TS16,

Ale18b, Ano18e, Cae15, CRdK16, FCH21,

HS16a, Kell15, Lau11a, Lyn14, SG21, WLS17].

Currency [ACM15, Ali15, Ano12, Ano18j,

Ano19b, AHWB20, BBSU12, BBH⁺13,

Car15, DMO⁺19, EL14, Eva14, GH05,

GKČČ14, GZH⁺14, GANT21, Gri11, Int14,

Ker18a, KN12, Lau11b, LCL17, LSH13,

MY11, MCS18, Mul14b, Nav17, Pav18,

Swa15a, VGJ15, VM15, AF16, BHI⁺14,

Bra15a, BOS15, CXS⁺17, CRdK16, Dus14,

Fan22, FGHM17, FB17a, Hol15, Ker14,

Lee15, Pec16, SI19, San14b, San14a, Six17c,

Son16b, SKG13, TFG17, TF16, Uri17].

Current [ATZ⁺21, ASK⁺21, Cou16, KTCI21, PSGM22, JCG⁺21, Six17a]. **Curse**

[HB14, JZS⁺17]. **Curve**

[Fit22, US23, WHJ17, WHJ20]. **Curves**

[US23]. **Custodianship** [GANT21].

custody [WMD⁺21]. **customers** [Abe18].

cut [Fai19]. **Cyber** [CGT⁺21, FYZ⁺21,

LSZ⁺21, NVE⁺21, RS21b, SIDV14, UJ16,

DAT21, HFP⁺22, Sko19]. **Cyber-Physical**

[CGT⁺21, LSZ⁺21, NVE⁺21, Sko19].

Cyber-physical-Social [FYZ⁺21].

cyberattack [BAR21]. **Cyberattacks**

[Koe17]. **Cybercrime** [Vas17].

cybercriminal [YV17]. **Cybercriminals**

[Esc18, Fir18]. **Cyberphysical**

[AAAO20, BATB20, BLKD20].

cybersecure [Ser21]. **Cybersecurity**

[Fug19, Mal18, DSM⁺17, GAdFGMA21,

MRG18, SLG⁺21, Gou19]. **Cybertrust**

[Ksh18a, Ksh18b]. **Cycle**

[SW17, Tro14a, Tro15b]. **cycles**

[GTMP14, HDM⁺14, Tro14b]. **Cycling**

[JMK17]. **Cyfer** [Gou19].

D&R [Li14a, Li14b]. **D2D**

[HWCL17, YYDC21, ZSL21]. **D2D-assisted**

[ZSL21]. **D5** [OA17]. **DAC** [DHH⁺22].

dada [ZWH⁺20]. **DAG**

[GPPB⁺21, WLC⁺22a, XHP⁺21, ZWH18].

DAG-Based [GPPB⁺21, XHP⁺21, ZWH18].

Dagger [But13a]. **DAGsim** [ZWH18].

Daily [PMMP19, MF19]. **DAML** [KF19].

Dance [Bhe17c]. **Dandelion**

[VFV17a, VFV17b, VFV17c]. **DAO**

[DMH18e]. **Dark** [BBM⁺18, Gre22, Ano16a].

Darknet [KCD17]. **Darkweb** [GDP⁺17].

Dashcam [WBK⁺17]. **Dashcams**

[WBK⁺17]. **Data**

[ALGK19, AGK22a, ACW17, AS18,

ARBK17, ADA17, AVA21, ACV17,

AAD⁺21, ARK20, Ban18, BBGP19, BKS19,

CGLR19, CSN14, DCK17, DMR18, Dre17g,

Dre17i, Dre17n, Dre17t, Dre17y, ET17,

ECdO17, EG17, EN19, FBHS19, FHS⁺17,

Fug19, GPPB⁺21, GWF⁺21, Hul17, ISM17,

JRB⁺17, Kan20, KMMW17, Ker12, LCL⁺22,

LS17, LL17b, LL17c, LWL⁺21, LST⁺17,

LHZ⁺21, Liu16, LZZ21, LDY⁺22, LWL⁺22b,

LGGB⁺21, Mai18, MJS⁺14, Mis17,

MBC⁺17b, Nar19, NSNF17, PYC21, RRD17,

RDL⁺20, Sad13, SDT17, SBHD17, SV16,

SLY15, Spo17, SVS18, TD17a, THFI21,

TSCT18, VMMA17, WL21, Web21,

WLC⁺22b, WvB14, Wör16, XAZY17,

XAZY18, XWL⁺19, YW18, YMHY21,

YWJ⁺16, ZCC⁺16, ZZS⁺20, AKA⁺22,

ABB⁺19, AGK22b, BHH19, BBMS14, BP17b,

BCJR15, CA21, CSG⁺20, CLS19a, CXWY21,

CSLD17, CTGJ22, CLH⁺20, CMJ21,

CMR⁺16, DPN⁺22, DSPSNAHJ20, DCK21].

data [ESP22, FBL⁺20, FWP21, FLL⁺22,

Far18b, GWL20, GLF20, Gir18, GP17b,

GDKJ22, HCB⁺22, HSC21, HYWY22, HLP⁺21, HZY⁺19, HZX⁺20, ICGB21, JJ22, JZLL17, JO13, KGA⁺22, KTM⁺21, Lee15, LLH21, LFX⁺20, LML⁺19, MHL20, MZA⁺20, MBK⁺21, MyPLK22, Pal18, RWG21, RCD⁺19, SWY⁺21, SM20, SMHK21, SRA⁺22, Six17a, TDS⁺22a, UHK⁺21, WMD⁺20, WLZ20, WHY⁺21, WLL21, WWZ⁺20, XCZ⁺22, YCX18, YZL22, YLZ⁺20b, ZCJ⁺21, ZLH⁺20, ZNX⁺21, ZYL22, ZWGC19, GANAHHJ17]. **data-based** [WWZ⁺20]. **Data-Centric** [Hul17]. **Data-driven** [DMR18, LWL⁺21]. **data-level** [CSLD17]. **data-sharing** [HCB⁺22]. **Database** [DHES16, WB17, EHBA⁺19, GLO⁺22, NGS⁺19]. **Database-Backed** [WB17]. **Databases** [AAG17, FYK⁺17, Moh17, BANT20]. **Datacenter** [MKGT16a, MKGT16b, TVK⁺20]. **datastore** [RST11]. **Daten** [Six17a]. **Datenschutz** [PB17]. **datenschutzrechtliche** [BP17b]. **Dating** [CE12]. **David** [Lut17]. **day** [Fir18]. **dBFT** [CCA⁺20]. **DDoS** [FGHM17, JLG⁺14, KKT⁺22, RBL⁺17, RBS17]. **de-anonymization** [XWY⁺21]. **De-Anonymizing** [DS15]. **Dead** [BR16]. **deadlock** [NQ20]. **deal** [ADMM13]. **DealBook** [Ano18j]. **dealing** [K.13]. **Deanonymisation** [BKP14]. **Deanonymizing** [AABE20]. **death** [Cim19]. **Debt** [Bhe17c]. **Debt-based** [Bhe17c]. **DecChain** [BS20]. **Decentralised** [BCM16, Lau11a, Lei16, P16, TLS⁺21]. **Decentralization** [CVM17, EBHBL16, GBE⁺18, WPXZ20, BHMB21, LX21]. **Decentralized** [Ant21, BSCG⁺14, But13b, Cou13, CDE⁺16, DMH18f, DGP17, DGP20, Eva14, FR16, FBL⁺20, FY19, FDT17, FF17, GH05, GKČ14, GM17, HTCW17, HTCW18, KET⁺17, Kra16b, KMB15, LWY⁺19, MBC⁺17b, Mue18, Mul14b, NOT15, Not19, Pas15, RGB20, RS21b, RMSK14, SCG⁺14, SJX⁺20, SGF⁺17, Shi19, SV16, Sub18, Tam19, TS16, Voi11, YPFY21, ZL19, Zoh17, ZZJ17, AB20, BAJ20, BS20, Bre17, DHH⁺22, GLF20, GPP18, HHBS18, HSGY20, JGL⁺20, JZLL17, KKK⁺21, LFX⁺20, QHW⁺20, RKP19, RSJP19, SJB21, Woo14, WMHL21, XJB⁺17, ZWC21, ZWY⁺21, ZMH⁺17, ZMH⁺18, CGT⁺21]. **Decentralizing** [CTNS21, Hal17]. **decidable** [PLSS17]. **Deciphering** [LZZ21]. **Decision** [Las17, Moh19, PZZ⁺20, DCK21]. **Decisions** [AMGBK22, EGB18, KUEE17, KUEE18, KUE17]. **decoded** [CM14]. **decompilation** [GLTS22]. **Decomposition** [Gya21, PASA22]. **Deconstructing** [Ros03]. **DECOR** [Ler14a]. **Decoupling** [DMO⁺19, IM16]. **DecReg** [àNOE17]. **Deep** [BNMH17, FYZ⁺21, GMH21, GR17, LLL⁺21b, LPSP20, NMH16, WWML21, Fan22, GS20b, LLL⁺21a, NVE⁺21, UJ16, XLZ20, ZZB⁺22]. **Default** [NTKS17]. **Defects** [CXL⁺22]. **Defense** [ZP17b]. **Defenses** [CPNX20]. **Defined** [AK17, HCB⁺22, RS21b, SD16a, YPDC20]. **Defining** [CXL⁺22, Hir17]. **definition** [DMR19b]. **Definitions** [Big20]. **defrauded** [Lew15]. **Degradation** [ABF⁺16]. **degree** [LX21]. **del** [RSR17]. **Delay** [FOA16, SOA17, FOA17, GRM22, GKKT16]. **delay-tolerant** [GRM22]. **Delays** [RFM⁺18]. **Delegatable** [CDD17]. **delegated** [ESP22]. **delegation** [AAC⁺19b]. **deletion** [YCX18]. **Deliver** [GDTP17, BHMB21]. **delivered** [Pal18]. **delivering** [TF16]. **Delivery** [GRKČ15, CAA⁺22, ICGB21, LGL⁺22, WLL21, ZLT⁺19]. **Demand** [KT22, DB16, Per20]. **Demo** [SZJ17, ZZJ17]. **Democracy** [QFLM17, Mea19, Pou20]. **democratic** [KH16]. **Demonstrating** [FF17]. **Demystifying** [Ano20, CDM20, LTKS15]. **Denial** [BAR21, SGDT19, VTM14, Bac02a, Bee16]. **Denial-of-Service** [VTM14]. **Dense**

[SYK17]. **Dependability** [BBGP19].
dependent [WGL19]. **Depends**
[Smol18, RS21a]. **Deploy** [Raz19]. **deployed**
[CXY21]. **Deploying** [GBSAS17].
Deployment [ECHL16, FSW14]. **Deposit**
[BZ17]. **Deposits**
[ADM14a, Ano18l, Bee16, YSLH17, YTLD19].
Depth [ZDP+22]. **derivation** [Per09].
Derivative [BKT17]. **Design**
[AMGBK22, Ali19, AAKJ22, BK14,
BLSD17, CLS19a, EGB18, Fot17, KLZ+21,
LLHW20, Lin15, LLP+20b, MAQ99,
RSGA+21, SK17, TKBK22, Wör16, ZTSS20,
GLO+22, MÖ22, NGS+19]. **Designated**
[WHJ17, WHJ20]. **Designated-verifier**
[WHJ17, WHJ20]. **Designed** [Li14a, Li14b].
Designing
[LTMW19, NST+17, Uri17, VGJ15, XLL+19].
Designs [BABD17, TBB21, ZWL22].
despite [PB17]. **Destruct** [CXLG22].
Destruction [Cou14]. **detailed** [ARK20].
d'État [MK15]. **detect** [KKT+22].
Detecting
[AGGM16, CLS+21, WZS19, YML+22].
Detection
[ALGK19, Bog17, CPL+21, DH17, JW18,
KPJ22, LZC+17, MMT16b, RRM18, RS21b,
SGDT19, WWZ+22, AJA+22, CMR+21,
CBST22, CEW15, HYWY22, KKK+21,
KTM+21, KKT+22, LW16, LTMW19,
LWA21, LTB+22, MLYL20, MGE20,
MMT16a, SMB22, SYH22a, SYH22b, VD17,
WLZ20, XWY+21]. **detections** [CZ16].
detector [LLCF21, NQ20, XGS+20].
determinants [PASA22]. **Determining**
[JFG18, KRL17, Scr18, GB21].
Deterministic [DCK17, GS15b, WLGL19].
Deterring [KT15]. **Detrended** [ZWLS18].
developed [AR15]. **Developer**
[Ano17b, Nor17b]. **developers**
[Lee13, Per20]. **Developing**
[Ano18g, BBH18, Ksh21, Lim18, FRSU17].
Development [AKP17, AKP18, Ant21,
DSN17, HS16d, Lei16, ZGY+21, Bra15a,
CXY21, wScCcS21, VDVC21].
Developments [DMH18k]. **Device**
[LGGB+21, LHL20, PK22]. **Devices**
[HS16c, LMWL17, ÖY17, Ses18, TSY+21,
FMR+19, HYLY19, HCW+18, LL16, LL17a,
WLC+22a]. **DEVp2p** [HZT+22].
dezentrale [Six17e]. **Dhabi**
[ACM17a, ACM17b, ACM17d]. **diabetes**
[CMR+21]. **diagnosis** [WWZ+21]. **diced**
[Nic17]. **Did** [RS14]. **Dies** [McK19].
Dietcoin [FMR+19]. **Difference**
[Nis16b, YS21]. **Differences** [Mul14c].
Different [Mer19, WLW22]. **Differential**
[URC20]. **Difficulty**
[GKL17, Kra15, Kra16a, MCJ17]. **diffusion**
[YS20]. **Digital**
[AKP18, ACV17, BBM+18, Cha81, CMS21,
EL14, Gev16, GK14, GANT21, Gri11,
KL18a, KT15, KKS14, LPSZ18, Mer88,
MK15, Mor17h, Nav17, OZ16, Pav18, Pop15,
Pop16b, RBB19, Rin18, Sei20, SK20, Smo18,
Spr13, Swe16, TS16, Vel16, WWQ+18,
Wer18, Zei16, Bar18, BHS93, BGPW16,
CJW17, CRdK16, DGP20, Fan22, GTMP14,
Gon17, Goo18, HS91, HS16a, HLF+21, Ker14,
KH16, KSLC21, Lee15, LLCH21, Olu21,
Pan96, RBM17, RSJP19, SI19, TF16, Uri17,
VC15a, VC15b, XWZ21, YL20a, AKP17].
digitalen [Ker14]. **digitaler** [RBM17].
Digitalization [Sch19b]. **Dilemma** [Eya15].
Dilemmas [KKS+17d, KKS+17c].
dimension [CLS19b, CLS20]. **dimensional**
[GFLS21]. **Dimensionality** [IM21].
Dimensions [JB18b, BHMB21, Hal18].
DiPETrans [BAPS22]. **Diplomacy** [Ber17].
Directed [RJK+17]. **direction**
[IKC21, MF19]. **directional** [CTGJ22].
Directions [ASSK21, DH76, HHK18,
KAKC20, PPMT17, Son16a, DPN+22,
JCG+21, KGTK20, PDJ22, URC19].
Diritto [MS15]. **Disambiguating** [Dre17e].
Disaster [Pan18]. **disclosure** [BEM+20].
Discontinuity [TSCT18]. **Discourage**
[MKKS14, MKKS15]. **Discovering**

[DSBPS⁺18, Dre17f, EZ17, EZ18, TSCT18].

Discovery

[ACW17, LWZ⁺21a, LTB⁺22, MBT19].

discrete [LLWH21]. **discrete-event**

[LLWH21]. **Discuss** [FF17, WXH21].

Discussion [Ali15, HSB17c, HSB18g].

Discussions [WXH21]. **Disease** [CTM22a].

Dishonest [AKWW19]. **Disincentivize**

[ES14a]. **Disk** [GL00]. **Disparate**

[LGK⁺22]. **dispensers** [MTR⁺21]. **Dispute**

[BT18a]. **Disputes** [ABL18b]. **Disruption**

[BBBB15, DTM20]. **Disruptive**

[DT18, FRSU17, GR17]. **disruptiver**

[FRSU17]. **Dissecting**

[BCCS20, MPC⁺23, NPB⁺21]. **Distance**

[OTS⁺21, GFLS21]. **Distilling** [Olu21].

Distributed [AMEF21, ALPBT17,

AKGN18, Ant21, AABM17, Brül17, BZK⁺21,

CZJ⁺17, EGB18, ECdO17, Eti19, EG17,

HL16, HLC⁺17a, Her17, Hul17, JCHSR16,

KLDS20, KMOD17, Kol22, KYV19,

LDWS17, Lau11b, LS17, LLW17, LWL⁺22a,

LSP⁺15, MZLW20, MGM⁺17, Mei18,

MGGR13, NST⁺17, Poe14, RV21, RKTv22,

RSJ21, RBB19, RLT17, SD16b, SW21,

SGDT19, Str18, SPS⁺21, TD17a, Tre21,

VCPC20, VRK21, Wat17, Wei18, Wu17,

XNC21, YLZ20a, ZWQ⁺16, BAPS22,

BCK⁺21, BS15, BANT20, BERHE19, CK16,

CM19, CHL19, FFL21, FD20a, HS20, Her19,

KF19, KTM⁺21, KKT⁺22, LZY22, LWCX21,

MKS⁺19, MCF20, MMMV21, PLSS17,

PK22, SK20, XBX⁺22, ZWH18, dORM⁺20].

Distributing [Dre17g]. **Distribution**

[NPG⁺22, Yeo15, DAV20, KK21, ZLL⁺18].

distributions [GFLS21]. **Diversification**

[HJHBG22, BOS15]. **Diversity** [JB21].

Divide [Bra13]. **Divisors** [DDX17]. **DL'17**

[Spo17]. **DLoc** [ECdO17]. **DLT**

[FFL21, Lim18]. **DLT/Blockchain** [Lim18].

DNA [YS21]. **DNS** [HSGY20]. **Do**

[ALB21, CXLG22, Pec17a, SIDV14, WXH21,

Cal21, Kug18]. **Docker** [XJB⁺17].

doctrinal [HA15]. **doctrinarias** [HA15].

Document [PPR⁺20, HS91].

Documentation [Ano17b]. **Documenting**

[Dre17h]. **Does** [HSB17c, HSB18g, SGF⁺17,

Ste17, Ano17d, Fai17, RE18]. **Dollar**

[HJHBG22, ZKU⁺23]. **Domain**

[JB18a, WXH21, LZZ⁺20, PK21, RBS17,

SMHK21, TDS⁺22a, YS20, YS21, YP21].

domains [ARL20, AAC⁺19a]. **Dominant**

[AC17]. **Dominating** [SS20]. **donation**

[SPB⁺22]. **Done** [BSLM20]. **DONS**

[BAK22]. **Don't** [JBK⁺19, MHH⁺16, Pal18].

doors [LZDA16]. **Doping** [PRS22].

Doppelganger [KKS⁺17b]. **Dormancy**

[Smi18]. **DoS-resistant** [CZQ⁺21, Voi11].

Double [AMEF21, DNY17, JW18, KAČ12,

KAR⁺15, LZC⁺17, NT21, àNOE17,

PSDSNAHJ19, PR16, ZL19, DB16, MXW22,

RWG21, WWZ⁺21, WLS22, YSLH17].

double-blockchain [RWG21].

Double-Financing [àNOE17].

Double-spend [PR16]. **Double-Spender**

[DNY17]. **Double-Spending**

[AMEF21, JW18, KAR⁺15, LZC⁺17, ZL19,

KAČ12, PSDSNAHJ19, WLS22, YSLH17].

Down [Son14, Vig15, Zet13, Sha17]. **DPM**

[GANAHJ17]. **DPoS** [LX21]. **DPS** [FF17].

DPS-Discuss [FF17]. **DPSO** [DRS22]. **DR**

[FWP21]. **Drain** [VBC⁺17]. **Draw**

[Ano18m, Ole18]. **Dread** [RS14]. **Dreamers**

[DMH18a]. **Dreams** [Eya17]. **Dredas**

[FBL⁺20]. **Drive**

[BK17a, BK18, KPW19, Seg18]. **Drive-by**

[Seg18]. **Driven** [DCZ⁺21, HSB17b,

HSB17a, HSB17d, HSB18f, HSB18e, HSB18h,

JBH⁺22, DMR18, LWL⁺21, LTW⁺21,

TDS⁺22a, TDS⁺22b, WQGX22, ZDM⁺21].

Drivers [PZZ⁺20, GDA⁺21, KVP21].

Drives [GMH21, Smu18]. **drone** [LYZ⁺21].

Drones [SYK17, CAA⁺22]. **Drug**

[Zet13, Gei16]. **Drugs** [STG⁺20]. **Dry**

[LJG15]. **DSA** [GGN16, GGK⁺14].

DSA/ECDSA [GGN16, GGK⁺14]. **dual**

[LYW⁺21, YWX⁺22]. **dual-blockchain**

[LYW⁺21]. **Dubai** [Nor17a]. **Dubious**

- [Roo18]. **Due** [Ami16, McL13]. **dumber** [Ito18]. **dummies** [Ant16]. **d'une** [San14b]. **Duplex** [DW15]. **Duplication** [KKS⁺17b]. **during** [BSKR21, CTM22a, Osb18a]. **Dutch** [PdWWS16]. **dwelled** [UJ16]. **Dynamic** [BAK22, JBH⁺22, KTA⁺20, Lin21, RV21, WMD⁺21, WLW22, YMHY21, ZzH21, AB20, Bar17, DB16, FWP21, KUE17, LDLS22, NAR22a, Sal22]. **Dynamical** [ZKU⁺23]. **Dynamically** [KJ17, KJ18]. **Dynamics** [EDS15, LS20, Sem22, Bla18, GKKT16, GK17, Gon17, VLAf21].
- E-Cash** [MGGR13, BB15, Nak08b]. **e-Cheque** [SV19]. **E-Commerce** [DCZ⁺21, SXZ⁺21, XLM⁺17, ZWY⁺21, GWF⁺21]. **E-Democracy** [QFLM17]. **E-Governance** [QFLM17, LSN21]. **e-Government** [ØJ17]. **E-health** [BJ20, SMM⁺20, ZYL22]. **E-Health-Care** [BSLM20]. **e-Healthcare** [IFD⁺19]. **e-learning** [AC21]. **E-Voting** [HTCW17, HTCW18, KV18, KAK21, KAK20, PR21, ZWX20a]. **Early** [KD16, Mul14g]. **earned** [Tun18]. **Earnings** [Mat13, GS20a]. **Earns** [WvB14]. **EASBF** [EFFM21]. **Easier** [BSLM20]. **East** [Ber17]. **Easy** [But13a]. **Ecash** [Pan96]. **EcashTM** [Sch98]. **ECB2** [BILN21]. **ECBC** [XZK⁺17]. **ECC** [XWZ21]. **ECDSA** [DS17b, GGN16, GGK⁺14, Lin17, WYZ⁺20, WMD⁺21]. **ECIES** [KAS⁺22]. **eclipse** [XGS⁺20]. **eclipsed** [XGS⁺20]. **eCommerce** [MFR⁺21]. **EconLedger** [XNC21]. **Economic** [BHMB21, Bon16a, DdFP18, EKK⁺17, EZR⁺22, Eva14, Hal18, MLD19, Nav17, Pav18, CGR18, GTMP14, VC15a, VC15b, VCS03]. **economically** [KDS⁺20]. **Economics** [Bhe17b, BCEM15, CG16, Fra14, HS16d, Hou14b, Ker18a, KLZ⁺21, KD20, Ksh21, Rec19, Ant20, Bar16, CG20, HS16a, KDF13]. **Economies** [MDAP16, MAP16, Son16b]. **Economy** [BDP17a, Bhe17c, HYZ⁺24, LSN21, TSHI22, XSC⁺17, GTMP14, Har17, LPS⁺20a, LP18c, LP18d, Sir16b, Swa15b, TKW15].
- Ecosphere** [Six17a, Six17f]. **Ecosystem** [Cus14a, GHMO17, GDP⁺17, Ibr17, Kab17, Son18, VTM14, Cus14b, DMH18b, HVM⁺18, HAZ21, LGCY22, MBB13b, MBB13a, PCHD19, dSR21, YV17]. **Ecosystems** [HSY⁺21, SW17, Sto17]. **Edge** [BS20, Du21, MMR⁺21, SD16a, SJ21, TMTB19, YZC22, BKV22, FWP21, HVM⁺18, HZL⁺20, HTLY21, JYTW21, JAK19, KAP20, LDLS22, LGL⁺22, MGN⁺22, QL22, WQGX22, XCZ⁺21, YLZ⁺20b, ZZW⁺21, ZSL21]. **edge-as-a-service** [JAK19]. **edge-cloud** [YLZ⁺20b]. **edge-enabled** [HTLY21, JYTW21]. **Edges** [XWL⁺19]. **Editor** [WR16, Wil17, WR18]. **Editorial** [CCH21, ZMKR22, ZWC21, HWJ22]. **Education** [Jas18, RRD17, SL17, CXLC18]. **Educational** [HRE17, SD16b, XZK⁺17, AC21]. **Edward** [Ano16c, SM-16]. **Effect** [Lin21, GHJ22, NC17a]. **Effective** [BM20, LLYL19, MCD15, WTW⁺23, LML⁺19, PC21, dSR21]. **Effects** [Bai19, MG17, OOF⁺17, KCS⁺14, SG21]. **efficiency** [BHS93]. **Efficient** [BD19, CZQ⁺21, DS17b, Dim20, FYK⁺17, Ibr17, JKKX16, KO22, LS20, Lau11b, LCSR21, LWL⁺22b, MGS22, MHWK16, PHH⁺20, RAH⁺15, RM19, TD17b, WDLL19, WGL19, WPG⁺22, XZK⁺17, XCG⁺17, XWL⁺19, AMME21, BYR⁺20, CM19, CLH⁺20, EFFM21, ES16, FBL⁺20, GLW⁺20, GLY⁺21, HYLY19, HZL⁺20, KW20, Lau11a, LWQ⁺21, LLZ⁺17, RCD⁺19, RSJP19, VD17, WDL⁺18, XHP⁺21, XBX⁺22, YYDC21, ZLL⁺19a, ZLL⁺19b, MRR⁺20]. **Effing** [MSC15]. **Effort** [Coe08]. **Efforts** [Nar19]. **Egalitarian** [Sut20]. **eGose** [ACM17c]. **eHealth** [DXR⁺17, HSX⁺21, HP19, SDT17]. **eHealthcare** [WHA⁺20]. **EHR** [LCL⁺22]. **EHRs** [HSX⁺21]. **Eigentumsrechten**

[HP17, HP18]. **Einordnung** [SKG12]. **Einsatz** [DF17a, DF17b]. **Einsteiger** [Ale18b]. **EIP** [Woo14]. **EIP-150** [Woo14]. **Ekiden** [ZHC⁺20]. **Elapsed** [Cor19]. **Elastic** [HYP⁺22, LML⁺19, Sch14b]. **ElearnChain** [AC21]. **Election** [MG17]. **Electric** [KMAJ21, KUE17, ZW15, ZW17]. **electricity** [Fai17]. **Electronic** [ACM17c, Ano17a, Cha81, Hut17, Ksh18a, MY11, Nar19, OO91, PPR⁺20, Shu19, CLC⁺19, KRK21, Nak08a, Pan96, SHL⁺20, Sub18, TPE20, VBST21, YLM21, YWX⁺22, ZGZ21]. **Electronics** [XRS⁺19]. **Electrum** [VCLK17]. **elements** [Uri17]. **ELIB** [MRR⁺20]. **eliminate** [LLZ⁺17]. **Elipmoc** [GLTS22]. **Elliptic** [Fit22, US23, WHJ17, WHJ20]. **Elon** [Sha17]. **emails** [Pal18]. **Embedded** [IK19, LMWL17, LL16, LL17a]. **embrace** [Cae15]. **Embracing** [And18]. **emergence** [BCV19]. **emergency** [RGS GHGCG21]. **Emerging** [ACW17, Bai19, But19, Du21, KD16, TODM19, HS20, Son16b]. **Empirical** [JL17, KAK21, MC13, PPW⁺15, VTM14, Vel16, WLXC17, WPC⁺22, CF15, CAMS20, DCB⁺21, MB17b, BBBB15, NPB⁺21]. **Empower** [DXR⁺17]. **Empowered** [HWCL17, CSKP21, LWL⁺21, TSY⁺21, WLZ20]. **Empowering** [LLL⁺21c]. **Enable** [QXC⁺21]. **Enabled** [AAAO20, BD19, DCZ⁺21, Du21, KV18, Las17, LQYG19, LN17, MZLW20, Mal18, SS17b, XRS⁺19, BKV22, BKM⁺17, CJA⁺19, CMR⁺21, CGC21, DMH18b, EFFM21, FYZ⁺21, GLW⁺20, GDKJ22, Hal21, HH22, HTLY21, ICGB21, JYTW21, JAK19, KKT⁺22, LTB⁺22, MXW22, MRG18, MBK⁺21, MLTT20, MFE⁺20, NVE⁺21, NML19, PCM⁺21, QUG⁺23, SRP20, WQGX22, WLZ20, WLN⁺21, YPDC20, ZWX20a, ZZW⁺21, ZGR⁺22, ZBF22]. **Enabler** [CBWF17, SS17a, CDS⁺19]. **Enabling** [ABL18b, GRM22, HGDD20, IK19, LLJ21, Nar19, Øln16, WZW⁺20, XSC⁺17]. **Enactments** [LSN21]. **Encrypted** [AAG17, DCK17, FYK⁺17, GWF⁺21, DCK21]. **Encryption** [DDX17, FYK⁺17, HSS⁺20, LLW17, Mer88, SZM22, BILN21, CLC⁺19, HH22, LWQ⁺21, MBK⁺21, TGC⁺21]. **End** [BMSS17, BMSS19, GWX⁺21, MBB⁺15, PR21, Roi13, Rot17, PK21]. **End-to-End** [BMSS19, BMSS17, GWX⁺21, PR21, PK21]. **Endorsement** [MBT19]. **Energy** [AAAO20, BD19, Dru22, EBD⁺20, LDWS17, OO19, PW17a, Pop18a, WMG⁺21, CJA⁺19, DLK⁺21, Fai19, GB21, GLW⁺20, GLY⁺21, JAK19, KMAJ21, KTA⁺20, Kug18, KGTK20, LWCX21, MNB⁺17, MMMV21, OM14, TKW15]. **Energy-Efficient** [BD19]. **ENF** [XNC21]. **enforced** [GGJ22]. **Enforcement** [KT18, ME17, Tzi18, WBK⁺17]. **Enforcing** [Zei16]. **engine** [LPGBD⁺19, SSSJ19, WDL⁺18]. **Engineering** [CS20, CMM⁺22, Fra14, JJFC22, LP20, Nia19, Not19, PPMT17, SL20, Sve17, TODM19, Bar16, CLS19b, CLS20, LTW⁺21]. **EngraveChain** [SW21]. **Enhance** [SOA17]. **Enhanced** [BM20, CC16, KAS⁺22, LST⁺17, XJY17, BK22, HZL⁺20, HTLY21, SZdLZ22, XWY⁺21]. **Enhancements** [CCA⁺20]. **Enhancing** [BBGP19, CP17b, KKJG⁺16, MO15, MLYL20, WA15a, WA15b, Hea13]. **enigma** [Nis16a]. **enormous** [Fai17]. **Enough** [ES14b, GLD⁺18, ES18]. **Ensemble** [JJFC22, LPSP20]. **Ensuring** [Ano21c, SHL⁺20]. **entail** [Cal21]. **Entangled** [JB18b]. **Enterprise** [DTM20, Mor17a, dKW17]. **entire** [Nic17]. **entities** [AAGX⁺22, YV17]. **Entity** [KFBI22, ZSGB⁺22]. **Entrepreneur** [IM16]. **entrepreneurship** [NC17a]. **Entropy** [GMH21, PMMP19, PW17b]. **Entwicklung** [FRSU17]. **Environment** [LST⁺17, ABB⁺19, ICGB21, JAK19, KK17b, LL16, LL17a, Li14a, Li14b, ML20, WLL⁺13,

YL20b, ZWY⁺21]. **Environmental** [GPPB⁺21]. **Environments** [Mer19, VFS⁺19, ZDP⁺22, BPT⁺22, HS20, HSX⁺21, LTMW19]. **EOSIO** [HSY⁺21, HWW⁺20]. **EPBC** [XCG⁺17]. **EPR** [PLSS17]. **Equi**hash [BK17b]. **Equilibrium** [WdLY⁺19]. **Equities** [HJHBG22]. **equity** [How20, ZZ16]. **Equivocation** [RKS15, TD17b]. **era** [dS17a]. **Erasing** [FBHS19]. **Erratum** [Ano18g, ZFY17, ZDL17b]. **Errors** [JS20]. **erste** [SKG12]. **escalation** [FTS⁺20]. **Escrow** [WLY17]. **ESORICS** [GANAHHJ17]. **espoused** [SG21]. **Essays** [Kha19, Rec19]. **estimated** [Nic17]. **Estimating** [Bon14a]. **estimation** [Kat17, YV17]. **ETH** [Osb18a]. **Ether** [Cal21, WKD22]. **Ethereum** [AGK22a, ABBS18, ABC17, BCCS20, BKT17, BCM16, Bon16b, BO17, But13b, CCMN17, CPNX20, CLZ⁺20, CXY21, CPL⁺21, CLS⁺21, CXL⁺22, CXLG22, Dan17b, DMH18g, DMH18m, Fai19, FD20b, GBE⁺18, GKJ⁺18, GLTS22, HSY⁺21, Hir17, HZT⁺22, IM21, JCHSR16, JS20, KSA22, KLM17, KOJ⁺20, LGTS20, LDM⁺21, LTB⁺22, LPGBD⁺19, LWZ⁺21b, MPC⁺23, MB17a, ML20, NPS⁺17, OHJ20, OAS⁺21, Pie20, Six17g, SOA⁺21, TKBK22, WLW⁺19, WZS19, WTC24, Woo14, WPXZ20, WWZ⁺22, XGS⁺20, YML⁺22, ZWW⁺17, ZTJ⁺21]. **Ethereum-based** [LDM⁺21, ZTJ⁺21]. **EtherQL** [LZY⁺17]. **Ethics** [AM15, BKS19, UJ16]. **EthIKS** [Bon16b]. **EthReview** [ZTJ⁺21]. **EU** [But19]. **Eurasia** [ACM17c]. **Euro** [ZKU⁺23]. **Euro/US** [ZKU⁺23]. **EUROCRYPT** [OF15]. **Europe** [Bri21, Ker18b]. **European** [Gim16, LD17]. **EV** [HZLH19]. **Evaluating** [AKR⁺13, JLX21, YCP⁺21]. **Evaluation** [ACW17, BAR21, DCK17, Doz18, FOA16, IGRS16, KUBS22, Mer19, Sal18, YPFY21, Ano21d, DCB⁺21, LLJ21, MOM22, WLW⁺19, WZ21]. **evaluations** [HGDD20]. **Evasion** [Nar19]. **Even** [Ler14a, VM15]. **Event** [Hul17, Tac17, LLWH21]. **Event-based** [Hul17]. **Events** [LX20, TADS20, RGSFGHCG21]. **eventual** [Sir16a]. **ever** [Cim19, Fai17]. **Every** [Kan20, RDL⁺20]. **Everyone** [GH17]. **Everything** [LSN21, Far18a, SNKG20]. **everywhere** [Laz15]. **Evidence** [DVRM16, GB22, KYLA22, RIMP22, WWQ⁺18, YS21, ZzH21, ALB21, FGHM17, LLCH21, MB17b]. **Evil** [Kru13]. **Evolution** [FPKH17, HSY⁺21, KBS17, Kün16, Smo18, Tay17, WL15, CPSGAA20, OC16]. **Evolutionary** [ADQH22]. **EVOO** [But19]. **examination** [SCP⁺20]. **Examining** [But19, KCD17, VBC⁺17, Uni14]. **Exchange** [CC16, CGLR19, GLG19, HG15, JMM14, Joh19, MSCH15, McK19, MC13, MCS18, Nar19, RJK⁺17, SY22, WXH21, Wu19, YSZ⁺19, ZKU⁺23, Abe18, BCK⁺21, Cim19, JFG18, MF19, SBL19, Son16b, TDS⁺22a, WHJ17, WHJ20, Ano19a, Cim18a]. **Exchanges** [DBB⁺15, DGSW15, Hut17, Son14, WSZN18, FGHM17, K.13]. **Exchanging** [WvB14]. **Exclusive** [WREK18, MLTT20]. **Exclusively** [BdL13, CSG⁺18]. **Executing** [SCAA13]. **Execution** [EMEHR17, GBPDW17, SCAA13, WXR⁺16, BAPS22, LPGBD⁺19, SSSJ19]. **Executive** [WREK18]. **Existential** [RS21a]. **Expected** [Sid14]. **Experience** [Riz16]. **Experiences** [KJGW17]. **experiments** [Lil14a, Lil14b]. **explaining** [BWZ17]. **exploited** [Fir18]. **Exploiting** [GRU22, MHH⁺16, CZX⁺21, DMR18]. **Exploration** [LCL17, SK17, Wey19, BB14]. **Explorative** [Bri21]. **Exploratory** [AH19, BO17, KFBI22, LW16, Nav17, OHJ20]. **explorer** [KK17b]. **Exploring** [CXLC18, EN19, KSCD16, OOF⁺17, SCN⁺22, SK15, Tre21, WL15, WTW⁺23, Gom16]. **Extended** [BLMR14, Hul17]. **Extending**

[BLMR14, FYK⁺17, LPS20b, Wij16].
extension [Bak09]. **Extents** [WPXZ20].
External [WBK⁺17]. **Extra** [But19].
Extracting [SMZ14, YSZ⁺19]. **Extremism**
 [Lut17].

Fabric

[BSV17, LLHW20, Lin21, MBT19, Suk19,
 Vuk16, Yew18, GRHS20, MOM22, BHH19].
Fabric-Based [Lin21]. **face** [BILN21].
Facebook [dS17a]. **Facilitate** [NH17].
Facilitative [KCD17]. **Factor**
 [ML15, ML17]. **Factors** [GB21, KCD17,
 PZZ⁺20, ZSLY20, ZDL17a, ZDL17b]. **Facts**
 [EDS15, ALB21]. **FaDe** [CGLR19]. **Failings**
 [Wey19]. **Fair** [ADM14a, Ast16, BK14,
 BC16a, CGLR19, CGJ⁺17, GLG19,
 HWCL17, HLC17c, JMM14, MBC⁺17b,
 PS17, Pia16, QXC⁺21, SY22, WDLL19,
 YSLH17, Bee16, DSPSNAHJ20, GWL20,
 GLC⁺22, HCW⁺18, HLC19, LFX⁺20,
 LWQ⁺21, LLZY20, YTLD19].
Fair-Exchange [JMM14]. **Fairness**
 [CGJ⁺17, GDTP17, MSA⁺22, RSH22,
 MÖ22]. **Fake** [DDPS22]. **Fall** [Son14]. **falls**
 [Lee13]. **False** [Han13]. **Fambit** [HRE17].
Far [KVL19, Goo18]. **Farming**
 [PTPR17, PTPR18]. **Fast** [DW15, KAČ12,
 Lin17, LZC⁺17, LLYL19, SCAA13, SZJ17,
 DTK20, SZ13, Uri17, YTLD19, VB08].
fast-payment [YTLD19]. **faster**
 [CEN14, Ler14a]. **faucet** [MÖ22]. **Fault**
 [BVCH22, BSV17, Coe20b, XZY⁺21,
 TYY⁺19, VG20]. **fault-tolerance**
 [TYY⁺19]. **Fault-tolerant**
 [BVCH22, BSV17, VG20]. **FAW**
 [KKS⁺17d, KKS⁺17c]. **FBI** [Gre13, RS21a].
FC [BBMS14, BCJR15, CSN14, CMR⁺16,
 GP17b, JRB⁺17, Jue04, Ker12, Sad13].
Fears [HM18]. **Feasibility** [JCG17, SL18].
Feature [JJFC22, NTRK22, RS21a].
Feature-Rich [NTRK22]. **Features** [Bog17,
 Cou16, SS19, ARL20, DAGK20, HZT⁺22].
February [CMR⁺16, GP17b, Jue04, Ker12].

Federal [HV20, Nav17, Int14]. **Federated**
 [FZG⁺22, GLC⁺22, Mal18, QUG⁺23,
 SFYB21, SRA⁺22, AJA⁺22, ARL20,
 AKT21, MRG18, PSY21, QHNL21, RSH22,
 SZdLZ22, UHK⁺21, WQGX22, ZDM⁺21].
Feds [Zet13]. **Fee** [GCD16, LSZ22]. **Feed**
 [ZCC⁺16]. **feedback** [GTMP14, MXW22].
feedback-based [MXW22]. **Feeding**
 [Fai17]. **Feel** [SIDV14]. **Fees**
 [ARL19, Dim19, MB15, TNJJ22, ECA⁺20].
Felten [Ano16c, SM-16]. **ferenda** [Kün16].
FGFL [GLC⁺22]. **Fi** [SI16]. **fiat** [G.17].
Fiction [Lin15]. **Field** [Alz19, MTR⁺21].
Fighting [SOA⁺21]. **fight** [Tun18]. **Filters**
 [GCKG14]. **Finance**
 [Bhe17d, Edw15, Eya17, HSB17b, HSB17a,
 HSB17c, HSB17d, HSB18a, HSB18b,
 HSB18f, HSB18e, HSB18g, HSB18h, HSB18i,
 MSA⁺22, TBY17]. **Financial**
 [Ami16, Bai19, Cal21, DMH18l, EMEHR17,
 HRF17, JB17a, JMK17, Ksh20, Nor17c,
 Rec19, Sch19b, TSCT18, WLW22, And18,
 GS20b, GS20a, K.13, KBTT20, Lee15,
 Lew15, LMR17, LP18c, LP18d, RSR17,
 SPB⁺22, Six17d, VX17, WGC19, XLZ20,
 BBMS14, BCJR15, CSN14, CMR⁺16,
 GP17b, JRB⁺17, Jue04, Ker12, Sad13].
financieros [RSR17]. **Financing** [àNOE17].
Finanzindustrie [Six17d]. **Findel** [BKT17].
finding [Lar13]. **Findings** [BBBB15]. **finds**
 [Aro12, Edw15]. **Fine** [RCD⁺19, WTC24,
 LCZL21, LHH⁺18, MHL20]. **Fine-Grained**
 [WTC24, RCD⁺19, LCZL21, LHH⁺18,
 MHL20]. **fingerprint** [HS19b]. **FinTech**
 [WM18]. **Fintechs** [Sch19b]. **Fire** [RKS15].
FireLedger [BF20]. **firms** [K.13, Nor17c].
Firmware
 [LMWL17, HYLY19, LL16, LL17a, YL20b].
First [BH15, BP14, DP18, LF16, Pav18,
 PL16, SDT17, Ano17a, BHI⁺14, EBSC15,
 Ker18b, SKG12, WMHL21, YV17].
First-Generation [BH15]. **fisheries**
 [How20]. **Fishes** [ZWW⁺17]. **Fistful**
 [MPJ⁺13, MPJ⁺16]. **fix** [Lee13]. **Fixed**

[LX21]. **FL** [Jue04]. **flance** [Cae15]. **flash** [MBD⁺12]. **flash-speed** [MBD⁺12]. **flaw** [Duc13, Fir18]. **flaws** [FB17a]. **Flexible** [KXSS21, WDLL19, DKJ19, LTC⁺19, XHST20]. **Flow** [BS17a, JYKA19, YK15, HGDD20, QHNL21]. **flows** [BDP⁺15]. **Fluctuations** [EDS15, PPW⁺15, GAF18]. **Fly** [NVWF14]. **Focus** [TKW15, PCP20]. **Fog** [BAS⁺22, BK22, BATB20, JWNS19, LWZ⁺21a, SNKG20, TMTB19, EFFM21, HCW⁺18, HLC19, IFD⁺19, KGS⁺19]. **Fog-based** [LWZ⁺21a]. **Fog-enhanced** [BK22]. **Fog-oriented** [BAS⁺22]. **FogBus** [TMTB19]. **follow** [RSGHGC21]. **follow-up** [RSGHGC21]. **folly** [Sch14b]. **FOO** [ZLJW20]. **Food** [But19, CMT⁺21, CTM21, KD20, PK19, Ano21c]. **Footprint** [GB22, OM14]. **Forecast** [PMMP19, ALB21, GS20a]. **Forecasting** [Coh20, LPSP20, PASA22, YK15, Ara21, AAPZ19, PCP20]. **Forensic** [Tzi18, YCP⁺21, KSLC21]. **Forensics** [NHM16, RBB19, Wad18, KSLC21, LLCH21, RSJP19, ZLW19]. **Foreseeable** [ATD17]. **Foreword** [FD20a]. **Forex** [DMO⁺19]. **Forging** [Pop16a]. **Fork** [KLM17, KYLA22, KKS⁺17d, KKS⁺17c, LTC⁺19]. **Fork-free** [LTC⁺19]. **forkable** [WDL⁺18]. **Forkbase** [WDL⁺18]. **Forks** [LK17]. **Form** [Ano18g, BBH18]. **Formal** [BDLF⁺16, MSMH21, SY22, Son16a]. **formalization** [SPZ⁺20]. **Formalized** [CXS⁺17, LN17, NML19]. **Formalizing** [AKGN18, Wel18]. **formation** [DAGK20]. **Fortune** [Pop17b]. **forward** [MAAN19, SBA21]. **Fostering** [Sch19b]. **FOTB** [YL20b]. **Found** [Kee16, Pop17b, YWJ⁺16]. **Foundations** [DMH18h, Ant20, Gom16, HMS17]. **Founder** [McK19]. **Founding** [EL14]. **Four** [LF16]. **FowlerNollVo** [VFN91]. **FPGA** [KXSS21, SNM17]. **FPGA-Based** [KXSS21]. **Fractal** [DVRM16, ZKU⁺23]. **fractality** [LB18]. **Fragen** [BP17b]. **fragment** [RS21a]. **Fragmentation** [Bhe17d]. **Framework** [AvM18, AVA21, Ano18g, BLPB17, BBH18, Cor19, DDPS22, DWC⁺17, FZG⁺22, Gou19, HL16, KT18, Las17, LWY⁺19, Mal18, Nar19, àNOE17, PTPR17, PTPR18, RS17, SK15, Scr18, Ses18, SV19, SCZ⁺21, Tam19, TSY⁺21, TMTB19, WWZ⁺22, BAPS22, BAS⁺22, DHH⁺22, FWP21, Gim16, Hal21, HCB⁺22, HSC21, IFD⁺19, JAK19, KBT20, KOM⁺20, KRK21, KKK⁺21, KSLC21, LWA21, LGCY22, LYZ⁺21, LQZ⁺20, MZA⁺20, MRG18, MMMV21, PHRH21, RDDB19, RSJP19, SGM20, SCE21, SWG21, SLG⁺21, SRA⁺22, VCS03, YL20b, YLZ⁺20b]. **Fraud** [CZ16, CBWF17, Gof19, HRF17, Kru18, MMT16b, RRCL17, Ano18e, CLS⁺19c, Kha15, LTB⁺22, MMT16a, VD17, ZZB⁺22]. **Frauds** [ZTJ⁺21]. **fraudulent** [LW16]. **Frax** [Men19]. **Free** [HSS⁺20, SPB17, VM15, Dim20, LTC⁺19, Six17f]. **Free2Shard** [RKTV22]. **FreeBSD** [Ano18b]. **freedom** [TF16]. **Frees** [Hou14b]. **Freicoin** [TF16]. **French** [San14b, TFG17]. **Frequencies** [WLW22]. **Frequency** [Gya21, PMMP19, Via16, MLTT20]. **frequency-based** [MLTT20]. **friendly** [ABB⁺19, ZWX⁺20b]. **Friends** [AMVA17]. **frozen** [Cim19]. **FruitChains** [PS17]. **Fuel** [Car15, MTR⁺21]. **Fulfillment** [Nis16b]. **Full** [Ano18b, HSB17c, HSB18g, MMR16, RS13]. **fully** [HLF⁺21]. **fun** [PW17a]. **Function** [Ano18g, Bac03, BBH18, CXLG22, KAS⁺22, Mer88, VFN91]. **Functional** [FBGMPS23, OOF⁺17]. **functionality** [Wij16]. **Functioning** [Ker14]. **Functions** [Bac02b, Ler13, SBBR17, Per09]. **fund** [Pan96]. **fundamental** [CF15]. **Funding** [BDW17, LHZ17]. **funds** [Cim19]. **funktioniert** [RE18]. **Funktionsweise** [Ker14, RE18, Six17h]. **Further** [Dre17u].

Future [ASSK21, BBBB15, BVGC22, BK17a, BK18, Bys19, Car15, CWCC21, EH24, EGB18, Her17, JKS16, KAKC20, MDAP16, MAP16, PP16, PSGM22, SG19, Son16a, AKT21, CXY21, DPN⁺22, Ext15, Fri14, GGDK20, HS19b, JCG⁺21, KGTK20, MKY⁺21, PDJ22, SC21, SKG13, URC19]. **futures** [ADZ23]. **futuristic** [URC20]. **fuzziness** [LX21]. **fuzzy** [AAPZ19, Che18, WZQ⁺17].

Gamble [Ksh22, Roo18]. **Gambling** [MCHM17, MHM17]. **Game** [Hou14a, Hou16, JLG⁺14, Kra16b, LJG15, LBS⁺15, Ort16, HS19a, HVM⁺18, SZdLZ22, YZC22]. **game-enhanced** [SZdLZ22]. **Game-Theoretic** [JLG⁺14, LJG15]. **Games** [Alz19, KKKT16, LSP⁺15]. **Gaming** [Pia16]. **GAN** [FYZ⁺21]. **Gap** [Dan17a, YZC22]. **GARCH** [Ara21, Kat17, SKG22]. **Gas** [KSA22, DLV⁺22, GKJ⁺18, GKJ⁺20]. **Gasp** [Bue18]. **Gateways** [YWJ⁺16]. **Gave** [Pav18]. **GDPR** [BERHE19, PYC21]. **GDPR-Compliance** [PYC21]. **geautomatiseerd** [PdWWS16]. **Gegenbauer** [PCP20]. **Geld** [Möl13, Cap12]. **Geldwährungen** [WLS17]. **Geleit** [LPW17a, LPW18, LPW17b]. **General** [BLPB17, Int14, SV16, DB16]. **Generalized** [BK17b, PCP20, WdLY⁺19]. **Generals** [LSP82]. **generated** [Goo18]. **Generating** [BBM⁺18, LUBS18]. **Generation** [AMLH15, BH15, But13b, CGT⁺21, OA17, AMLH18, BCK⁺21, BHI⁺14, Hal21, MRG18]. **generative** [ZSGB⁺22]. **Genetic** [MGS22]. **Genius** [Mez19, Gei16]. **Genomic** [KPK17]. **Geospatial** [FHS⁺17]. **German** [ABR17, Ale18b, Ano16b, Blo18, BP17b, Cap12, Dix17, DF17b, FRSU17, GH17, HP17, Ker14, KFR17, LPW17b, MG16, Möl13, PB17, Pla13, RE18, RBM17, San14a, Six17a, Six17d, Six17c, Six17h, Six17f, Six17i, Six17j, SKG12, SKG13, Sto17, WLS17]. **Geschäftsmodelle** [RBM17]. **Get** [WM18, Cim19, Pec15]. **GHash.io** [Mat14]. **GHOST** [KKS⁺17a]. **Gibbard** [Ano18h]. **Gifted** [Ro13]. **giuridica** [Cap15]. **Giving** [Ano19b]. **Glimpse** [LMLA17, Pav18]. **glitch** [Lee13]. **Global** [ACM15, Ali15, BK22, Gre22, MMT16b, Mul14h, Yeo15, CV18, CRdK16, GRHS20, OFA22, PCC22, VC15a, VC15b]. **Go** [BS17a, Fai17]. **Goals** [AKP17, AKP18]. **Going** [Dre17u, GCD16]. **Gold** [BBM⁺18, CTM19, DMH18i, ZzH21, Cap12, LL18, Nis16a, Pop15, Pop16b, Sza08]. **Goldfeder** [Ano16c, SM-16]. **Goldstrike** [BHI⁺14, BH15]. **Golumbia** [Lut17]. **gone** [Nic17]. **Good** [AKP17, AKP18, BP15, WA15a, WA15b, Bon14b, Ito18, Pla13, RKY⁺20]. **Google** [ALB21, Smu18]. **Got** [Ro13]. **Govern** [Nor17a, RRD17]. **Governance** [ACM17c, BCEM15, Bri21, KPP⁺20, LSN21, Mor17b, QFLM17, ROH16, SC20, Yer17, CV18]. **Governed** [LDH17, NOT15]. **Government** [CDZ⁺20, OA17, Øln16, ØJ17]. **Governments** [Chi18, Nar19]. **governor** [GLC⁺22]. **Gox** [FGHM17]. **Grained** [WTC24, LCZL21, LHH⁺18, MHL20, RCD⁺19]. **Grand** [Ort16, Far18a]. **Graph** [ADQH22, CLZ⁺20, DHES16, FPKH17, GGS19, MMR16, OKH13, RS13, WLZ20, ZG15, BDP⁺15, DMR17a, DMR18, DMR19a, GGS20, LTBY20, Tro15b]. **Graph-Based** [ZG15]. **graph-theoretic** [Tro15b]. **Graphene** [OAB⁺17]. **Graphics** [Zei16]. **Gratis** [Six17f]. **Gratis-Bitcoin-Ökosphäre** [Six17f]. **Great** [WA15a, WA15b]. **Greatest** [RS21a]. **Green** [PTPR17, PTPR18, TSY⁺21, CCMN17]. **Grid** [ARL20, GH05, KUEE17, KUEE18, WHW22, ALP15, GLY⁺21, JAK19, LYW⁺21, MNB⁺17, MMMV21, ZLH⁺20]. **Grind** [JB18a, JB18b]. **Ground** [XZL⁺22].

Grounded [Doz18]. **Group** [GCH⁺22, OOF⁺17, WHW22, YLZ20a, NAR22a, NAR⁺22b, Tun18, ZLL⁺19a]. **Grouping** [NTKS17]. **grow** [Ker18b]. **Growing** [JB17b]. **grows** [SZ13]. **Growth** [Leo20, CW20, Per20]. **Grundlage** [RBM17]. **Grundlagen** [BP17b]. **Guarantee** [CLJ⁺21, ZY21]. **guarantees** [CCMN17, ECA⁺21, Sir16a]. **GuardHealth** [WLZ20]. **Guest** [HWJ22, ZWC21]. **Guidance** [Int14]. **Guide** [DTM20, Sch14a, Wal18, BDP17a, BT18b, Mil15, Pro13, Pro14, Wal19]. **Guidelines** [Ant21, BO17]. **GuiltyWalker** [OTS⁺21]. **gut** [Pla13]. **Gyges** [JKS16].

Hack

[GGS19, McM13, Nak18, WSZN18, GGS20]. **Hacked** [Abe18, DMH18e]. **Hacker** [Ape14, Osb18a]. **Hacker-Proof** [Ape14]. **Hackers** [WREK18, Boi18, Nic17]. **hacking** [Ano18e]. **Hacks** [dre14]. **Hadoop** [Li14a, Li14b]. **Hailing** [Shi19]. **half** [BBDN21]. **halting** [XHST20]. **Handbook** [LMC18, Lee15, MG16, OZ16]. **Handbuch** [Ale18b, MG16]. **handful** [AF16]. **Handle** [Tre22, SPB⁺22]. **Handling** [GHJ21, LMLA17, dSR21]. **handover** [LCZL21]. **Hands** [PL16]. **Hands-on** [PL16]. **Handshake** [XJY17]. **Hard** [But13a, Lar13, Ler13, ML14, LSZ⁺21, Per09, Tro14a, Tro14b]. **Hardening** [RC17, FMR⁺19]. **Hardfork** [MCHM17, MHM17]. **Hardness** [SFMC21]. **Hardware** [BNMH17, NMH16, SNM17, Tay17, WRB15, BBDN21, Per22]. **Hash** [Bac97, Bac01, KAS⁺22, LS20, WDLL19, YLZ20a, Bak09, VFN91]. **Hashcash** [Bac02b, Bac02a, Bac03, Tro15a]. **Hashimoto** [Dry14]. **Hashing** [DCY⁺22, Dre17i, Dre17j, Ler13, LSZ⁺21, Tro15a]. **Haven** [CTM22a]. **HCI** [SK15]. **headless** [TFG17]. **Health** [BSLM20, DMH18c, SDT17, Shu19, SZM22,

AMME21, BJ20, CLC⁺19, SMM⁺20, SHL⁺20, YLM21, YWX⁺22, ZYL22]. **HealthBlock** [ZCJ⁺21]. **Healthcare** [ARBK17, DFKU20, IFD⁺19, Joh18, Ksh18a, RRD17, YWJ⁺16, ABB⁺19, BTS⁺21, CMR⁺21, CDS⁺19, GRM22, JJ22, KRK21, MCLH19, MyPLK22, NVE⁺21, PL20, SJ21, SRA⁺22, SJSY21, TPE20, WLZ20, ZCJ⁺21, ZYL22]. **Healthchain** [WL21]. **hearing** [Uni14]. **Hearings** [Dus14]. **Heater** [Lin15]. **heck** [Kay17]. **Hedging** [ADZ23]. **heist** [Abe18, Far18a, Hol18]. **Heists** [dre14, Gal18]. **held** [Uni14]. **Help** [MBC17a]. **Hermes** [BVCH22]. **Heterogeneous** [AA20, LTBY20]. **Heterotopia** [MK15]. **Hey** [KD16]. **Hidden** [EZ17, EZ18, GZH⁺14, AABE20]. **Hiding** [AK14, SZM22]. **Hierarchical** [GS15b, SJ21, TYY⁺19, FTS⁺20, NAR⁺22b, WLGL19]. **hierarchical-deterministic** [WLGL19]. **High** [CGFH16, DMH18g, Dru22, DHES16, Gya21, MPSP17, PMMP19, SS12, SZ15, TOM17, Via16, XLM⁺17, XZK⁺17, BF20, GFLS21, RIMP22, SYH22a, SYH22b, ZLX⁺17]. **high-availability** [ZLX⁺17]. **high-dimensional** [GFLS21]. **High-Frequency** [Gya21, PMMP19, Via16]. **High-Performance** [DMH18g, DHES16]. **High-Rate** [SZ15]. **high-tech** [RIMP22]. **High-Throughput** [MPSP17, SS12, XLM⁺17]. **Higher** [MZLW20]. **Higher-Level** [MZLW20]. **Highlights** [Sup16]. **Highly** [JKKX16, Far18a, RST11, XBX⁺22, Cim19]. **Highly-Efficient** [JKKX16]. **highway** [Gal18]. **Hijacking** [AZV17]. **History** [AMVA17, Dre17d, Hil14, Abe18]. **Hit** [Ker18b, Ano18e, Lee13]. **hitchhiker** [Wal19, Wal18]. **HMMs** [SS19]. **Hoc** [RLS⁺21, CGFH16, KT18, LMH16, NAR⁺22b]. **HOL** [ABBS18]. **Hole** [bAHRAK17, bAHRAK18]. **Holistic** [LX20]. **homes** [RLQ⁺21]. **Honest**

[YCMM20, FZC⁺20]. **Honey** [MXC⁺16]. **hood** [Zoh15]. **Hop** [Voi11]. **Hop-Proof** [Voi11]. **Hope** [Bue18, Per17]. **hopes** [Pal18]. **hoping** [Hol18]. **hopping** [CK16, CBST22]. **Horizon** [Tre22]. **Host** [Ro13]. **Hosts** [SD16a]. **hot** [Per20]. **Hotwire** [CPMM21]. **Hours** [Cim18b]. **House** [PTPR17, PTPR18]. **HRRS** [DCY⁺22]. **HSMMs** [SS19]. **Hub** [BKM⁺17]. **huge** [Hol18]. **Human** [PHD⁺17, Har17]. **Hundred** [Uni14]. **Hunt** [Gre22]. **Hybrid** [AMEF21, GLO⁺22, Gya21, SJ21, Ano21d, Ara21, BTS⁺21, HZLH19, LTC⁺19, TDS⁺22b]. **Hype** [PZZ⁺20, Per17]. **Hypergraph** [RJK⁺17]. **Hyperledger** [BSV17, DMH18j, LLHW20, Lin21, MBT19, Suk19, Yew18, MOM22, BHH19]. **Hyperpubsub** [ZZJ17]. **Hypothesis** [KO22].

I.R.S. [HM18]. **I/O** [Dry14]. **IBM** [MDN⁺18]. **IC** [AHC⁺21, IK19]. **Iceland** [Ano18i, Far18a, Hol18]. **Icelandic** [Far18a]. **ICN** [CHL19]. **ICO** [Ito18, Osb18a]. **Idea** [BP15, Nis16b, WK19]. **Identification** [BCCS20, MYSZ19, PPR⁺20, TT19, TOM17, CAS21, Cha85]. **Identify** [JSKV16]. **Identifying** [DWS21, Dre17k, HZT⁺22, ZZB⁺22, NBP⁺21]. **Identities** [ACC⁺17, Smo18, Sei20, SJX⁺20]. **Identity** [AK17, AB17, AABM17, CTM21, DP18, FR16, Hal17, Kue18, LN17, LLW17, LLP⁺20b, YZL22, LGCY22, LHO⁺20, MGN⁺22, NML19, Sar21, YL20a]. **identity-authentication** [NML19]. **Identity-Based** [LLW17, YZL22]. **Ideological** [KPW19]. **IDPS** [Ali19]. **IEEE** [TODM19, ALP15]. **if** [Fai17, Far18b, LP18c, LP18d, Pec17a]. **II** [HSB18c, OF15]. **III** [HSB18d]. **IIoT** [BPT⁺22, GLW⁺20, KXSS21, SRB20, WLC⁺20, ZBF22]. **IIoT-enabled** [GLW⁺20]. **Illegal** [CPMM21, MCF20, NBP⁺21]. **illicit** [OTS⁺21]. **Illinois** [Nor17a]. **Im** [CXG⁺18, ABR17]. **Image** [CCC19, KTM⁺21]. **Images** [DCY⁺22, Via16, XJB⁺17]. **Imaginaires** [KL17, KL18b]. **imagination** [Fin17b]. **Imaging** [Shu17, dAdSM⁺22]. **Imbalanced** [HYP⁺22]. **Immediately** [Ro13]. **Immigrants** [Chi18]. **Immune** [LZC⁺17, Xu16]. **Immutability** [EN17, DLK⁺21]. **Impact** [ATD17, Bee18, Blo18, LJG15, SLS20, SGF⁺17, Smo18, SS20, BCCS20, FGHM17, MLM15, WLW⁺19]. **Impacts** [LX20, Ün21]. **imperfect** [WLW⁺19, YCMM20]. **Implants** [Mic16]. **Implement** [PL16]. **Implementation** [Ali19, Ano21d, FNP17, JJ21, RSGA⁺21, Shu17, Yew18, Bac97, NGS⁺19, TKBK22, Yue20, ZSLY20]. **Implementations** [Bri21, SG19]. **Implementing** [AKGN18, CC16, Wel18, YNS16, vS02]. **implicated** [Duc13]. **implication** [SBL19]. **Implications** [GSF⁺20, GB22, MZ19, TSL⁺17, dCdCM14, MGM⁺17, ZSLY20]. **imported** [XLL⁺19]. **Impossibility** [GG17, SFMC21]. **Impossible** [Poe14, Lau11a]. **Improve** [FOA16, Riz16, FOA17]. **Improved** [JJFC22, LZY22, SCE21, ZLJW20, ZGZ21]. **Improvement** [But19, ALMLS16, HC12]. **Improvements** [KVV16, NSB19]. **Improving** [BHS93, CWL17, CXW⁺21, HM20, LR22, BR17, FA21, Sal18, ZSGB⁺22]. **In-Browser** [Abr18]. **In-Depth** [ZDP⁺22]. **in/for** [CWCC21]. **Incentive** [AAJ21, DCZ⁺21, HLC⁺17a, NWGF20b, NWGF20a, SBBR17, ZGR17, GLC⁺22, WLC⁺20, ZDM⁺21]. **Incentive-based** [AAJ21]. **Incentive-Driven** [DCZ⁺21, ZDM⁺21]. **Incentives** [JMK17, KLZ⁺21, LTKS15, SZ17, SXZ⁺21, SZ18]. **Incentivize** [KB14]. **incentivized** [MMM21]. **Incentivizing** [LK17, WCZ21]. **Inclusion** [TNJJ22]. **Income** [Ksh20].

Incontestable [ZGGT16]. **inconvenience** [Gal18]. **Increased** [GK17, LP18c, LP18d, SA20]. **Increasing** [SMD14]. **Independent** [LHZ17]. **Index** [Hil15, Son16b]. **indexes** [Ünv21]. **Indexing** [TD17a]. **India** [RIMP22]. **Indicators** [Gya21, JLLK23]. **Indistinguishability** [HZ20]. **Individual** [EN19, MZ19, AZR⁺20, SG21]. **individual-level** [SG21]. **Industrial** [Hal21, LSK17, MBF⁺20, SLS20, BKV22, CLH⁺20, FBL⁺20, Ker18b, KTA⁺20, KTM⁺21, SMHK21, WWML21, ZWH⁺20, ZNX⁺21]. **industrialise** [BDP17b]. **Industry** [ATD17, BATB20, CTM19, STG⁺20, Sch19b, And18, Ano21e, GL16, LHH⁺18, Six17d, XZZ21, ZSLY20, EHA22, GSF⁺20, MAAAW⁺22]. **Industry-4.0-Complaint** [MAAAW⁺22]. **Ineffable** [MSC15]. **inefficiency** [Bar17]. **Inevitable** [DTM20]. **infeasibility** [WM19]. **Infect** [Cim18b]. **infects** [Goo18]. **Infer** [WRB15]. **inference** [GFLS21]. **Inferring** [KCS⁺14, NAH16, DMR17a]. **Influence** [BO17, ESLB20, RIMP22, YS21, ZDL17a, ZDL17b]. **Info** [Gal18, Bar18]. **Info-highway** [Gal18]. **Information** [AR15, BART17, BKM⁺17, CTM22b, Cra17, DW13, GK14, HV20, Hut17, JB17b, JL17, JYKA19, Joh18, NH17, OA17, VLAF21, WDS21, Yan21, Zam19, DAV20, LLH21, LHL20, LQZ⁺20, SSL⁺19, ZTSS20]. **information-centric** [LQZ⁺20]. **Information-Processing** [HV20]. **Informational** [BdL13, BW14, CSG⁺18]. **Infrastructural** [JB18a, JB18b]. **Infrastructure** [EN17, JB17b, MBC⁺17b, OA17, ØJ17, ÖY17, DGP20, Kol22, PMP19, Ser21, SSV22, ZSM22]. **Infrastructures** [CGT⁺21, CPM21]. **Infrastructuring** [KL17, KL18b]. **Initial** [IPL⁺18, ISM17]. **Initiatives** [ASK⁺21, HRE17, OO19, OA17, CPSGAA20]. **Innovating** [Bhe17e]. **Innovation** [Doz18, Mor17f, Sch14a, Sch19b, And18, Lee15, LMR17]. **Innovationen** [FRSU17]. **Innovations** [FRSU17, AR15, ZFY16, ZFY17]. **Innovative** [Gri11, BT18b]. **Inonymous** [BK17c]. **input** [Ano21a]. **Inquiry** [PPW⁺15, MBB13b, MBB13a]. **insecurity** [Sat18, Sat20]. **Insertion** [SLY15, SVS18]. **Insider** [SSV22, MLYL20]. **Insights** [ET17]. **Insolar** [KLZ⁺21]. **Inspired** [BBH⁺13, CCA⁺20, Kri19]. **Instability** [CKWN16]. **instant** [GWL20, ZWX⁺19a]. **instead** [Blo18]. **Institution** [RRD17]. **institutional** [BDP17a]. **Institutions** [DdFP18, BGPW16, KBTT20]. **instruments** [Cal21, Lee15]. **Insurance** [CIL⁺21, GLD⁺18, VMMA17, ZZB⁺22]. **Integer** [DDX17]. **Integrated** [LTW⁺21, PK19, XZL⁺22, ZHZ⁺22, MRR⁺20, dSR21]. **Integrating** [ÖY17, Shu19, TBB21]. **Integration** [AKT21, AAKJ22, DAAY22, DT18, GSF⁺20, MAAAW⁺22, URC19, UHK⁺21, XZY⁺21, Bit09, SBA21]. **integration/staging** [Bit09]. **Integrity** [BBH⁺13, Dre17l, EBHBL16, Fug19, HP19, Mai18, XRS⁺19, ZBF22, CFM⁺22, FWP21, HS20, RS21a, RSH22, WHY⁺21, WWZ⁺20, YZL22, YLZ⁺20b]. **Intellectual** [Zei16]. **Intelligence** [Du21, SG19, SRP20, SMZ14, YWJ⁺16, YSZ⁺19, ZBF22, ZDW21, DAT21, DNZ⁺19]. **Intelligent** [SJ21, SRP20, VFS⁺19, CJA⁺19, LYW⁺21, PSY21, SK18, XZZ21, XBX⁺22]. **Intensive** [SDT17]. **Intent** [EN19, KLL⁺15]. **Intentions** [GZH⁺14, AZR⁺20]. **Inter** [SYK17, CZX⁺21, LZZ⁺20, XZL⁺22]. **inter-block** [CZX⁺21]. **inter-constellation** [XZL⁺22]. **inter-domain** [LZZ⁺20]. **Inter-Service** [SYK17]. **Interaction** [Fot17, SWG21]. **Interactions** [Kra16b, OR17, PHRH21]. **Interactive** [Hir17, YSZ⁺19, ZGGT16]. **Interchange** [Nar19]. **Interconnected** [LGK⁺22]. **Interconnectivity** [HQ15]. **interdisciplinary** [YP21]. **Interest**

[BHM20, AAC⁺19a]. **interface** [DHH⁺22]. **Intermediation** [KET⁺17]. **International** [ACM17c, ACM17d, CMR⁺16, GANAHHJ17, GP17b, JRB⁺17, Ker12, OF15, Sad13, TODM19, BCJR15, IKY05, Jue04]. **internationalization** [RIMP22]. **Internet** [AZDF22, DRS22, HYZ⁺24, MFR⁺21, NSB19, BKV22, AJA⁺22, AA20, AAC⁺19b, AKT21, Älv18, AAKJ22, Ban19, Big20, Böh13, CXC⁺20, CLH⁺20, CVM17, DGP17, EFFM21, GLF20, GLW⁺20, HL16, HYLY19, JCG⁺21, JB21, JBK⁺19, JCG⁺22, KTCI21, KTA⁺20, Ksh17a, Ksh17b, KSLC21, LL16, LL17a, LQYG19, LLCF21, LWZ⁺21a, McM13, Mic14, PK19, PP16, PC21, QFLM17, RKT19, RWG21, Rddb19, RS21b, Ses18, SM20, SNKG20, Son18, SCZ⁺21, SGDT19, Sve17, TSY⁺21, TBB21, UHK⁺21, XAZY17, XAZY18, XLL⁺21, XBX⁺22, ZW17, ZWH⁺20, ZLS⁺22, ZLT⁺19, vO20, vO21]. **Internet-of-Forensic** [KSLC21]. **Internet-of-Things** [Ses18, SM20]. **Internship** [HMS17]. **Interoperability** [BVGC22, CWL17, JB18b, JJ21, LGK⁺22, BVCH22, LLP20a, PBHM21]. **Interoperable** [Lim18]. **interoperating** [WHA⁺20]. **interplay** [KCS⁺14]. **INTERPOL** [Tzi18]. **Intersection** [JB18b]. **intra** [CZX⁺21]. **intra-** [CZX⁺21]. **Intraday** [Gya21]. **Intricate** [Bhe17c]. **introduced** [Ano17a]. **Introducing** [Dan17b, JB18a]. **Introduction** [CGT⁺21, Dzi15, HSB17d, HSB18h, JSK⁺17, Kat16, MY11, NBF⁺16, ZFY16, ZFY17]. **intrusion** [KKK⁺21, KKT⁺22, LTMW19, LWA21, MLYL20]. **Inverse** [EDS15, LUBS18]. **Investigating** [JKS16, KAK20, RC16, ZKU⁺23, CXLG22]. **Investigation** [Älv18, Smu18, SXYL23, TNJJ22, VCLK17, WRB15, WWZ⁺22, ZG15, CF15, KK17b, Olu21, RSJP19]. **Investigations** [KT18, VBST21]. **Investment** [Ano18m, JYKA19, Pop17a, Sup16, TOM17, DXW21, KH17, XLZ20]. **Investor** [HZ21, BT18b]. **investors** [Lew15]. **Invitation** [BK17c]. **Invitation-Based** [BK17c]. **Invited** [Gar17, Zoh17]. **Involving** [Nav17]. **IoD** [ICGB21]. **IoF** [KSLC21]. **IoT** [ACM17d, Ban19, MBF⁺20, AKA⁺22, ADA17, AVA21, AAD⁺21, ANMM22, BTF⁺21, BBGP19, BLB⁺21, BLNN17a, CTNS21, CTM22b, DCK21, DKJ17, DKJG19, Du21, FSY⁺19, FBL⁺20, FFL21, FA21, GPPB⁺21, Hal21, HHBS18, JBH⁺22, KS18, KAS⁺22, KSLC21, KKT⁺22, LLH⁺20, LDWS17, LTMW19, LHL20, LSM17, Liu18, LGGB⁺21, MKY⁺21, MAAN19, MBK⁺21, MTR⁺21, MLTT20, MFE⁺20, MGE20, MMR⁺21, MBC⁺17b, MRR⁺20, OEO16, OEO17, ÖY17, PDJ22, QXC⁺21, RKP19, dSR21, RSJP19, SGM20, SD16a, SBA21, SRB20, Ser21, SBHD17, SJ21, SWY⁺21, SSL⁺19, SRP20, SMHK21, SRA⁺22, TDS⁺22a, URC19, VD21, WHI⁺21, WDLS17, WSC⁺20, WHY⁺21, WLC⁺22a, WWML21, XWZ21, YL20b, ZW15, ZW17, ZWS⁺20, ZDP⁺22]. **IoT-assisted** [MLTT20]. **IoT-based** [LDWS17, MKY⁺21, MTR⁺21]. **IoT-ecosystem** [dSR21]. **IOTA** [GPPB⁺21, Hal21, VD21, AGK22a, SM20]. **IoTPTS'17** [ACM17d]. **IoTs** [MKS⁺19, PGS⁺21]. **IoV** [DRS22, KT22]. **IoVT** [XNC21]. **IP** [AGGM16, Gia15]. **IPFS** [ADA17, JJ22, KTM⁺21]. **irrational** [KVP21]. **Irrefutable** [FDT17]. **Irregularities** [RDD17, SPB⁺22]. **IRS** [Far18b, Int14]. **Isabelle** [ABBS18, Kam17]. **Isabelle/HOL** [ABBS18]. **isn't** [BP15, Ito18, SK14]. **Isolation** [Ses18]. **Issue** [Ano18j, AHWB20, CGT⁺21, Mat14, MFR⁺21, WSZN18, ZMKR22, FD20a, YSD⁺20, ZFY16, ZWC21, ZFY17]. **Issues** [ATZ⁺21, ASSK21, BGM20, Bon16a, CELR18, Du21, bAHRK17, bAHRK18, SC21, SRB20, VGJ15, ZFW24, BB15, CXC⁺20, CXY21, CCH21, DSM⁺17, Lyn14, MKS⁺19, SJSY21, URC19]. **Issuing**

[LWL⁺22a]. **ITA** [DRS22]. **Italian** [AF16, Cap15]. **Iterative** [NT21]. **it'll** [PW17a]. **Ivy** [Gei16].

January [BCJR15]. **Japan** [Sad13, Nis16b, Ün21, YWW⁺18, YWS⁺18]. **Jewels** [vO20, vO21]. **Job** [Cim18a]. **jobs** [Per20]. **joint** [WZQ⁺17]. **Jointgraph** [XHP⁺21]. **Joseph** [Ano16c, SM-16]. **journal** [WZ21]. **Journey** [BBP19]. **Juan** [BCJR15]. **Judicial** [Nav17, VBST21]. **junctures** [PF18]. **June** [IKY05]. **Junk** [DN93]. **jurisdictions** [Ano14b]. **jury** [Ano18a]. **just** [Kay17].

Kademlia [MCD15]. **KARMA** [VCS03, GH05]. **Keep** [WM18]. **Kernel** [WRB15]. **Kernel-Level** [WRB15]. **Key** [Alz19, Bon16b, Eti19, GS15b, Jue04, Kee16, MSCH15, WGL19, WHW22, CSC16, DSPSHJNA18, DAV20, EBSC15, MBB⁺15, Mer80, NAR22a, NAR⁺22b, Per09, XLL⁺21, ZSM22, ZSLY20]. **Key-dependent** [WGL19]. **Keyless** [EN17]. **Keynote** [HM16, Spo17, Web21]. **keys** [Sei20]. **keyword** [JGL⁺20, SZM22, YWX⁺22]. **Kimberley** [Wey19]. **Kindleberger** [G.17]. **King** [BSKR21]. **kleptographically** [WLGL19]. **kleptographically-secure** [WLGL19]. **Know** [JBK⁺19, KD16]. **Knowledge** [CGGN17, Dan17a, GCL16, MGDEK17, MGDEK18, YS20, PCM⁺21, XCZ⁺22, YL20a]. **Kodak** [Ano18j, Bue18, Roo18]. **KodakCoin** [Bue18]. **können** [KFR18, KFR17]. **Korea** [Ano18k]. **Kralendijk** [Ker12]. **Kryptoökonomie** [Six17e]. **Kryptowährungen** [Ale18b]. **Kubernetes** [Yew18]. **Kudos** [SD16b]. **kurz** [Pla13].

Labeling [NPS⁺17]. **Lack** [MPC⁺23]. **landscape** [LSS14]. **Language** [Cob17, HBJB14, O'C17, Wol18, KF19]. **Large** [Chr13, EH24, ES14a, SIDV14, SZJ17,

WLXC17, WPC⁺22, vdHKZ14, DKJ19, FA21, NAR22a, NAR⁺22b, ZWX20a, ZWX⁺19a]. **Large-scale** [SIDV14, SZJ17, WLXC17, WPC⁺22, FA21, ZWX20a, ZWX⁺19a]. **largest** [Abe18]. **Last** [Bue18, ZGR17, LGL⁺22]. **Last-Gasp** [Bue18]. **latency** [Sal22]. **lattice** [ES16]. **lattice-based** [ES16]. **launch** [Fir18, Osb18b, Sto20]. **Launched** [EH24]. **Launching** [Wol18]. **laundering** [MBB13b, MBB13a]. **Laundry** [dBHC17]. **Law** [KT18, Tzi18, Ano16b, DW18, Lev17, VBST21, EDS15]. **Lawful** [WBK⁺17, LLCH21]. **Laws** [GP17a, KPJ22, McL13, Mic14]. **Layer** [Kla19, LZY⁺17, LFZ⁺21, FWP21, LZY22]. **layering** [WLLH21]. **Layers** [Dre17v]. **LBTM** [AZDF22]. **LD** [Spo17]. **LD-DL'17** [Spo17]. **LDA** [WXH21]. **LDC** [ZWH⁺20]. **lead** [Hol18]. **League** [Gei16]. **Leakage** [GS15b]. **Leaks** [LL17b, LL17c]. **Learn** [HSB17b, HSB18f]. **Learnable** [RRF22]. **Learned** [Son16a]. **Learning** [Als23, BNMH17, Bik16, Böh13, Cae15, Coh20, EZR⁺22, FZG⁺22, GLC⁺22, GMH21, GR17, Gya21, JJFC22, JLLK23, KOM⁺22, LUBS18, LLL⁺21b, LLL⁺21c, LPSP20, NMH16, OAS⁺21, QUG⁺23, RT20, RFM⁺18, SFYB21, SRA⁺22, SOA⁺21, WHI⁺21, AJA⁺22, AMME21, AKT21, AC21, BCK⁺21, CLS19b, CLS20, CWCC21, Fan22, GS20b, KKK⁺21, LLL⁺21a, MF19, MFE⁺20, MMT16a, NBP⁺21, PSY21, PK22, PC21, QHNL21, RSH22, UHK⁺21, WQGX22, WWML21, XLZ20, YV17, ZDM⁺21, ZZB⁺22]. **Learning-Based** [Als23]. **Learns** [NVWF14]. **leasing** [ANMM22]. **least** [Lau11a]. **leave** [Ano13b]. **LEChain** [LLCH21]. **Led** [HSB18a, HSB18b]. **Ledger** [AK17, AKP17, AKP18, AKGN18, Ant21, BMTZ17, CZJ⁺17, EGB18, EZ17, EZ18, Eva14, GCL16, KLDS20, KYV19, LWL⁺22a, Muf16, RSJ21, Str18, SPS⁺21, Tre21,

VCPC20, VRK21, Wei18, Wu17, XNC21, BCK⁺21, CM19, FFL21, MGM⁺17, MMMV21, Wat17, Woo14, ZWH18].
Ledgers [AABM17, BMSS19, CWL17, EG17, LDWS17, Lei16, LS17, Mei18, PP16, TD17a, KF19, MCF20, SK20, Brü17]. **Legal** [BP14, Kün16, MBC17a, Ole18, Cap15, Far18b]. **legality** [UJ16]. **legally** [Sha18]. **lege** [Kün16]. **Legitimacy** [IM16]. **Lending** [KMOD17]. **LEO** [LLW17]. **Less** [HBJB14, BDF⁺22]. **Lessons** [Son16a]. **let** [Lau11a]. **Level** [GAK17, MZLW20, SL20, WTC24, WRB15, BZK⁺21, CSLD17, FSW14, SG21]. **Leverage** [Dir19, ADZ23, PCP20]. **Leveraging** [Ger16, Mue18, RKT19, Cae15]. **LI** [YNS16]. **liabilities** [Cal21]. **Liability** [CIL⁺21]. **Liar** [RKS15]. **Libertarian** [Eya17]. **library** [HZT⁺22]. **Licensing** [Mor17j]. **Life** [KLZ⁺21, SW17, Aro12, CDS⁺19]. **Lifecycles** [NOT15]. **Light** [BD19, PC21, ZWX⁺19b]. **Lightning** [BCV19, BSB19, LPS⁺20a]. **Lightweight** [BL22, GČKG14, MGE20, MRR⁺20, TMTB19, WWQ⁺18, WHW22, XCG⁺17, XNC21, ASB⁺21, AZDF22, BAS⁺22, BTF⁺21, CW20, LLC⁺20, LYW⁺21, WLC⁺22a, ZWH⁺20, DKJG19]. **lightweight-script** [LLC⁺20]. **Like** [HSB17c, HSB18g, KL18a, Pop17a, BW14, SG21, VGJ15]. **Likely** [DL17]. **Limit** [Dim19, WM19]. **Limitationen** [Six17j, Six17i]. **Limitations** [Dre17r, GDTP17, KTCI21, Six17i, Six17j]. **Limits** [BLNN17a]. **line** [GH05]. **Linear** [KPJ22]. **Linkable** [SALY17, ZLL⁺19a]. **Linkage** [WLW22]. **Linked** [EG17, Spo17, TD17a]. **linking** [wScCcS21]. **liquidation** [ADZ23]. **Liquidity** [BSKR21, BLMZ22, VLAF21]. **List** [Ano13a, dre14]. **litecoin** [Cal21, HQ15]. **Literature** [BTvdH20, KT22, SS17a, SJB20, AHH20, VDVC21]. **Live** [BR16]. **Living** [FAC22]. **LLL** [US23]. **LLNs** [SGM20]. **Load** [LWL⁺22b]. **Loafing** [OOF⁺17]. **loan** [WGC19]. **LoC** [WGC19]. **Local** [GMH21, MMT16b, Ano21c, DAGK20, MNB⁺17, Son16b]. **LocalCoin** [CGFH16]. **Locality** [FOA17]. **localization** [GKA⁺21]. **Location** [DS15, ECdO17, LHL20, NYZ⁺20, YZL⁺19]. **lock** [RSW96]. **Locked** [FYK⁺17, DSPSHJNA18, YTLD19]. **Lockmix** [BSK⁺20]. **Log** [ABL18b, Bon16b, SW21, HS19b, MBD⁺12]. **Log-Based** [ABL18b]. **log-in** [HS19b]. **logging** [PMP19]. **Logic** [ARL19, BFS17, BFS18, HM16, IGRS16]. **Logic-Based** [IGRS16]. **Logistics** [PK19, LGL⁺22]. **Logs** [SS17b, vdHKZ14, ASM19]. **Long** [AV22, BR16, LJG15, NTRK22, PASA22, PCP20]. **Long-Range** [AV22]. **Long-Term** [LJG15, NTRK22]. **Longest** [Cou14]. **Longitudinal** [HSY⁺21, MB15]. **Look** [Ano18d, DP18, HSB17c, HSB18g, HMS17, EBSC15, WMHL21]. **LoRaWAN** [LSM17]. **lord** [Gei16]. **Lords** [Gre22]. **Loses** [Ano19a]. **Loss** [RKS15]. **Losses** [Ami16, dre14]. **Lost** [Nak18, Sha17]. **Lösungsansätze** [Six17j]. **Lotteries** [BZ17, MB17a]. **loves** [Ano14a]. **Low** [GAK17, Ksh20, ÖY17, Lee13, PGS⁺21]. **Low-Income** [Ksh20]. **Low-Level** [GAK17]. **Low-power** [ÖY17]. **LPWAN** [DGP20]. **LSB** [DKJG19]. **LSTM** [SYH22a, SYH22b]. **LSTM-TC** [SYH22a, SYH22b]. **Luck** [MHWK16]. **Lucky** [SIDV14]. **Lunch** [VM15].
M [Bon16a, DRS22]. **M-ITA** [DRS22]. **M-Payments** [Bon16a]. **M2M** [BL22, Gia15]. **M2X** [LSN21]. **MA** [HLF⁺21]. **MA-ABE** [HLF⁺21]. **MaaS** [BPT⁺22]. **Machine** [Als23, Bik16, CWCC21, EZR⁺22, Gya21, Hir17, JLLK23, KOM⁺22, LSN21, OAS⁺21,

RT20, SOA⁺21, WHI⁺21, CLS19b, CLS20, DCK21, KKK⁺21, MF19, PK22, PC21, UHK⁺21, WLL⁺13, YV17].

Machine-to-Everything [LSN21].

machines [BHI⁺14, SAL20]. **Made** [VA15, Lam01, PLSS17, ZLX⁺17].

MadMax [GKJ⁺18, GKJ⁺20, Liv20].

Maduro [Ano17e]. **Mail** [Cha81, DN93].

main [YS20, YS21, YP21]. **Mainstream** [Fug19, Fai17]. **Maintaining** [TS20].

Maintenance [Ale18a, CXY21].

Maintenance-related [CXY21]. **Major** [Lee13, LX20, dre14]. **Majority** [AKWW19, CXG⁺18, ES14b, ES18]. **Make** [BBSU12, VTL17, Cha85, Cro18, DMH18b, Gal18, Lau11a, SI19]. **Making** [CLJ⁺21, CMS21, DGSW15, HLF⁺21, LCO⁺16, XWL⁺19]. **Malicious** [CAS21, Ses18, AJA⁺22, WLS22, Xu16, BBM⁺18].

Malleability [ADMM15, DW14, PW17b, RAH⁺15, ADMM13, KAK21, LLZ⁺17].

Malta [JRB⁺17]. **Malware** [Ami16, Cim18b, DH17, Ker18b, Bar18, HYLY19, LSS14, Pal18, Tun18, vO21].

malware-proof [HYLY19]. **Manageable** [WWQ⁺18]. **managed** [LMH16].

Management [ACV17, Ban18, CTM22b, DP18, GANAHHJ17, HP17, HP18, KT22, KPP⁺20, KUBS22, KKS14, Liu19, MWV⁺18, Pan18, RKT19, Rin18, TADS20, VMMA17, WMG⁺21, WLC⁺22b, XWW17, YW18, ZWQ⁺16, AHSZ21, AZDF22, BZK⁺21, CLS19a, Cus14b, DAV20, EBSC15, Gir18, HSGY20, HFP⁺22, HLF⁺21, How20, KTA⁺20, KW20, KGS⁺19, KBS⁺21, KGTK20, LM20, LLCH21, LGCY22, LHO⁺20, LHL21, LTW⁺21, MISS22, PHRH21, RGB20, Sar21, Sha18, VBST21, WGC19, WMD⁺20, WLZ20, WLS22, Wij16, XZZ21, YL20a, ZCJ⁺21, ZNX⁺21, ZSL21, ZWGC19]. **Manager** [Men19]. **managers** [LLWH21]. **managing** [AMLH18].

MANETs [LDY⁺22]. **manipulating** [KK21]. **Manipulation** [GHMO17, HSX⁺21]. **Manual** [Ale18b].

manufacturing [XZZ21]. **Many** [Ito18, Ano13b, Spo17]. **Manycast** [MCD15]. **Mapping** [DS15, LN17]. **maps** [Che18]. **March** [BBMS14, CSN14, Ker12].

marine [How20]. **maritime** [ZSLY20].

Market [Ano18f, DMO⁺19, Hil15, KYLA22, KO22, LS20, LSZ22, LUBS18, MLM16, Ort16, Str18, SS19, Swe16, Wör16, Wu19, YK15, ZWLS18, ZzH21, CCMN17, IKC21, KCS⁺14, LB18, LMR17, MB17b, PASA22, Son16b, Ün21].

Marketing [Swe16]. **Marketplace** [Chr13, Bar16, YKJK21]. **Marketplaces** [KET⁺17, LPSZ18, NRP⁺20, GDKJ22, Sub18]. **Markets** [CCH⁺20, KCD17, Not19, ZzH21, CF15, LT17, MXW22, MNB⁺17, VLAf21, VX17].

Markov [KPJ22]. **Masked** [GPPB⁺21].

Masses [Per22]. **Massive** [Ano13b, Tun18].

MasterCoin [Wil13]. **Mastering** [Ant15].

Matching [Lin21, KOS⁺21, MLTT20].

Mathematica [Wol18]. **Matter** [HJHBG22]. **Matters** [And14]. **Mature** [GLD⁺18]. **maturity** [WCX16]. **Max** [MÖ22]. **Maximization** [SCYP17].

maximum [GB21, MF19]. **May** [Kan18, Bon14b]. **Maybe** [DL17]. **MB** [BPT⁺22]. **MB-MaaS** [BPT⁺22]. **MCS** [FY19]. **MCS-Chain** [FY19]. **me** [NQ20].

Mean [Ste17]. **Measure** [Smi18, WPXZ20, Bac02a]. **Measurement** [Chr13, HSY⁺21, WCY19, LZDA16].

Measurements [GHJ22, DAT21].

Measuring [Vas17]. **MEC** [MISS22].

MEC-assisted [MISS22]. **Mechanising** [PS18]. **Mechanism** [AMEF21, AAJ21, DRS22, HLC⁺17a, KK17a, Lin21, RSGA⁺21, XLM⁺17, DAV20, FZC⁺20, GLF20, HTLY21, LZY22, LX21, MHL20, MKL⁺22, RLQ⁺21, RDDB19, Shi16, SSL⁺19, WWZ⁺20, dORM⁺20].

Mechanisms [CCC19, JWNS19, JSK⁺17, MLD19,

KOS⁺21, ZLS⁺22, ZLL⁺18, SKNM21].
Media [CR17, DDPS22, MLM16, AZR⁺20, MLM15, VD17]. **Media/Messaging** [DDPS22]. **MediBchain** [ARBK17].
Medical [Big20, ISM17, LCL⁺22, Liu16, Shu17, WL21, WDS21, CAA⁺22, CXWY21, ESP22, GRU22, HZX⁺20, LLH21, PSY21, TGC⁺21, ZZB⁺22, ZGZ21, dAdSM⁺22].
Meet [Ras13]. **Meets** [DSW14, DSW16, LQYG19, LZD21, NGS⁺19]. **Mehr** [Dix17].
Membership [CV21, Sal22]. **Memory** [But13a, Kad18, Lar13, Ler13, LSZ⁺21, VCLK17, DKJ19, LGTS20, PASA22, Per09, PCP20, SKNM21, Tro14a, Tro14b, Tro15b].
Memory-Easy [But13a]. **Memory-Hard** [But13a, Lar13, LSZ⁺21, Per09, Tro14a, Tro14b]. **Men** [MPJ⁺13, MPJ⁺16].
Merchant [Mul14d, Nar19]. **Merge** [Hea13, SFMC21]. **Merge-Avoidance** [Hea13]. **Merged** [JZS⁺17]. **Merkle** [Bak09, CCC19, Coe08, ZGZ21]. **Mesh** [FDT17, KDS⁺20]. **Message** [FYK⁺17, GADO17, RSJ21, SLY15, WGL19].
Message-Locked [FYK⁺17]. **Messaging** [DDPS22, GPPB⁺21, Hal17, MCD15]. **Meta** [SV16]. **Meta-products** [SV16]. **Metadata** [BP17a, BBP19, GBSAS17]. **Metaverses** [OFA22]. **metering** [MTR⁺21, SSV22].
Method [ACW17, Hal21, JJ21, KKS14, LZZ⁺22, WHW22, WPXZ20, Kha15, KW20, QL22, SH16, SYH22a, SYH22b, Ün21, XCZ⁺21].
Methodology [AAD⁺21, YCP⁺21].
Methods [DH17, YF22, ZDW21, IKC21].
Metrics [Pie20]. **Metrology** [MBC17a].
metropolitan [LZZ⁺20]. **Micro** [VMMA17, YNS16]. **Micro-insurance** [VMMA17]. **Micro-Pricing** [YNS16].
MicroBTC [WDL19]. **microgrid** [ML20].
Microgrids [BLSD17]. **MicroMint** [RS96a, RS96b, vS02]. **Micropayment** [BDW17, DW15, RM19, RS96b, WDL19, RS96a]. **Micropayments** [Pas15, KK20b, Riv04]. **microservices** [LKP⁺21]. **Microsoft** [Cim18b, Tun18].
Microstructure [Wu19]. **Middleman** [MC13]. **middleware** [BVCH22]. **Might** [Hur16]. **mile** [LGL⁺22]. **mileage** [Ano21e].
Miller [Ano16c, SM-16]. **Million** [Cim18a, Gre13, McK19, Nak18, YWW⁺18, YWS⁺18, Cim19, Osb18b]. **Millionaires** [Ras13, Pop15, Pop16b]. **Millions** [Ano19a, BBM⁺18, Seg18]. **MILP** [Coe20b].
min [MÖ22]. **Mind** [Ano14a, MBC⁺17b].
Minds [GCL16]. **mine** [GKKT16]. **Miner** [Eya15, Ler14b, SGF⁺17, WL15, CSLD17, Tun18, YCMM20, QXC⁺21]. **Miners** [BM20, BBM⁺18, GCD16, Kan18, TNJJ22, FZC⁺20, GB21, LLWH21]. **mines** [CP17a].
MiniChain [CW20]. **minimal** [MAQ99]. **minimisation** [MyPLK22]. **minimum** [MF19]. **Mining** [ADQH22, Abr18, BS16, BH15, BGN⁺22, BD19, Ber18, BPT⁺22, CTM19, CGN14, CPMM21, De18, DMH18i, Dim17, Dru22, ES14a, ES14b, HVM⁺18, Hou14a, Hou16, JB21, JLG⁺14, JZS⁺17, Ker18a, Ker18b, KKKT16, KJ17, KJ18, Kwo14, KKS⁺17b, LS21, LS20, LJG15, LBS⁺15, LL17b, LL17c, LSP⁺15, Mat14, MGS22, MKKS14, MKKS15, Mul14e, RSV15, RJK⁺17, RC17, Ros11, SCYP17, SSZ17, SBBR17, TSHI22, VTL17, WCY19, ZWW⁺17, ZP17a, ZP17b, ZGR17, BHI⁺14, CEW15, Dev14, DTK20, ES18, Goo18, HS19a, Hol18, KDF13, LLWH21, OM14, Ole18, Sat18, Sat20, Sem22, SA20, Tro15a, VDK16, WLW⁺19, YCMM20, YZC22, ZLL⁺18, Nic17].
Mining-as-a-Service [BPT⁺22].
Mining-based [JB21]. **MiningVis** [TSHI22]. **Minority** [Ort16]. **MinT** [QXC⁺21]. **Mirror** [BBGP19]. **Mis** [HWW⁺20]. **Misbehavior** [KAR⁺15].
misfits [Pop15, Pop16b]. **Misleading** [EHA22]. **Missions** [Raz19]. **mistrusting** [dORM⁺20]. **Mitigating** [ZTJ⁺21, QHW⁺20]. **Mitigation** [BRS17, Gou19, RBL⁺17, RBS17, AHC⁺21, SSV22].

MitM [QHW⁺20]. **mix** [BSK⁺20]. **Mixcoin** [BNM⁺14]. **Mixed** [Mic14]. **Mixers** [Cou13]. **Mixes** [BNM⁺14, VR15]. **Mixing** [BOLL14, RMSK14, RMS17, SMB22, SFMC21, YCP⁺21, ZGH⁺15, SYH22a, SYH22b, ZMH⁺17, ZMH⁺18]. **MLP** [RRF22]. **MLP-based** [RRF22]. **MNC** [IM16]. **Mobile** [Abr18, BPT⁺22, Gev16, MCS⁺21, SVL17, FY19, FMR⁺19, Gim16, HSC21, HS19b, LGL⁺22, PCC22, PF18, QL22, SAS⁺21, ZSL21]. **mobility** [ANMM22, LM20, PCC22]. **MOBT** [WLGL19]. **Mode** [Gya21]. **Model** [BBGP19, CTM19, Coe20b, ESLB20, FOA16, FYK⁺17, Gya21, HG15, Hut17, HP19, JBH⁺22, LS21, LS20, LS17, LT17, MZWX21, ML14, MAAAW⁺22, OEO16, OEO17, Tam19, YLZ20a, ZzH21, AC19, BCK⁺21, BCV19, BSF22, HZL⁺20, JJ22, KOM⁺22, KKM19, LLWH21, LTW⁺21, MAM22, MRR⁺20, NBP⁺21, NAH15, NVE⁺21, PC21, SZdLZ22, TDS⁺22a, WCX16, WLS22, WdLY⁺19, XWY⁺21, YKJK21, ZW15, ZW17, ZDL17a, ZDL17b]. **Model-based** [LT17, MAM22]. **model-driven** [LTW⁺21]. **Modeling** [ADM14b, Bys19, JL17, JW18, LLH⁺20, LUBS18, CFvdPS15, Suk19, VSE21, IKC21, LGTS20, SKG22]. **Modelling** [Kab17, MSMH21]. **Models** [GMH21, LPSP20, vM18, Ara21, Kat17, LW16, Liu18, PCP20, PR16, RBM17]. **Moderately** [ML14, VA15]. **Moderately-Hard** [ML14]. **Modern** [PP16]. **Modernize** [Ger16]. **modifiable** [CLS⁺19c]. **modifying** [Bar18]. **MOF** [DKJ19]. **MOF-BC** [DKJ19]. **möglich** [Möl13]. **Momentum** [Lar13]. **Monero** [SALY17, AGK22a, KFTS17]. **Monetary** [Hut17, Rec19]. **monete** [AF16]. **Monetised** [Zei16]. **Monetization** [AVA21]. **monetizing** [AKA⁺22, HDM⁺14]. **Money** [BWZ17, Bel18, BW14, Ber13, Bhe17c, CMS21, Dre17s, Gia15, Har17, Nak18, Nis16b, NVWF14, OFA22, Pan96, Roi13, WvB14, CSG⁺18, Fri14, G.17, GC08, Möl13, MBB13b, MBB13a, Nis16a, OC16, Pal18, Pop15, Pop16b, Rot17, Sch14b, SZ13, TT16, TTC16, VC15a, VC15b, PP16]. **Money-like** [BW14]. **Money-over-IP** [Gia15]. **Monies** [BdL13]. **Monitoring** [Nar19, Shu17, WXR⁺16, MFE⁺20, SJ21]. **monnaie** [San14b, TFG17]. **Month** [De18]. **Moonwalk** [KZVT17]. **Moratorium** [De18]. **Most** [KPW19]. **Motivates** [BSB16]. **Motivating** [JMK17]. **Motivations** [KSCD16]. **Move** [WREK18, Nor17c]. **Movement** [LUBS18, IKC21, RSR17]. **movimiento** [RSR17]. **MSV** [ZzH21]. **Mt.** [FGHM17]. **Mt.Gox** [BR16]. **MtGox** [DW14]. **much** [Kug18]. **MudraChain** [KBTT20]. **Mulls** [De18]. **Multi** [ABL18b, GLG19, KK20a, LFZ⁺21, LYZ⁺21, RBS17, SZM22, WLL⁺13, ZGH⁺15, AAGX⁺22, Ano21a, CLT⁺20, FWP21, FZC⁺20, HVM⁺18, HZL⁺20, LB18, MPSW19, PK21, Sko19, TDS⁺22a, WLS22, XCZ⁺22, YKJK21]. **multi-agent** [Sko19]. **Multi-Blockchain** [KK20a]. **multi-blocks** [FZC⁺20]. **multi-contracting** [AAGX⁺22]. **multi-cryptocurrency** [HVM⁺18]. **Multi-domain** [RBS17, PK21, TDS⁺22a]. **multi-fractality** [LB18]. **multi-input** [Ano21a]. **Multi-keyword** [SZM22]. **Multi-Layer** [LFZ⁺21, FWP21]. **multi-malicious** [WLS22]. **multi-output** [Ano21a]. **Multi-Party** [ZGH⁺15, ABL18b, GLG19, LYZ⁺21, CLT⁺20, XCZ⁺22]. **Multi-processor** [WLL⁺13]. **multi-resource** [YKJK21]. **multi-signatures** [MPSW19]. **multi-tenant** [HZL⁺20]. **Multifaceted** [MMT16b]. **Multifractal** [WKD22, ZWLS18, GB22]. **Multimedia** [JCG⁺21, LWZ⁺21a, NPG⁺22, WZW⁺20]. **Multiparty** [ADMM14, BZ17, CGJ⁺17, NT21, ADMM16, BHH19]. **Multiple** [GCL16, RLQ⁺21, AAC⁺19a, GDKJ22,

KOM⁺20, WLGL19]. **multipurpose** [Fir18]. **MultiRes** [DCY⁺22]. **MultiRes-RCF** [DCY⁺22]. **multisignature** [ES16]. **multivariate** [CA21]. **Multivocal** [BTvdH20]. **Municipal** [Nar19]. **Music** [Sha18]. **Musical** [KPP⁺20]. **Musk** [Sha17]. **mutual** [LHH⁺18]. **My** [CMJ21, MBC⁺17b]. **mysteriously** [Osbl8a]. **Myth** [EBHBL16].

naar [PdWWS16]. **Nakamoto** [Cha14, RZJ20, Sha17]. **Namecoin** [HQ15]. **named** [JZLL17, ARK20]. **Names** [MPJ⁺13, HS97, MPJ⁺16]. **Narayanan** [Ano16c, SM-16]. **Narrative** [CR16, RC16]. **National** [Pan18, SG21, Sto20]. **native** [MKL⁺22]. **Natural** [AW18]. **Nature** [DVRM16, Dre17w]. **navigating** [Hol15]. **NDN** [TKBK22, Yan21]. **NDN-based** [TKBK22]. **Near** [Alz19, Ber17]. **Necessity** [ZP17a]. **need** [Pec17a]. **needed** [Fai17]. **needs** [Pec15, TLS⁺21]. **negotiation** [FZC⁺20]. **Neighbor** [BAK22, PW17a]. **NEM** [Ano18l]. **Neo** [CCA⁺20]. **Neoadjuvant** [Shu17]. **nervous** [Ano13b]. **Net** [Kuz19a, Kuz19b]. **Network** [AK17, Ali19, AGT⁺22, BCv19, BSB19, BKP14, CTNS21, CPL⁺21, DWS21, DW15, DSBPS⁺18, DPSHJ14, EBHBL16, FOA16, FSW14, FPD⁺21, GHJ22, HWCL17, IST19, JW18, KM20, KLM17, KLZ⁺21, KFBI22, Kla19, KKM14, Leo20, LLW17, LPS⁺20a, LF16, LWL⁺22b, LX20, MCD15, MZWX21, NSB19, NAH16, NH17, RRM18, RS21b, SCN⁺22, SOA17, SCAA13, SMZ14, Suk19, TDW⁺22, VFV17a, VFV17b, VFV17c, WL15, WLZ20, WRB15, YK15, Zam19, ZL19, Ano21a, BS15, BSF22, Cas12, CK16, DW13, DAGK20, ECA⁺20, ECA⁺21, FOA17, GS20b, GRM22, Hal21, HVM⁺18, IKY05, KCS⁺14, KKT⁺22, Lee13, LLWH21, LTBY20, LLL⁺21c, NC17a, NPB⁺21, NAH15, NVE⁺21, OTS⁺21, PCC22, RKP19, RWG21, Sal18, wScCs21, Six17h, WLW⁺19, WCZ21, XLZ20, YCMM20, ZWS⁺20, ZWL22, Ser21].

Networked [CTGJ22]. **Networking** [DPS⁺21, YPFY21, JZLL17, LQZ⁺20, WLN⁺21, YPDC20]. **Networks** [ADQH22, BL22, BDW17, EKK⁺17, FDT17, GBE⁺18, JL17, JWNS19, Kat16, KG17, LMH16, LWL⁺21, MMSK⁺17, MMSH16, MMR⁺21, NPG⁺22, PSS17, RGB20, RLS⁺21, RLT17, SKA⁺20, SYK17, SZJ17, TWFO20, WCY19, WK19, WPXZ20, XNC21, YMHY21, ZY21, AJA⁺22, AGK22a, A⁺13, BAK22, BAJ20, BLMQ19, BERHE19, Che18, DKJ19, FZC⁺20, FD20b, HLC⁺17b, KDS⁺20, KO22, LCSR21, LCZL21, LDLS22, LP18c, LP18d, LZZ⁺20, MLYL20, NAR⁺22b, NPDS20, PASA22, SCP⁺20, SYCC21, TKW15, VD17, WHY⁺21, XCZ⁺21, YS21, ZGR⁺22, ZLS⁺22, ZSGB⁺22, ARK20, HCB⁺22, XZL⁺22]. **Netzwerks** [Six17h]. **NeuCheck** [LWZ⁺21b]. **Neural** [JL17, Ser21, VCPC20, WK19, BCK⁺21, Che18, GS20b, KO22, LTBY20, LLL⁺21c]. **neuro** [AAPZ19]. **neuro-fuzzy** [AAPZ19]. **Neutrality** [Kuz19b, Kuz19a]. **Never** [McM13, SA20]. **newly** [Pal18]. **News** [Ano16a, DDPS22, Kug18, Pec15, Pec16, Und16]. **Next** [AMLH15, BCK⁺21, But13b, CGT⁺21, MRG18, OA17, Tre21, AMLH18, Ant20, Hal21, LP17b, LP17c, LP18b]. **Next-Generation** [AMLH15, But13b, MRG18, AMLH18]. **NEXTLEAP** [Hal17]. **NFC** [Mic16]. **NG** [EGSvR15, NWGF20b, NWGF20a]. **NIC** [SNM17]. **NiceHash** [Nic17]. **Nick** [McG18]. **NIST256p** [US23]. **NIST521p** [US23]. **No** [MPJ⁺13, Pop17a, VM15, MPJ⁺16]. **Node** [Ano18b, JBH⁺22, YLZ20a, AJA⁺22, HYWY22, HZT⁺22, XHST20]. **Nodes** [FBHS19, Yeo15, OTS⁺21]. **Non** [BMSS19, EAvm20, FDT17, GCL16, TD17b, Sar21, WLL21]. **Non-blocking** [EAvm20]. **Non-equivocation** [TD17b]. **Non-Permissioned** [BMSS19]. **Non-Repudiation** [FDT17, WLL21]. **non-transferable** [Sar21]. **Non-Users**

[GCL16]. **Noncausal** [HG15]. **nondeterministic** [WZS19]. **nonmathematicians** [Gom16]. **Nonoutsourcable** [MKKS14, MKKS15]. **Nonparametric** [DH17]. **normal** [YZC22]. **Normative** [RC16]. **North** [Ano18k]. **Northbound** [DHH⁺22]. **Norway** [GANAHHJ17]. **Notarization** [MGDEK17, MGDEK18]. **Note** [BS16, Nis16b, WR16, Wil17, WR18, Hea13]. **Nothing** [Pop18a]. **Notice** [ALP15]. **Novel** [EHA22, LSZ⁺21, LZZ⁺22, MCS⁺21, OEO16, OEO17, YWJ⁺16, BILN21, BAR21, LDLS22, LZZ⁺20, LKP⁺21, SGM20]. **NovidChain** [ACKJ22]. **NRE** [KZVT17]. **Nudge** [WMD⁺20]. **nuevas** [HA15]. **number** [Duc13, Kin13, SAS⁺21]. **nutzen** [KFR17, KFR18]. **Nxt** [Pop16a]. **NY** [IKY05]. **NyaYa** [VBST21].

O [Dry14]. **Obama** [WM19]. **Object** [OR17]. **Object-Oriented** [OR17]. **objectives** [TBB21]. **Objects** [AKGN18, Wel18]. **oblivion** [RS21a]. **Oblivious** [CXS⁺17, KPK17, CLT⁺20]. **Obsidian** [Cob17, CAMS20, COE⁺20a]. **obsolete** [Cha85]. **Obstacles** [Mei18]. **occupies** [Nor17c]. **Odometer** [CBWF17]. **Off** [Ape14, ET17, GH05, HBG16, KG17, Kra16b, MKKS15, Ano21d, Gal18, JJ22, Lee13, MKKS14, XZXP21]. **Off-Blockchain** [HBG16, KG17, Ano21d]. **Off-Chain** [Ape14, Kra16b, JJ22, XZXP21]. **Off-Chaining** [ET17]. **Off-line** [GH05]. **öffentlicher** [PB17]. **Offerings** [IPL⁺18]. **Official** [Ano18m]. **Offline** [DNSY14, DNY17, WLGL19]. **Offloading** [DCZ⁺21, HSC21, XCZ⁺21, ZGR⁺22]. **offs** [KLDS20, SIDV14]. **ohne** [Möl13]. **Oil** [But19, ZzH21]. **Okinawa** [Sad13]. **Ökosphäre** [Six17a, Six17f]. **Ökosysteme** [Sto17]. **Oligopoly** [AW18]. **Olive** [But19]. **OLSR** [CTNS21]. **Omni** [SS20]. **on-** [Ano21d]. **On-Blockchain** [HBG16]. **On-chain** [KOM⁺22]. **once** [Sha17]. **Oncology** [DXR⁺17]. **One** [GCL16, Pav18, Uni14, Nor17a, Tun18]. **Onion** [GDP⁺17, Esc18]. **Online** [Chr13, JKKX16, LD17, RRCL17, RGB20, WXH21, CZ16, JFG18, SCE21, YYN⁺20]. **Only** [McK19, LP18c, LP18d]. **Onto** [SD16a]. **Ontology** [RC16, dKW17]. **op** [PdWWS16, SS20]. **OP_RETURN** [BP17a]. **Open** [ACM17c, ATZ⁺21, BGM20, BLBS17, Du21, HRE17, Lim18, LNZ⁺16, TNM17, XWL⁺19, dCdCM14, Cap12, CXC⁺20, Hol15, KS18, LFX⁺20, LGCY22, MKS⁺19, Sko19, SJSY21, VDVC21, WMD⁺20, Cap12]. **Open-source** [dCdCM14, Cap12]. **Open-Source-** [TNM17]. **Open-Source-Geld** [Cap12]. **Opening** [MSC15]. **Opera** [Abr18]. **Operability** [SYK17]. **operate** [SAL20]. **operation** [Ole18]. **Operations** [Ber18]. **Opinions** [GCL16]. **opportunità** [AF16]. **opportunités** [San14b]. **Opportunities** [ASSK21, BGM20, EBD⁺20, FFL21, HSB17a, HSB18e, JB17a, MWV⁺18, SK17, Van14b, ACA⁺19, AF16, DCB⁺21, DPN⁺22, HYL21, Ker14, LZD21, MCLH19, San14b, San14a, ZFY16, ZFY17]. **Opportunity** [Mul14f, Tzi18]. **Optimal** [GGN16, LS21, SSZ17, ZGR⁺22, HZLH19, JFG18, Sal22]. **optimal-latency** [Sal22]. **Optimistic** [JMM14]. **Optimization** [AGT⁺22, DXW21, Hal21, KZVT17, GS20a]. **optimizations** [CSC16]. **Optimized** [BAK22, DKJ17, GBPDW17, MAAAW⁺22, DKJ19, MDN⁺18]. **Optimizing** [CGN14, LDH17, SS13, TNJJ22]. **Options** [Nia19]. **Oracle** [Cal22]. **oracles** [KGS⁺19]. **orchestration** [AC19]. **Order** [DDX17, Pav18, VC15a, VC15b]. **Order-Preserving** [DDX17]. **Ordering** [BSV17]. **Orders** [YWS⁺18, GAF18]. **Organisations** [NST⁺17]. **Organization** [NOT15, ZWX⁺20b]. **organization-friendly** [ZWX⁺20b].

organizational [AAGX⁺22].
Organizations [DMH18f, KPP⁺20, Son18].
Organized [MDAP16, MAP16, Pie20, Far18a].
Oriented [GvRS17, OR17, BAS⁺22, IPSP17, ICGB21, NML19, PPMT17]. **origin** [CCMN17]. **Origins** [SJZG19]. **Orphan** [DSBPS⁺18, IST19]. **Oscillators** [YF22].
Oslo [GANAHJ17]. **Other** [EDS15, Eva14, JYKA19, KJGW17, Pop17a, Ano18a, FGHM17]. **Our** [Smo18].
Ouroboros [KRDO17]. **out-of-gas** [GKJ⁺18, GKJ⁺20]. **Outbreak** [ZKU⁺23, Tun18]. **outfit** [Nic17]. **Outliers** [MMT16b]. **Outlive** [Hur16]. **Outlook** [LWL⁺21, GL16, ZZ16]. **output** [Ano21a, BBDN21]. **Outsourced** [LWL⁺22b, FBL⁺20]. **outsourcing** [BJ20, HS20, HCW⁺18]. **Overcoming** [BLNN17a, GG17, HRF17]. **overflow** [TML⁺22]. **Overlay** [ADQH22]. **Overlays** [CM16, MO15]. **Overlooked** [Tre21].
Overstock [Sid14]. **Overview** [Cal22, Ros12, YMRS18, ZFY16, VG17, ZFY17].
Own [Ano18j, PW17a]. **Owner** [GANT21, Gre13]. **Owner-Custodianship** [GANT21]. **Ownership** [Dre17h, Dre17w, CAMS20, GDKJ22, HP17].
P [SS19]. **P2P** [ACM15, Ali15, BKP14, Cas12, DPSHJ14, FSW14, GHJ22, HLC⁺17a, KKM14, Nak08b].
p2pool [Voi11]. **P4** [YPDC20].
P4-to-blockchain [YPDC20]. **PACChain** [Yue20]. **packet** [YPDC20]. **paid** [Ito18].
Pairing [DFKP13, WHW22, AAGA19].
Pairing-based [DFKP13, AAGA19].
Pairings [Fit22]. **pairs** [LT17]. **PAMBA** [Ler14b]. **Pandemic** [BSKR21]. **Paper** [AM15, BDLF⁺16, GvRS17, MCJ17, Sch14b, XJY17, Ano17a, Nak08b, Sad13]. **Papers** [BBMS14, CSN14, JRB⁺17, Ker12, BCJR15, CMR⁺16, GP17b, Jue04]. **Paradigm** [Mor17c, HZL⁺20]. **Parallel** [HM20, LSH13, BAPS22, CSLD17, TDS⁺22b, XZXP21].
parallelity [TDS⁺22a]. **Parking** [KK20a].
parliament [Lam89]. **parser** [YPDC20].
Parsing [RDDL17]. **Part** [OF15, Lam89].
part-time [Lam89]. **Partial** [YLZ20a].
partially [WZQ⁺17]. **Participants** [ACV17]. **participation** [LP18c, LP18d].
Participatory [Las17, KAP20]. **particle** [GS20a]. **Parties** [FWB15]. **Partition** [KLM17]. **Partitioning** [SCN⁺22].
Partnering [Sch14a]. **Party** [ADM14a, FYK⁺17, HLC17c, ZGH⁺15, ABL18b, CLT⁺20, GLG19, HLC19, Lin17, LYZ⁺21, XCZ⁺22]. **Password** [IK17, JKKX16, LSZ⁺21, McK19, WGL19, HZ20].
password-based [HZ20].
Password-Protected [JKKX16, WGL19].
Past [BVGC22]. **patch** [KW20]. **Path** [LCL17, Mei18, LPS⁺20a, YS20, YS21, YP21]. **paths** [YS20]. **Patient** [WDS21].
Pattern [LLP⁺20b, RJK⁺17, TNJJ22, TOM17, HLC⁺17b]. **Patterns** [EZ17, EZ18, MYSZ19, NML19, SMB22].
PAutoBotCatcher [LLCF21]. **PAXOS** [DLL00, DLL97, GL00, HMS17, Lam01, MBD⁺12, MPSP17, PLSS17, RST11, Ros03, SS12, SS13, Sut20, VA15, VB08].
PaxosStore [ZLX⁺17]. **Pay** [Ede14, HSB17d, HSB18h, ZGR17, BDE⁺13].
payer [ZLL⁺19a]. **Paying** [Dre17].
Payload [Kan18]. **Payment** [AH12, CGFH16, DW15, EKK⁺17, GM17, KG17, Lei16, LZC⁺17, MMSK⁺17, MMSH16, MSH17, RLT17, Sch98, Sou13, TWFO20, ZY21, CJW17, ECA⁺20, ECA⁺21, Kha15, LWQ⁺21, MSMH21, WZS19, YTLD19, ZWX⁺19a, ZWX⁺19b].
Payment-Channel [MMSK⁺17].
Payments [AM15, BSCG⁺14, Bon16a, CGGN17, Cha83, DNSY14, DNY17, Gev16, Gom16, KAČ12, MPJ⁺13, SCG⁺14, Bar18, Gim16, HCW⁺18, MPJ⁺16, PCHD19].
PayWord [AH12, RS96a, RS96b]. **PBFT** [CCA⁺20, GRU22, LFZ⁺21, XBX⁺22].

PBFT-based [GRU22]. **PBFT-Inspired** [CCA⁺20]. **PCS** [KLR⁺17b]. **Peak** [LS20]. **Pedigree** [NC17b]. **Peer** [AAAO20, Ano17a, CVM17, CS15, GH05, KN12, NAI16, Rin18, SOA17, SZJ17, FOA17, GHJ22, Nak08a, NAI15, TF16, VCS03]. **Peer-to-Peer** [AAAO20, Ano17a, KN12, NAI16, SOA17, CS15, GH05, SZJ17, FOA17, Nak08a, NAI15, TF16, VCS03]. **Peers** [Dre17g]. **Pegged** [IK19]. **Penalizing** [RKS15]. **Penalties** [KB16, KVV16]. **People** [BSB16, Ksh20]. **Peppercorn** [Riv04]. **perceived** [AZR⁺20]. **Perceptions** [GCL16]. **percolation** [BCV19]. **Perfection** [Ger16]. **Performance** [ABF⁺16, Cor19, DMH18g, Gao17, GKW⁺16, JB21, KKJG⁺16, Mah18, MOM22, MMR⁺21, RZJ20, SCAA13, Suk19, XZK⁺17, BANT20, BLB⁺21, DCB⁺21, Dev14, DHES16, GLO⁺22, KAK20, Li14a, Li14b, Sal18]. **Performant** [ZHC⁺20]. **perhaps** [Osb18b]. **Perils** [ACM15, Ali15]. **Perish** [ZP17b]. **Permacoin** [MJS⁺14]. **Permeability** [JB18b]. **permissible** [ZLW19]. **permission** [AAC⁺19b]. **Permissioned** [BANT20, BMSS19, CZQ⁺21, EN17, HS16c, HYP⁺22, HP19, Moh19, Suk19, Vuk17, ZZJ17, ASB⁺21, AAE19, BHMB21, DCB⁺21, HSGY20, PMP19, SJX⁺20, TYY⁺19]. **permissionless** [BHMB21, LLZY20]. **Persistent** [GB22]. **Personal** [EN19, Gir18, LN17, ZTSS20]. **personnel** [CLS19a]. **perspectivas** [HA15]. **Perspective** [FSW14, Kan20, Kün16, LD17, Mor17f, Mor17g, Sir16b, Svel17, Tzi18, CZ16, CGR18, FD20b, Her19, KFR17, Liv20, WGL⁺21, WLLH21]. **Perspectives** [BMC⁺15, PZZ⁺20, Dus14, HA15]. **Pervasive** [YPFY21, CJW17]. **Petersburg** [ACM17c]. **Petro** [Osb18b]. **Petroleum** [Nia19]. **PGP** [WA15a, WA15b]. **Pharmaceutical** [STG⁺20]. **PharmaCrypt** [STG⁺20]. **phase** [EAvM20]. **phenomenal** [GC08]. **Phishing** [CPL⁺21, Ano18k, Pal18]. **photo** [ZLW19]. **Physical** [CGT⁺21, FYZ⁺21, LSZ⁺21, MKL⁺22, NVE⁺21, Sko19]. **Picture** [Dre17q]. **Pieces** [Dre17c]. **Pikachu** [AV22]. **pilfered** [Nic17]. **Pinocchio** [DFKP13]. **Pipelining** [SS12, SS13]. **Pirate** [RS14]. **Pistis** [LWL⁺22a]. **PKI** [AB17, JLX⁺19, KKM19, QHW⁺20, TADS20]. **place** [Ant20]. **plan** [Nor17c]. **planet** [TVK⁺20]. **planet-scale** [TVK⁺20]. **planned** [AZR⁺20]. **Planning** [Dre17m, MAM22]. **Plans** [Ano17e]. **plants** [LWCX21]. **Plastic** [AM15]. **Platform** [ARBK17, BSV17, BO17, But13b, JCHSR16, KMOD17, MZLW20, Shi19, SV16, SVL17, WDLS17, ZHC⁺20, ACKJ22, ABB⁺19, DCK21, HYLY19, HS19b, KGS⁺19, KOJ⁺20, LFX⁺20, LXL⁺19, MBK⁺21, MOM22, Nor17a, OHJ20, Osb18a, Sto20, Wij16, ZTSS20]. **Platforms** [DDPS22, Eva14, Mah18, WXH21, BLB⁺21, DCB⁺21, Olu21, Raj18]. **PlaTIBART** [WDLS17]. **Platoon** [AS18]. **Play** [KMB15]. **plunges** [K.13]. **PNPCoin** [Kol22]. **PoET** [Cor19]. **Point** [ECHL16, Tre22]. **points** [Far18a]. **Poker** [KMB15]. **PoLe** [LLL⁺21c]. **police** [Ano18i, Far18a, Hol18]. **policies** [JLX21]. **Policy** [GB22, Rec19, SZM22, ZSLY20]. **policymakers** [BC16b]. **Politics** [Bel18, Lut17, Bra15a]. **Poly1305** [GADO17]. **Polynomial** [CLS⁺19c]. **Polynomial-based** [CLS⁺19c]. **Ponzi** [BCCS20, CLS⁺21, Lew15]. **Pool** [RC17, SCYP17, SBBR17, CBST22, LLWH21, Voi11, ZLL⁺18]. **pool-hopping** [CBST22]. **Pooled** [LSP⁺15, Ros11]. **Pooling** [SGF⁺17]. **Pools** [BS16, ES14a, JLG⁺14, KKS⁺17b, LJG15, LBS⁺15, VTL17, WCY19, ZWW⁺17, ZGR17, CK16, HS19a, HS20, SKNM21]. **poorer** [Ano13b]. **Popularity** [VM15]. **portability** [SAS⁺21]. **Portfolio** [BOS15, HJHBG22, DXW21]. **PoRX** [WLC⁺20]. **PoS** [Ano18k, AV22].

Possibility [LS20, CXG⁺18]. **possible** [Möl13]. **Post** [WKD22, BGPW16, CGHC21, CXY21, SK20]. **Post-COVID-19** [WKD22]. **post-deployed** [CXY21]. **post-digital** [BGPW16]. **post-quantum** [CGHC21, SK20]. **postage** [Bac97]. **Postal** [JB17a]. **Poster** [CGFH16, DNSY14, Hil14, JCG17, XWW17, MHH⁺16]. **Potential** [BBBB15, Dre17o, Hil15, HSB17c, HSB18g, Ksh20, Tre21, WZ21, CXLC18]. **Pound** [Hil14]. **PoW** [QXC⁺21, AV22, BDF⁺22]. **PoW-less** [BDF⁺22]. **Power** [Bon14a, DVRM16, LSP⁺15, WMG⁺21, YKDEV19, Cae15, Gon17, Hol18, LWCX21, ML20, Ole18, ÖY17, PW17a]. **Powered** [QFLM17, AMME21, ZDM⁺21]. **powerful** [Hol18, RS21a]. **Powering** [AMLH15]. **PPCoin** [KN12]. **PQChain** [EGB18]. **Practical** [CDD17, KFN⁺17, Ksh20, RMSK14, THF17, VSE21, XZY⁺21, vS02, LWZ⁺21b, ZLX⁺17]. **Practice** [Ami21, BNMH17, ELFCFL20, NMH16, PCM⁺21]. **Practices** [IPL⁺18, Mor17d, BGPW16]. **Pre** [KLL⁺15]. **Pre-Search** [KLL⁺15]. **Precise** [LGTS20]. **Predictable** [MLM16]. **Predicting** [EZR⁺22, GGKR21, GAF18, IKC21, JLLK23, KLL⁺15, Koo18, LUBS18, MF19]. **Prediction** [Gya21, JL17, KK21, NTKS17, RT20, BAR21, CA21, CLS19b, CLS20, IM21, KOM⁺22, QHNL21, RRF22]. **Predictions** [MDAP16, MAP16]. **predictor** [MLM15]. **Preemption** [RRCL17]. **Preface** [Ano19c, LPW17b]. **preference** [YP21]. **Preferences** [NTKS17, KOS⁺21]. **premise** [PCM⁺21]. **Premises** [Han13]. **Prescribed** [ZP17a]. **prescription** [GRU22]. **Presence** [GCR16, GKKT16, KDF13, Pou20]. **Present** [BVG22]. **Preservation** [LLYL19, MJS⁺14, WWQ⁺18, LLH21, SRA⁺22, URC19]. **preserved** [XZL⁺22]. **Preserving** [ARBK17, ACV17, DCK17, DDX17, KLR⁺17a, KLR⁺17b, KMMW17, KUEE17, KUEE18, LS17, LL17b, LL17c, OEO16, OEO17, SVL17, WQHX17, WQHX20, ZHC⁺20, ACKJ22, AC21, BYR⁺20, BSK⁺20, CXWY21, DBB⁺15, DAT21, GGJ22, GLY⁺21, HZX⁺20, JLX⁺19, KUE17, LCL⁺22, LLCF21, LYW⁺21, MZA⁺20, NAR22a, PHH⁺20, QHNL21, RLS⁺21, STN22, SJX⁺20, WQGX22, XCZ⁺22, YZL⁺19, ZYL22, ZLT⁺19]. **Prestige** [KSAB⁺21]. **Pretty** [WA15a, WA15b, Ito18, Sha17]. **prevent** [Lew15, QL22]. **Preventing** [àNOE17]. **Prevention** [AMEF21, CBWF17, Peo13, SPB17, Kha15, PSDSNAHJ19]. **Price** [Bla18, EDS15, EZR⁺22, GHMO17, Gya21, Kha19, LUBS18, PPW⁺15, RT20, Urq17, Wu19, AAPZ19, CLS19b, CLS20, CLXW22, DAGK20, Edw15, GAF18, K.13, KK21, Lee13, MB17b, RRF22, Son16b, SOA⁺21, VLAf21, ZDL17a, ZDL17b]. **Prices** [BSKR21, JL17, KPJ22, Smu18, LLJ21, MF19, MYSZ19]. **Pricing** [DN93, YNS16, YF22, KTA⁺20, LYW⁺21, WZW⁺20, ZGR⁺22]. **pricing-based** [ZGR⁺22]. **PriFoB** [BK22]. **prime** [Kin13]. **Primecoin** [Kin13]. **primer** [BC16b]. **Primitives** [GCR16, GCR18, WSL⁺19]. **Principles** [ALP15, TT19, Pil16]. **Prioritization** [MPC⁺23]. **Prioritized** [Gou19]. **Privacidad** [Bec14]. **Privacy** [ACM17d, ATZ⁺21, ARBK17, ABB⁺19, ADA17, AAKJ22, AKR⁺13, ACV17, Ban18, BK22, CIL⁺21, CBWF17, CVM17, CELR18, DBB⁺15, DAT21, DCK17, EN19, GANAHHJ17, GPP18, GČKG14, GANT21, GLY⁺21, Hal17, HHK18, HJPS16, JLX⁺19, KLR⁺17a, KLR⁺17b, KC18, KMMW17, Kat16, KL18a, KAS⁺22, KUE17, KUEE17, KUEE18, KJGW17, Ksh18b, LDWS17, LST⁺17, LLYL19, LGGB⁺21, MMSK⁺17, MO15, NTKS17, OEO16, OEO17, PS16, QHNL21, RLS⁺21, RMS17, SDT17, SFMC21, SVL17, SS17b, TWFO20, URC19, WBK⁺17, WHI⁺21, WQGX22, WL21, WDS21, XSC⁺17, YWJ⁺16, ZLMR19,

ZXL19, ZZS⁺20, ACKJ22, A⁺13, AC21, BYR⁺20, BSK⁺20, BLB⁺21, CSG⁺20, CCG21, CXWY21, CLXW22, CCH21, ECA⁺21, FHZ⁺19, GGJ22, Hea13, HZX⁺20, JJ22, LCL⁺22, LLCF21, LL17b, LL17c, LYW⁺21, MZA⁺20, MRR⁺20, MGN⁺22, NAR22a, PHH⁺20, Pec16, RSH22, STN22, SJX⁺20, SHL⁺20]. **privacy** [SRA⁺22, URC20, WQHX17, WMD⁺20, WQHX20, WWZ⁺21, WLL⁺13, XZL⁺22, XCZ⁺22, YZL⁺19, YSD⁺20, ZYL22, ZFW24, ZLT⁺19, PB17]. **Privacy-aware** [BK22]. **Privacy-Enhancing** [MO15, Hea13]. **Privacy-friendly** [ABB⁺19]. **privacy-preservation** [SRA⁺22]. **privacy-preserved** [XZL⁺22]. **Privacy-Preserving** [DCK17, KLR⁺17a, KLR⁺17b, KMMW17, KUEE17, KUEE18, OEO16, OEO17, DBB⁺15, DAT21, GLY⁺21, J LX⁺19, KUE17, QHNL21, RLS⁺21, WQGX22, ACKJ22, AC21, BYR⁺20, BSK⁺20, HZX⁺20, LLCF21, LYW⁺21, MZA⁺20, NAR22a, PHH⁺20, STN22, SJX⁺20, XCZ⁺22, YZL⁺19, ZLT⁺19]. **Privacy-Utility** [TWFO20]. **Private** [CTNS21, DWC⁺17, ISM17, LSFK17, SFYB21, Yue20, BHH19, DSPSHJNA18, ECA⁺21, JGL⁺20, Ler14b]. **Privately** [ZC16]. **privilege** [FTS⁺20]. **PrivySharing** [MZA⁺20]. **Probabilistic** [ARL19, GZ18, Pop16a]. **probably** [Lau11a]. **Problem** [BK17b, Dre17f, KJ17, KJ18, LSP82, Bra17, Lee13, LGL⁺22, Pec17a]. **Problems** [vS02]. **Proceedings** [ACM17c, CRS83, OF15, ACM17a, ACM17b, ACM17d, GANAHHJ17, IKY05]. **Process** [CWL17, Doz18, MWV⁺18, VCLK17, WXR⁺16, DCK21, FMR⁺19, KFR17, KK17b, LPGBD⁺19, SJB22, SSSJ19, Wey19]. **Processes** [GBPDW17, KL17, KL18b, LTW⁺21, PSHW20]. **Processing** [DN93, HV20, Hul17, PP16, PSGM22, SZ15, QNM⁺19, SZ13, XZXP21]. **Processor** [BH15, Sou13, BHI⁺14, WLL⁺13]. **procurement** [LLJ21]. **producer** [CHL19]. **Product** [Kri19, LD17, LX17, ZTJ⁺21, AB20, KFR17, XLL⁺19]. **production** [Gon17]. **products** [Ano21c, GS20a, SV16]. **Produkt** [KFR17, KFR18]. **Produkt-Sicht** [KFR17, KFR18]. **Professional** [BT18a]. **Professionals** [Hut17]. **Profiling** [DLV⁺22]. **Profit** [SCYP17, PW17a]. **profitability** [GPM18]. **Profitable** [SVL17]. **Profits** [VM15]. **Programmed** [Cou14]. **Programmers** [WXH21]. **Programming** [ARL19, Cob17, COE⁺20a]. **Programs** [TOM17]. **Progress** [XCW⁺22, ÖY17, ZFW24]. **Project** [DMH18j]. **Projects** [BO17, OOF⁺17]. **Promise** [Fot17]. **Promises** [Han13, Rou18]. **Promising** [HRE17]. **Promoting** [AIM19]. **promptly** [Far18b]. **Proof** [Abr16, AMEF21, Ape14, Ast16, Bac03, BLP17, BBH⁺13, BLMR14, BK17b, Coe08, DFKP13, FZC⁺20, GKW⁺16, HM20, JB21, Kam17, KN12, KSAB⁺21, Lar13, LABK17, LTC⁺19, LLL⁺21c, MGS22, MHWK16, Poe14, Pou20, QXC⁺21, SW21, SLY15, SDK⁺17, Tro15a, Voi11, Vuk16, WSC⁺20, XNC21, YLN⁺19, AC19, Dry14, HYLY19, KRDO17, Kin13, Shi16, Tro14a, Tro14b, Tro15b, WHJ17, WHJ20, YL20a, ZLT⁺19, Cor19, LC04]. **Proof-of-Activity** [LTC⁺19]. **Proof-of-Belief** [Abr16]. **proof-of-delivery** [ZLT⁺19]. **Proof-of-Elapsed-Time** [Cor19]. **Proof-of-ENF** [XNC21]. **Proof-of-negotiation** [FZC⁺20]. **Proof-of-Prestige** [KSAB⁺21]. **Proof-of-QoS** [YLN⁺19]. **Proof-of-Stake** [AMEF21, BLP17, KN12, LABK17, KRDO17]. **Proof-of-Work** [AMEF21, Bac03, BBH⁺13, BK17b, Coe08, Lar13, QXC⁺21, SLY15, Tro15a, Vuk16, Kin13, Shi16, Tro14a, Tro14b, Tro15b, LC04]. **Proofs** [DBB⁺15, SBRS16, SAL20, XCZ⁺22]. **Propagation** [FOA16, OAB⁺17, SOA17, DW13, FOA17, GHJ22, GKKT16, HTLY21,

XWY⁺21, ZWL22]. **Properties** [Gar17, YK15, DMR18]. **Property** [Int14, Zei16]. **proportion** [YV17]. **Proposal** [CTM22b, GP17a, SI16, HC12]. **Proposals** [Bra13, EBHBL16, ALMLS16]. **Prospect** [SCYP17]. **Prospects** [Hil14, GGDK20, URC19, WZ21]. **prosumer** [DLK⁺21]. **prosumer-side** [DLK⁺21]. **Protect** [ABL⁺18a, JKKX16, RS14, FLL⁺22]. **Protected** [JKKX16, WGL19]. **Protecting** [Dre17k, Dre17n, WLL⁺13]. **Protection** [NPG⁺22, WL21, BP17b, FHZ⁺19, HWDD17, WWZ⁺21, WWZ⁺20]. **Protocol** [Ape14, BM20, BLP17, Böh13, Coe08, EGSvR15, GPPB⁺21, GKL17, GLG19, HSS⁺20, HLC17c, Ibr17, KKS14, LN17, Ler14b, LLW17, LPS20b, LNZ⁺16, ML15, MSH17, MHWK16, Mue18, NT21, OAB⁺17, PSS17, SYB14, SALY17, WCL17, ZP17a, ASB⁺21, AB20, BB15, BF20, CW20, DSPSNAHJ20, DAV20, GKL15, GCH⁺22, Hea13, HLC19, JCG⁺22, KRDO17, KBS⁺21, LCSR21, Ler14a, LCZL21, LLZY20, LKP⁺21, CFvdPS15, ML17, MSMH21, NML19, PHH⁺20, PBHM21, Sal22, TYY⁺19, VG17, WSC⁺20, WLL21, XHST20, XLL⁺21, YYN⁺20, YLN⁺19, ZW15, ZWS⁺20, dAdSM⁺22, RC17]. **Protocols** [BK14, LABK17, Luu17, Mer80, MXC⁺16, HWJ22, KKS⁺17a, PLSS17, P16, ZWH18]. **prototype** [Ano21e]. **Provable** [SDT17]. **Provably** [NAR22a, Pia16, KRDO17, NAR⁺22b]. **ProvChain** [LST⁺17]. **Provenance** [AS18, LST⁺17, NSNF17, PK19, CTGJ22, RCD⁺19]. **Provers** [Hir17]. **proves** [LC04]. **provider** [Gir18]. **providers** [LKP⁺21]. **Providing** [LDWS17]. **provision** [UHK⁺21]. **Provisioning** [Eti19, AJA⁺22, MAM22]. **Provisions** [DBB⁺15, GČKG14]. **ProvNet** [CTGJ22]. **Proximity** [SOA17]. **Proxy** [MBK⁺21]. **Prozess** [KFR17, KFR18]. **Prozess-** [KFR17, KFR18]. **Pseudo** [MY11]. **Pseudo-anonymous** [MY11]. **Pseudonym** [FWB15]. **Pseudonymization** [FWB15, KMMW17]. **Pseudonymous** [FF17]. **Pseudonyms** [Cha81]. **PTAS** [JLX⁺19]. **pub** [HZL⁺20, Zha19]. **pub/sub** [HZL⁺20, Zha19]. **Public** [Alz19, Bri21, CCH⁺20, CGJ⁺17, CPMM21, Eva14, GP17a, HRF17, JWNS19, Liu19, Luu17, Mai18, Muf16, RT20, XCG⁺17, XSC⁺17, vdHKZ14, AR15, BAS⁺22, CW20, CLXW22, FCH21, HAZ21, HZY⁺19, Mer80, PB17, YZL22, ZSM22, ZLS⁺22]. **Public-Ledger** [Eva14]. **Publication** [ALP15]. **Publicly** [Bac02b, YYN⁺20, YCX18]. **Publish** [ZP17b, ZZJ17]. **Publish/Subscribe** [ZZJ17]. **Puerto** [BCJR15, Nar19]. **PUF** [AHC⁺21, IK19]. **PUFs** [PHH⁺20]. **pugno** [AF16]. **Punishes** [YWW⁺18]. **Punishment** [Ano21b]. **Purposes** [Int14]. **Push** [SD16a]. **Putting** [CIL⁺21]. **Puzzles** [BC16a, ML14, MKKS14, MKKS15, RRCL17, RSW96]. **PVORM** [CZJ⁺17]. **Qatar** [Ano18m]. **qBitcoin** [Ike17]. **QHSE** [BYR⁺20]. **QoS** [PK21, RDDB19, YLN⁺19]. **QoS-aware** [RDDB19]. **Quality** [CTM21, BR17, LLJ21]. **quantification** [Dev14]. **Quantifying** [FS20]. **Quantile** [HZ21]. **Quantile-Varying** [HZ21]. **Quantiles** [HZ21]. **Quantitative** [Hut17, RS13]. **Quantum** [ABL⁺18a, Bee18, BGN⁺22, BD19, BTS⁺21, CGHC21, Sat18, Sat20, SK20, TB17, ESP22]. **Quantum-Enabled** [BD19]. **Query** [LZY⁺17, PSGM22, WPG⁺22, XZK⁺17, QNM⁺19]. **querying** [KRK21]. **Quest** [Vuk16]. **Questions** [Pav18, BP17b]. **Queue** [ZWW⁺17]. **Queue-Based** [ZWW⁺17]. **Queueing** [KK17a, MZWX21, RFM⁺18]. **Quick** [LSO⁺15]. **Quorum** [Mer19]. **quota** [BSF22].

R [Li14a, Li14b]. **R-Hadoop** [Li14a, Li14b]. **Race** [Mat14, Pec13]. **Radar** [Laz15]. **Radiation** [DXR⁺17]. **Radio** [SKA⁺20]. **Raises** [Pav18, Osb18b]. **RAM** [CLT⁺20, KPK17]. **Rampenlicht** [ABR17]. **Random** [ADQH22, Ser21, CFM⁺22, Duc13, FZC⁺20]. **random-honest** [FZC⁺20]. **randomness** [LB18, WYZ⁺20]. **Randpay** [KK20b]. **Range** [AV22, XCZ⁺22]. **Ranked** [SZM22]. **Ransom** [BBM⁺18]. **ransoms** [LZDA16]. **Ransomware** [ALGK19, Als23, DWS21, PCHD19, WPC⁺22, CGR18, DMSCA20, UJ16]. **Raps** [YWS⁺18]. **Rare** [TADS20]. **Rate** [Joh19, SZ15, Wu19, MF19, Son16b]. **Rates** [BHM20, HG15, ZKU⁺23, SBL19]. **Rating** [Van14b, ZTJ⁺21]. **rationality** [KVP21]. **RC** [SYCC21]. **RC-chain** [SYCC21]. **RCF** [DCY⁺22]. **RDIC** [WHY⁺21]. **Re** [Nak08b, MBK⁺21]. **re-encryption** [MBK⁺21]. **RE_BBC** [SL20]. **reader** [BGPW16]. **Real** [Bys19, Dre17j, ECHL16, GSF⁺20, KLZ⁺21, Lei16, Nia19, NCS17, OO19, RRCL17, RT20, WM18, Wör16, XLM⁺17, HGDD20]. **Real-Time** [GSF⁺20, Lei16, RT20, Wör16, XLM⁺17, Bys19, HGDD20]. **Real-World** [ECHL16, NCS17, OO19]. **Realities** [Bri21, Eya17]. **Reality** [Ksh20, Mic14]. **Realization** [DNP17]. **really** [BWZ17, SA20]. **reappeared** [Osb18a]. **reasoning** [PLSS17]. **Rebalancing** [KG17]. **recall** [SYH22a, SYH22b]. **Recht** [Ano16b]. **recipient** [KK20b]. **recognition** [IFD⁺19]. **Recognizing** [Dre17o]. **recommendation** [SJ21]. **Recommendations** [Kön20]. **Recommender** [ATZ⁺21]. **Reconciliation** [OAB⁺17]. **reconfiguration** [VG20]. **Record** [Liu16, SD16b, CLC⁺19, PK22, SHL⁺20, TGC⁺21, TPE20, VBST21, YLM21, YWX⁺22, ZGZ21]. **Records** [Ale18a, Ksh18a, Shu19, AC21, Ano21e, BBDN21, KRK21, PL20, SMM⁺20]. **recoverable** [XHST20]. **Recovery** [Mis17, CSC16]. **Recruiting** [ACV17]. **Recurrent** [BCK⁺21]. **recursive** [BLMZ20, BLMZ22]. **recursos** [RSR17]. **Red** [BDOZ11, BDOZ12]. **Redactable** [AMVA17, ZNX⁺21]. **Redemption** [Mez19]. **reden** [GH17]. **Redesigning** [LSZ22, VFV17a, VFV17b, VFV17c]. **redirection** [CEW15]. **reduced** [ECA⁺20]. **Reducing** [DDPS22, JS20]. **reduction** [IM21]. **Reference** [AS14, VDG19, WXH21]. **Refinable** [DHES16]. **refinement** [TML⁺22]. **Refiner** [ZDM⁺21]. **Refining** [Wey19]. **Reflections** [Gev16]. **Refund** [MSH17]. **refunded** [BSF22]. **regarding** [Ano18]. **Region** [CSZ⁺21, Ano21c]. **Register** [ALPBT17]. **Registration** [AABM17]. **Regression** [Gya21, SZ14]. **Regulation** [Ano14b, Lew15]. **Regulations** [CIL⁺21]. **Regulatory** [Bai19, Nav17, Lyn14]. **reimburse** [Abe18]. **Reinforcement** [AMME21, LUBS18, LLL⁺21b, LLL⁺21a, MFE⁺20, PC21, WWML21]. **Reinforcing** [EN17]. **reinvent** [Pop15, Pop16b]. **Reinventing** [Dre17p]. **Related** [KCD17, WB17, CXY21, JLX21, RGSFGHCG21]. **Relational** [AAG17, NGS⁺19]. **Relationship** [ZWLS18, SKG22, Son16b]. **Relationships** [BSKR21]. **Relay** [NSB19, WCZ21]. **Release** [Mat13, Wol18, RSW96]. **released** [Sch13]. **Relevant** [Tre22]. **Reliability** [JBH⁺22, BHS93]. **Reliable** [AS18, FBL⁺20, HZL⁺20, ZDM⁺21]. **remains** [Goo18]. **Remote** [Shu17, FBL⁺20, WHY⁺21]. **removable** [DLK⁺21]. **removing** [CLS⁺19c]. **Repay** [McK19, Nak18]. **Repeatable** [WDLS17]. **replaces** [Goo18]. **Replication** [Vuk16]. **Repositories** [MGDEK17, MGDEK18]. **Repository** [Pie20]. **Representatives** [Uni14]. **RepuCoin** [YKDEV19]. **Repudiation** [FDT17, WLL21].

Repurposing [MJS⁺14]. **Reputation** [JBH⁺22, KUBS22, ME17, MCS⁺21, SD16b, SYCC21, SXZ⁺21, Tam19, YKDEV19, AHH20, SSV22, WLC⁺20, ZWY⁺21, dORM⁺20]. **Reputation-based** [SYCC21, dORM⁺20]. **Reputation-Driven** [JBH⁺22]. **repute** [WSC⁺20]. **requesters** [KOM⁺20]. **require** [KK20b].

Requirements [LN17, Lei16, SL18, SL20, ZGY⁺21, MKY⁺21, MAQ99, MKS⁺19, Olu21].

Research [BNMH17, BART17, BMC⁺15, Cal22, GK14, HJ15, LHZ17, MCLH19, NMH16, OZ16, RS17, SDT17, SK15, wScCcS21, Tre22, US23, Vel16, XCW⁺22, Ant20, BR17, JCG⁺21, LMC18, PDJ22, SC21, URC19, YP21, ZFY16, ZFY17, HMS17]. **reserves** [JFG18]. **Reshoring** [ME17]. **Resilient** [RC19, GRHS20, dORM⁺20]. **ResilientDB** [GRHS20]. **Resistant** [BOLL14, FWB15, HL16, FF17, OdVP20, RKTv22, Voi11, XHST20, CZQ⁺21].

ResNet [NVE⁺21]. **Resolution** [ABL18b, BT18a, NOT15]. **Resource** [HWCL17, HYP⁺22, HM19, JWNS19, MMR⁺21, RKTv22, XWW17, XWL⁺19, ZZW⁺21, vdHEM⁺17, BKV22, PGS⁺21, QL22, SLG⁺21, SSSJ19, VCS03, WZW⁺20, YKJK21, ZGR⁺22, ZLS⁺22, ZSL21]. **resource-aware** [SSSJ19].

Resource-Constrained [MMR⁺21, vdHEM⁺17].

Resource-Efficient [XWL⁺19]. **Resources** [HRE17, IM16, Nor17b, RSR17, YZC22].

Respecting [XSC⁺17]. **Response** [EN19, KT22, LSO⁺15]. **Responses** [Shu17]. **responsibility** [BERHE19]. **Responsible** [BEM⁺20]. **Restoring** [EBHBL16]. **Result** [SFMC21, LWQ⁺21]. **Results** [GG17].

Retail [AlM19]. **Rethinking** [KYV19, Vuk17]. **Retricoin** [SBRs16].

Retrievability [SBRs16]. **Retrieval** [MGDEK17, MGDEK18]. **Return** [Cha81, YK15, ZWLS18, BOS15].

Return-Volume [ZWLS18]. **Returns** [HZ21, SS20, Osb18a, PASA22, SKG22, VX17]. **Revealing** [Kan20, RDL⁺20, GZH⁺14]. **Reveals** [Ker18a]. **Reverse** [HSB18c, HSB18i].

Review [Ano16c, Ant21, Big20, BTvdH20, FAC22, HHO⁺21, KT22, KS18, LGK⁺22, OA17, SM-16, SS17a, SJB20, THFI21, XCW⁺22, ZDP⁺22, ZTJ⁺21, AKA⁺22, AHH20, CSG⁺18, CXC⁺20, CPSGAA20, HH22, LHO⁺20, NAK⁺22, SC21, SCP⁺20, TBB21, VDVC21]. **reviews** [LDM⁺21].

Revised [BBMS14, BCJR15, CSN14, GP17b, JRB⁺17, Ker12, Sad13, CMR⁺16, Jue04].

Revision [Woo14]. **Revisited** [CGGN17, NWGF20b, Bar17, NWGF20a].

Revisiting [DLL97, DLL00, HMS17, MCJ17, MCS18].

Revive [KG17]. **Revocation** [DNY17, AHSZ21, LCB⁺20, SJB22].

Revolution [CMS21, Kün16, Dus14, Hal18, Rot17, TT16, TTC16]. **Revolutioniert** [HP18, HP17]. **revolutionizing** [HP17].

Revolutions [DMH18]. **Reward** [Ano21b, CKWN16, GCD16, KSAB⁺21, Ros11, SBBR17, SD16b, So19, ZLL⁺18].

Rewarding [LDM⁺21]. **rewards** [SIDV14].

Rewriting [AMVA17]. **RFID** [Mic16].

RFID/NFC [Mic16]. **Rhetoric** [Bel18].

Rich [NTRK22]. **richtigen** [FRSU17]. **Rico** [BCJR15, Nar19]. **Ride** [Shi19].

Ride-Hailing [Shi19]. **rigging** [QL22].

Right [FRSU17, Lut17, SK14, HLF⁺21].

Right-Wing [Lut17]. **Rights** [KPP⁺20, KKS14, Rin18].

Rigorous [Tre22].

Ring [JKS16, MPSP17, NMt16, SALY17].

RingCT [SALY17]. **Ringling** [BW17].

Ripple [SYB14, AGK22a, Ale18b]. **rischi** [AF16].

Rise [Bec18, Son14, FRF⁺19, Gei16]. **Rises** [Vig15].

Risiken [Ker14, San14a]. **Rising** [Sid14, Pro13, Pro14].

Risk

[Bys19, Kab17, MC13, MBB14, PMMP19, SIDV14, YWJ⁺16, AZR⁺20, DAT21, Gof19, KBS17, NML19, San14b, Ün21]. **risk-oriented** [NML19]. **Risk-rewards** [SIDV14]. **Risks** [AAG17, Mai18, MHH⁺16, MCS18, Peo13, AF16, Ker14, San14a, Uni14, Wea18]. **risques** [San14b]. **RMB** [Wu19]. **RMKABSE** [SZM22]. **Road** [BABD17, FRSU17, PdWWS16, Chr13, Gre13, Zet13]. **Roads** [CIL⁺21]. **Roadside** [XLL⁺21]. **Roaring** [Wol18]. **robbery** [Gal18]. **Roberts** [RS14]. **Robotics** [ASSK21, Raz19]. **Robust** [Ibr17, RZJ20, ZY21, HFP⁺22, MMT16a, Sal22]. **Robustness** [SGK21, ZWX20a]. **RobustPay** [ZY21]. **Roger** [MCHM17, MHM17]. **Role** [LGK⁺22, SLS20, SL20, AZR⁺20, Blo18, Bra15a, DAGK20]. **Rolle** [Blo18]. **Rolling** [HZ21]. **Rolling-Window** [HZ21]. **RON** [HTLY21]. **RON-enhanced** [HTLY21]. **rooftop** [PW17a]. **root** [HSGY20, HSGY20]. **Ross** [Gre13]. **Route** [RLT17]. **Router** [Esc18, WCL17]. **Routing** [AZV17, EKK⁺17, TWFO20, ZY21, AC19, JCG⁺22, KBS⁺21, LCSR21, LZZ⁺20, PK21, SGM20]. **RTChain** [SXZ⁺21]. **rubbish** [Sha17]. **Rule** [Cou14, DW18, Nor17a, VB08]. **Rules** [Int14, Ber13]. **Run** [LJG15]. **Running** [BCM16]. **Runtime** [JS20, PSHW20]. **Rush** [BBM⁺18, DMH18i, LL18]. **Russia** [ACM17c]. **Rust** [NQ20].

s [Rou18, Sup16, Che18, SS19]. **SADPonzi** [CLS⁺21]. **Safe** [CTM22a, FDT17]. **Safeguarding** [NML19]. **Safer** [Cob17, COE⁺20a]. **Safety** [ALMLS16, CXW⁺21, LDWS17]. **Said** [BSLM20]. **Sale** [ECHL16, HA15]. **Sales** [Nar19, Sid14, YW18]. **Salvador** [Ksh22]. **sample** [CLS19b, CLS20]. **sampled** [RWG21]. **Samplings** [Leo20]. **SAMR** [Ale18a]. **San** [BCJR15]. **Sanctions** [Ano18d]. **Santa** [CRS83]. **Sarkar** [BB15]. **SASLedger** [SPS⁺21]. **Satoshi** [Ant20, Cha14, Sha17]. **Satterthwaite** [Ano18h]. **saved** [Bar18]. **saving** [KW20]. **Savings** [CPM17]. **Sawtooth** [Cor19]. **say** [Far18a, G.17]. **Says** [Ano17e, Gre13, McK19, Far18b, Nic17, Sha17]. **SBAC** [LQZ⁺20]. **SBRAC** [CLXW22]. **SCAB** [VD21]. **Scalability** [Gen17, GSWV20, Gos17, HM20, HJPS16, Kar16, PS16, vdHEM⁺17, FA21, SC21]. **Scalable** [BABD17, BDW17, DW15, DKJG19, EGSvR15, JJ22, LSFk17, LFZ⁺21, LZY22, NAK⁺22, RV21, SPS⁺21, Vuk16, WWZ⁺22, YLZ20a, ZLL⁺19b, AJA⁺22, CCG21, CZX⁺21, ECA⁺21, KBS⁺21, OdVP20, RST11, RSH22, ZSM22, dORM⁺20]. **Scale** [Luu17, Riz16, DKJ19, Far18a, FA21, GRHS20, SIDV14, SZJ17, TVK⁺20, WLXC17, WPC⁺22, ZWX20a, ZWX⁺19a]. **Scaling** [CV21, CDE⁺16, Kuz19b, Zha19, Kuz19a, XZXP21]. **scam** [Goo18]. **Scams** [CPL⁺21, VM15, dre14]. **Scan** [AGGM16]. **Scenario** [Tre21, HZLH19]. **Scenarios** [Tre22, BBH⁺13]. **SChain** [CZX⁺21]. **scheduling** [HZLH19]. **Scheme** [BL22, CGFH16, CGLR19, CCC19, CLJ⁺21, HSS⁺20, JLX⁺19, KLR⁺17a, KLR⁺17b, KFN⁺17, LSZ⁺21, PYC21, RS21b, So19, WGL19, Wey19, BYR⁺20, BTS⁺21, BILN21, CLH⁺20, CMJ21, EFFM21, ES16, FSY⁺19, FBL⁺20, FTS⁺20, FLL⁺22, GWL20, G GK⁺14, GKA⁺21, HZX⁺20, ICGB21, KGA⁺22, KMAJ21, LLH21, LCB⁺20, LLCH21, LYW⁺21, MISS22, MGN⁺22, PCC22, RLS⁺21, SPB⁺22, SAS⁺21, SK20, SMM⁺20, TGC⁺21, VBST21, WLC⁺20, WWZ⁺21, WHY⁺21, WLC⁺22a, XZL⁺22, XZZ21, YCX18, YL20a, YWX⁺22, YZL22, ZLL⁺19b, ZLH⁺20, ZNX⁺21, ZBF22, ZLJW20, ZGZ21]. **Schemes** [Ano12, CLS⁺21, DP18, GCD16, KT15, RS96b, BCCS20, Lew15, RS96a]. **Schnorr**

[MPSW19]. **scholarly** [WZ21]. **School** [BKM⁺17]. **Science** [BLBS17, DMH18d, LHZ17, LMC18, Wat17]. **sciences** [CDS⁺19]. **Score** [KVL19, SSV22]. **Scoring** [MBB14]. **SCPki** [AB17]. **scrambled** [Lee13]. **Scrapes** [Pop17a]. **Scratch** [MKKS14, MKKS15]. **Scratch-Off** [MKKS15, MKKS14]. **script** [LLC⁺20]. **Script** [But13a]. **SDN** [CJA⁺19, DHH⁺22, JAK19, PK21]. **SDN-enabled** [CJA⁺19, JAK19]. **SDS** [SK20]. **sealed** [CLXW22, LLJ21]. **sealed-bid** [CLXW22]. **Search** [GWF⁺21, KLL⁺15, MLM16, JGL⁺20, MLM15, YWX⁺22]. **Searchable** [AAG17, SZM22, CLC⁺19, HH22, LWQ⁺21, TGC⁺21]. **Searchain** [JGL⁺20]. **Seasonality** [HQ15]. **Second** [TODM19, LPS⁺20a, Uni14]. **SECP256k1** [US23]. **Secret** [GP17a, JKKX16, CSKP21]. **SecTEP** [LLJ21]. **section** [CSZ⁺21]. **Sector** [CTM22b, HRF17]. **Secure** [ASM19, Alz19, ADMM14, ADMM16, BDWW14, BL22, BKT17, DRS22, DCK21, DNY17, EH24, EL14, FTS⁺20, FMR⁺16, FHS⁺17, FYK⁺17, GWL20, GWF⁺21, HS97, Hal17, HS16d, HZY⁺19, Ibr17, KFN⁺17, KAS⁺22, KXSS21, KMOD17, KB16, KVV16, LWZ⁺21a, LNZ⁺16, Luu17, NVE⁺21, PTPR17, PTPR18, RSJ21, SFYB21, Shi19, SL18, SZ15, SDK⁺17, Tac17, TDS⁺22b, VD21, WLY17, WZQ⁺17, ZGH⁺15, ZMH⁺17, ZMH⁺18, AMME21, BSK⁺20, BHH19, CJA⁺19, CAA⁺22, CM19, CLH⁺20, CMJ21, CGC21, GKA⁺21, GLW⁺20, HCB⁺22, HLF⁺21, HZX⁺20, ICGB21, JCG⁺22, JAK19, KGA⁺22, KAK20, KRDO17, LCSR21, LL16, LL17a, LFX⁺20, LLJ21, LHH⁺18, Lin17, LQZ⁺20, MZA⁺20, MBK⁺21, MAQ99, NAR22a, NAR⁺22b, NYZ⁺20, PR21, PGS⁺21, PMP19, RDDB19, RCD⁺19, SGM20, SCE21, SBA21, SMM⁺20, SWG21, SMHK21, TGC⁺21, UHK⁺21, Uri17, VCS03, WLGL19, WZW⁺20, WLZ20]. **secure** [Woo14, XBX⁺22, YKJK21, YYDC21, YPDC20, YL20b, ZCJ⁺21, ZSM22, ZWX⁺19a, ZWX⁺19b, ZGZ21, Ale18a, AABM17, CDD17]. **SecureCoin** [Ibr17]. **Secured** [LN17, SPS⁺21, DAV20, Gir18, KRK21, KTM⁺21]. **Securing** [AV22, Boi18, FA21, GPPB⁺21, GGK⁺14, Joh18, LABK17, MKS⁺19, PL20, SKA⁺20, DS17b, DHH⁺22, YLM21]. **Securitisation** [HSB18c, HSB18i]. **Security** [ACM17a, ACM17d, AMGBK22, A⁺13, AAKJ22, AKWW19, BB15, Bee18, Bra15b, CC16, CSG⁺20, Cha85, CPNX20, CSN14, CELR18, ESLB20, GGN16, Ger16, GKW⁺16, GGDK20, GCR16, GCR18, bAHRAK17, bAHRAK18, Hut17, JRB⁺17, JCG⁺21, Kar16, KC18, Kat16, Ker12, KKJG⁺16, Kri19, KJGW17, LDWS17, LKL⁺14, LDY⁺22, LDH17, Mor17i, Pan18, Sad13, SDT17, Sch98, SRB20, Ses18, SIDV14, Son16a, Sve17, TSL⁺17, WHI⁺21, WGL19, WDS21, XWW17, ZLMR19, ZXL19, ZZS⁺20, dCdCM14, van20, vO20, BJ20, BBMS14, BS20, BCJR15, BLB⁺21, CMR⁺16, DSM⁺17, DKJG19, ESP22, FGHM17, FB17a, GLF20, GP17b, HFP⁺22, HAZ21, IKY05, JJ22, JO13, KA16, KBS17, KS18, KTM⁺21, LJC⁺20, LWZ⁺21b, MSMH21, MRR⁺20, MCF20, NML19, PK22, RKP19, RWG21, SBL19, Sal18, SHL⁺20, SSL⁺19, Sir16b, Tun18, WGL⁺21, YSD⁺20, vO21]. **Security-critical** [dCdCM14]. **Seeing** [Bog17, Dre17q, Dre17r]. **seek** [Far18b]. **Sees** [Sid14]. **Seized** [Gre13]. **Seizure** [YCP⁺21]. **seizures** [Ano13b]. **Selected** [BBMS14, CSN14, JRB⁺17, Ker12, Sad13, Ano14b, BCJR15, CMR⁺16, GP17b]. **selecting** [LKP⁺21]. **Selection** [BAK22, Dir19, Hal21, MAAAW⁺22, RLT17, ADZ23, FZC⁺20, GHJ22, HYWY22, LLZY20]. **Selective** [YYDC21]. **Self** [CXLG22, CTM21, Cou14, HYZ⁺24, LMH16, LLP⁺20b, MDAP16, MAP16, Nis16b, Pia16, RZJ20, Sei20]. **Self-adaptive** [RZJ20].

Self-Contained [Pia16]. **Self-Destruct** [CXLG22]. **Self-Destruction** [Cou14]. **Self-Fulfillment** [Nis16b]. **Self-managed** [LMH16]. **Self-Organized** [MDAP16, MAP16]. **Self-Sovereign** [HYZ⁺24, LLP⁺20b]. **self-sovereignty** [Sei20]. **Selfdestruct** [CXLG22]. **Selfish** [KKS⁺17d, KKS⁺17c, SSZ17, ZP17b, GKKT16, WLW⁺19, YCMM20]. **selfish-mine** [GKKT16]. **sell** [GAF18, Lee13, PW17a]. **sell-off** [Lee13]. **Semantic** [FR16]. **Semi** [KMMW17, DMSA20]. **semi-autonomous** [DMSA20]. **Semi-structured** [KMMW17]. **send** [Far18b]. **sending** [Pal18]. **Sense** [CMS21]. **SenseChain** [KOM⁺20]. **Sensing** [LHZ⁺21, NVWF14, SVL17]. **Sensing-as-a-Service** [LHZ⁺21]. **Sensitive** [DCY⁺22]. **Sensor** [AJA⁺22, ME17, WvB14, LCSR21]. **Sensor-Based** [ME17]. **Sensornetzwerke** [TNM17]. **Sentiment** [JLLK23, Mue18, RT20, Smu18]. **September** [GANAHHJ17]. **sequential** [Per09]. **Series** [LPSP20, IKC21]. **server** [Ano18i, PR21]. **Service** [BSV17, BPT⁺22, ESLB20, GvRS17, KET⁺17, LWZ⁺21a, LHZ⁺21, LLP⁺20b, NVWF14, SS17a, SYK17, SL20, SGDT19, VTM14, Yew18, ZGY⁺21, ZZJ17, AJA⁺22, AABE20, Bac02a, BSK⁺20, BZK⁺21, Gir18, JAK19, LXL⁺19, MBT19, MAQ99, MAM22, PK22, Bee16]. **Service-Level** [SL20, BZK⁺21]. **Service-Oriented** [GvRS17]. **Services** [AVA21, CGGN17, HRF17, JB17a, Mul14d, Sch19b, SFMC21, WPG⁺22, YCP⁺21, dBHC17, Bar16, GGJ22, IFD⁺19, LZD21, LYZ⁺21, SAL20, SZdLZ22, SYZ16, ZSM22]. **SeShare** [HZY⁺19]. **session** [Uni14]. **Set** [OAB⁺17]. **Sets** [AC17]. **Setting** [NTKS17]. **Settings** [NTKS17]. **Setup** [HSS⁺20]. **Setup-Free** [HSS⁺20]. **Seven** [Cou16]. **several** [PASA22]. **SG** [XBX⁺22]. **SG-PBFT** [XBX⁺22]. **SHA** [BBDN21, FA21]. **SHA-256** [BBDN21, FA21]. **SHA1** [Ste17]. **SHA256** [CGN14]. **Sharding** [GvRS17, HYP⁺22, JBH⁺22, LNZ⁺16, NAR⁺22b, XHST20]. **Sharding-Based** [HYP⁺22]. **Share** [KKS⁺17b]. **Shared** [ALPBT17, CWL17, Liu19, ANMM22, EHBA⁺19, MBD⁺12, dAdSM⁺22]. **Shares** [ZGR17]. **Sharing** [BCM16, CGLR19, FHS⁺17, HWCL17, JKKX16, LSM17, LHZ⁺21, PYC21, RSJ21, SBHD17, Shu19, XSC⁺17, YMHY21, Zam19, ANMM22, CSKP21, CLC⁺19, CXWY21, CTGJ22, CLH⁺20, CMJ21, DAV20, HCB⁺22, HZY⁺19, HZX⁺20, KGA⁺22, KRK21, LCL⁺22, LYW⁺21, MZA⁺20, MBK⁺21, SMM⁺20, SWY⁺21, SLG⁺21, SSL⁺19, SMHK21, SYZ16, TGC⁺21, VCS03, YWX⁺22, ZTSS20]. **Sharks** [ZWW⁺17]. **Shipping** [JB18a, JB18b]. **shocks** [FGHM17]. **Shopping** [LD17]. **Short** [BDLF⁺16, GvRS17, MCJ17, XJY17, YF22, GAF18, PASA22, Pla13]. **Short-Term** [YF22, GAF18, PASA22]. **Should** [Chu15, McM13]. **Shows** [McM13]. **Shuts** [Son14]. **Sicht** [KFR17, KFR18]. **Side** [ABF⁺16, AGGM16, BBM⁺18, KJGW17, Ano16a, DLK⁺21]. **Sidechain** [SCP⁺20]. **sided** [KOS⁺21]. **Sidestep** [Ano18d]. **Signals** [RRM18, GTMP14, GS15a]. **Signature** [EN17, GCH⁺22, KFN⁺17, LLYL19, Mer88, SALY17, ZGGT16, BTS⁺21, GGK⁺14, LTMW19, MLTT20, RLS⁺21, SK20, WMD⁺21, XWZ21, ZLL⁺19a]. **signature-based** [BTS⁺21, LTMW19]. **Signatures** [Cha83, DMO⁺19, GGN16, SK20, DGP20, MPSW19, WZQ⁺17, YML⁺22]. **Signed** [HBG16]. **significance** [CGR18]. **Signing** [KKJG⁺16, THF17, BILN21, HLC19, Lin17]. **Silicon** [Tay13]. **Silk** [Chr13, Gre13, Zet13]. **Silver** [McG18]. **Simple** [CG16, CCG21, MPSW19, RAH⁺15, RS96b,

CG20, Lam01, RS96a]. **Simplicity** [O'C17]. **simplified** [Per22]. **Simulating** [CCMN17]. **Simulation** [AvM18, Gos17, MLD19, NSB19, ZWH18, CSLD17, LW16, LLWH21, NAH15]. **Simulations** [SZJ17]. **Simulators** [ZDP⁺22]. **sincerely** [Gal18]. **Singapore** [ZSLY20]. **Singing** [HLC17c]. **Single** [IK17, MLTT20]. **Sins** [Cou16]. **Sites** [GDP⁺17]. **situations** [RGSFGCG21]. **Size** [Dim19, RRF22, Ano18c, GK17]. **Sketching** [Vel16]. **Sliema** [JRB⁺17]. **SlimChain** [XZXP21]. **SmaCC** [RDDL17]. **Smart** [ACW17, AB17, ARL20, AHH20, ABBS18, ABC17, BNMH17, BDLF⁺16, Blo18, BS17b, BS18, BCM16, BATB20, But13b, CIL⁺21, CS20, CXG⁺18, CLS⁺21, CXL⁺22, CXLG22, DGHK17, Gao17, GLD⁺18, GLG19, IPSP17, IGRS16, JKS16, JS20, KPP⁺20, Kee16, KK20a, KUEE17, KUEE18, Kün16, LP20, LHZ⁺21, LWCX21, LCO⁺16, Mis17, Mor17j, NMH16, Øln16, PTPR17, PTPR18, PP16, Pia16, Pie20, RBL⁺17, SY22, SW17, SNKG20, SZM22, Swa16, Tam19, TSY⁺21, VTL17, WHW22, WTC24, XJY17, YW18, ZCC⁺16, ZHC⁺20, ZLH⁺20, ZGY⁺21, ACA⁺19, AMME21, ALP15, Ano21d, BAS⁺22, BAK22, BZK⁺21, CSKP21, CGHC21, CXY21, CGC21, DAT21, DLV⁺22, FBL⁺20, GRU22, Gia15, GKJ⁺18, GKJ⁺20, GLTS22, GLY⁺21, HYL21, HTLY21, JYTW21, KMAJ21, KAP20, KTA⁺20, KGS⁺19, KOJ⁺20, LCL⁺22, Lev17, LYW⁺21, LML⁺19, LZZ⁺20, LTB⁺22, Liv20, LWZ⁺21b, LYZ⁺21, MKY⁺21, MZA⁺20]. **smart** [MLTT20, MNB⁺17, MMMV21, ML20, NAR22a, NAR⁺22b, OHJ20, PHH⁺20, PGS⁺21, PK22, Pou20, RLQ⁺21, SPZ⁺20, SSV22, SJSY21, SYZ16, VDVC21, WZS19, WM19, WGC19, WLZ20, XGS⁺20, YKJK21, YML⁺22, ZWH⁺20, Ano21c, Ser21, SK20]. **Smarter** [LCO⁺16]. **Smartphone** [FMR⁺16]. **Smartpool** [Kad18]. **SME** [CMT⁺21, RIMP22]. **SMEs** [RIMP22]. **Smileycoins** [SL17]. **Smileys** [SL17]. **smoothing** [MYSZ19]. **SMS** [DSN17]. **snack** [BDE⁺13]. **Snapshot** [Leo20]. **sniffer** [Cas12]. **Soar** [McL13]. **Sociable** [HBJB14]. **Social** [AZR⁺20, CR17, DDPS22, FYZ⁺21, GS15a, HBJB14, KH16, MLM16, OOF⁺17, RGB20, RC16, ROH16, Smo18, YPFY21, A⁺13, LMC18, Lev17, OFA22, PCM⁺21, VD17, AZDF22]. **Social-Chain** [YPFY21]. **Socialism** [HW16]. **Socializing** [SYK17]. **Societal** [MZ19]. **Society** [ACM17c, ATD17, GRM22]. **Socio** [EBHBL16, GTMP14]. **socio-economic** [GTMP14]. **Socio-technical** [EBHBL16]. **sofa** [Sha17]. **Sofia** [OF15]. **Software** [AK17, FS16, HS16d, Lut17, PPMT17, RS21b, SD16a, SDK⁺17, TODM19, ZGY⁺21, dCdCM14, Aro12, HAZ21, NQ20, YPDC20, ZLT⁺19, HCB⁺22]. **Software-Defined** [RS21b, SD16a]. **SoK** [ABC17, BMC⁺15]. **solar** [PW17a]. **Solidity** [RDDL17, Dan17b, DLV⁺22, TML⁺22]. **Solidus** [CZJ⁺17]. **SolType** [TML⁺22]. **Solution** [ABL18b, Coe08, HRE17, Kuz19b, PL16, SPS⁺21, VDG19, Wey19, XWW17, DLK⁺21, Kuz19a, MDN⁺18, RWG21]. **Solution-Verification** [Coe08]. **Solutions** [ATZ⁺21, Ano19c, But19, bAHRAK17, bAHRAK18, HJPS16, PS16, SRB20, ZMKR22, ZHZ⁺22, DSC21, FFL21, KS18, KGTK20, SC21, SBA21]. **solve** [Pec17a]. **Solvency** [DBB⁺15]. **Solving** [KJ17, KJ18, LGL⁺22, Six17j]. **Some** [Ber13, CG16, CG20, Sha17]. **someone** [Ito18]. **sound** [BLZ20]. **Source** [Cap12, Pie20, TNM17, Hol15, dCdCM14]. **Sources** [WKEM20]. **Sovereign** [CTM21, HYZ⁺24, LLP⁺20b, LCL17]. **Sovereignty** [Roi18, Sei20]. **Space** [XZL⁺22]. **Space-Ground** [XZL⁺22]. **spam** [SKNM21]. **Spanish** [HA15, RSR17]. **sparks** [Lee13]. **spatio** [QNM⁺19].

spatio-temporal [QNM⁺19]. **Special** [AHWB20, CGT⁺21, MFR⁺21, YSD⁺20, ZMKR22, CSZ⁺21, FD20a, ZFY16, ZFY17, ZWC21]. **Specializing** [MKGT16a, MKGT16b, TVK⁺20]. **Specifiability** [Swa16]. **Specific** [Son18]. **Specifically** [Hut17]. **Specification** [SL20, Wil13]. **Specifications** [LN17]. **Spectra** [DVRM16]. **speculation** [Cra17]. **Speculative** [CF15, Bla18, LL18]. **speculators** [Ito18]. **Speed** [CSC16, HM20, MBD⁺12]. **Speeding** [ZWL22]. **spend** [PR16]. **Spender** [DNY17]. **Spending** [AMEF21, Dre17s, JW18, KAR⁺15, LZC⁺17, ZL19, KAČ12, PSDSNAHJ19, WLS22, YSLH17]. **Spillover** [ZzH21]. **splines** [MYSZ19]. **Splitting** [LSP⁺15, KKS⁺17a]. **sponsored** [Sto20]. **Sporny** [Spo17]. **Sports** [PRS22]. **spotlight** [ABR17]. **Spread** [DDPS22]. **spurs** [Far18a]. **Square** [EDS15, Per22]. **SSI** [CTM22b]. **St** [ACM17c]. **Stability** [GSWV20]. **Stable** [Men19, SI19]. **Stablecoins** [OFA22, Ano20, CDM20]. **Stack** [WXH21]. **Stacking** [Ara21]. **Stage** [Gya21, KD16, WLL21]. **Staged** [WLL21]. **staging** [Bit09]. **Stake** [AMEF21, BLP17, BLMR14, KN12, LABK17, Poe14, KRDO17]. **stakeholders** [SWY⁺21]. **stamp** [HS91]. **stamping** [BHS93]. **Standards** [HV20, Kön20, Lim18]. **Starting** [Tre22]. **startup** [Far18b]. **stash** [Hol18]. **State** [DPS⁺21, GGDK20, Nar19, NT21, PSGM22, Sup16, WRB15, ASK⁺21, NPDS20, SAL20, SCP⁺20, Sir16b, Sto20]. **State-of-art** [GGDK20]. **State-of-the-Art** [DPS⁺21, SCP⁺20]. **state-sponsored** [Sto20]. **Stateless** [RRCL17]. **static** [LGTS20]. **Statistical** [KM20, ALB21, SMB22]. **statt** [Blo18]. **Status** [ATZ⁺21, AHSZ21]. **Stay** [SGF⁺17]. **steal** [Hol18, Pal18]. **stealing** [LSS14]. **steals** [Bar18]. **Stealth** [van20]. **steam** [Gon17]. **Steven** [Ano16c, SM-16]. **Stick** [KLM17]. **Still** [BSKR21, Ano18a]. **stochastic** [PCP20]. **Stock** [ZzH21, BCK⁺21, Son16b, Ün21]. **Stolen** [Cim18a, Ro13, Sou13, WREK18, HDM⁺14, Osb18a]. **stop** [LP18c, LP18d]. **Stops** [Cim18b]. **Storage** [LWL⁺22b, RV21, RBB19, SBHD17, SJB20, SV16, SPS⁺21, XAZY17, XAZY18, YW18, YLZ20a, AGK22b, BAJ20, JJ22, JGL⁺20, KRK21, LHL20, LZY22, RLQ⁺21, SMM⁺20, SJB21, SJB22, WDL⁺18, XZXP21, YCX18, YZL22, YLZ⁺20b, ZLX⁺17, ZGZ21]. **Store** [Dre17g, Dre17n, Dre17y, MHH⁺16, McM13]. **Stores** [MCS⁺21]. **Storing** [Dre17t, Ano21e]. **Story** [Kan20, Mez19, RDL⁺20, Pop15, Pop16b, Rot17]. **Strategic** [EGB18, LLWH21]. **Strategies** [DFKU20, SSZ17, GPM18, QL22]. **Strategy** [LDLS22, LLL⁺21b, Cus14b, GKKT16, KK21, LLZ⁺17, LLL⁺21a]. **Stratum** [RC17]. **Streaming** [BGM20]. **street** [Lev17, Nor17c]. **street-smart** [Lev17]. **Strengthen** [Ksh17a, Ksh17b]. **Stress** [BHMW16, Mer19]. **Stressing** [BHMW16]. **Strict** [Ler13]. **Strong** [DSW14, DSW16, KKJG⁺16, Sir16a]. **Stronger** [Per09]. **Structure** [FPD⁺21, KK20a, LMLA17, Mor17c, OKH13, CLS⁺19c, DMR19a, FD20b, KCS⁺14, LZY22, SCE21]. **structure-based** [SCE21]. **Structured** [SS17a, KMMW17]. **Structures** [Ban18, AGK22a]. **stubborn** [WLW⁺19]. **Stuck** [NQ20]. **Stuck-me-not** [NQ20]. **Student** [PCP20]. **Student-** [PCP20]. **Studies** [KPK17]. **Study** [AMGBK22, AH19, BO17, CMT⁺21, Doz18, HSY⁺21, Hut17, ISM17, JL17, KAR⁺15, LX17, MB15, WLXC17, WXH21, YNS16, Yew18, YW18, ANMM22, Bar16, BANT20, CSLD17, CAMS20, DSM⁺17, FRF⁺19, GRU22, GHJ22, KOJ⁺20, OHJ20, Son16b, UJ16, XLL⁺19, EHA22]. **Studying** [ARL19]. **stutters** [Per20]. **Stylized** [EDS15, ALB21]. **sub** [HZL⁺20, Zha19].

Subchains [BLP17, LPS20b, Riz16]. **Subject** [DCY⁺22]. **Subject-Sensitive** [DCY⁺22]. **Subnetworks** [GGS19, GGS20]. **Subscribe** [ZZJ17]. **Success** [KVL19, MCHM17, MHM17, PZZ⁺20, Sei20, ZSLY20]. **Succinct** [DFKP13]. **suitability** [BLB⁺21]. **Sukuk** [AIM19]. **Summarizing** [Dre17u]. **Summary** [TODM19]. **Summer** [HMS17]. **Super** [LCL17]. **Super-sovereign** [LCL17]. **Supervised** [CLJ⁺21, NBP⁺21, YV17]. **Supervision** [Nar19, CJW17, Fan22, WGL⁺21]. **supplies** [CAA⁺22]. **Supply** [CTM21, HSB17b, HSB17a, HSB17c, HSB17d, HSB18a, HSB18b, HSB18f, HSB18e, HSB18g, HSB18h, HSB18i, Kri19, KD20, Ksh21, Nia19, RKT19, SCZ⁺21, Wu17, XRS⁺19, XZY⁺21, Älv18, AHC⁺21, DB16, DAV20, How20, NNGV19, PCM⁺21, STN22, XZZ21]. **Supply-chain** [SCZ⁺21]. **Support** [CTM21, Gya21, HRE17, Las17, ME17, Nar19, ØJ17, DCK21, WLL⁺13]. **supported** [BAR21]. **Supporting** [BHH19, CXS⁺17, XLM⁺17, MKL⁺22]. **Surface** [ZWW⁺17]. **surge** [Hol18]. **surrounding** [FB17a]. **Surveillance** [Raz19, MTR⁺21]. **Survey** [ATZ⁺21, ASSK21, Ami16, AGT⁺22, ABC17, BVGC22, CPNX20, CELR18, DFKU20, DPS⁺21, HYL21, KL18a, LLH⁺20, LWL⁺21, QUG⁺23, SRB20, TS16, WGL⁺21, WLC⁺22b, ZZS⁺20, ZHZ⁺22, ARK20, BAJ20, DCB⁺21, DPN⁺22, DM20, DSC21, FHZ⁺19, FCH21, GAdFGMA21, LJC⁺20, MyPLK22, NPDS20, SHL⁺20, SJSY21, WLLH21, WWML21, ZLL⁺18]. **surviving** [GKJ⁺18]. **SURVIVOR** [JAK19]. **Suspected** [Cim18a, Ano18i]. **sustain** [Fai17, KH16]. **Sustainability** [Vra17, FS20, LMC18]. **Sustainable** [AKP17, AKP18, MAAAW⁺22, KDS⁺20, MNB⁺17]. **Swarm** [Raz19, GS20a]. **Swimming** [ZWW⁺17]. **Swindle** [Ito18]. **SWOT** [MM17]. **SXSW** [Vig15]. **Sybil** [ZL19, BOLL14, FWB15, FF17, OdVP20]. **Sybil-Resistant** [BOLL14, FWB15, FF17, OdVP20]. **symbiotic** [Sko19]. **synchronization** [FSY⁺19]. **Syndicate** [HM19]. **Syntax** [LS17]. **Synthetic** [LUBS18]. **System** [AB17, Alz19, Ano17a, ACC⁺17, BK17c, CBWF17, CXS⁺17, CMT⁺21, CTM22b, DFKP13, Eti19, HWCL17, JMK17, JW18, JBK⁺19, KK20a, KXSS21, KSAB⁺21, LS20, LLHW20, LZY⁺17, LHZ⁺21, Lin21, Liu16, LDY⁺22, LSH13, MY11, MCS⁺21, Mor17e, PPR⁺20, RC19, RH11b, RH11a, RH13, Sch98, SD16b, SFYB21, SW21, SL20, SLY15, So19, SCZ⁺21, SZM22, SXZ⁺21, SYXL23, TADS20, US23, Van14b, VSE21, WWQ⁺18, WCX21, WL21, WLSZ17, XAZY17, XAZY18, YW18, ZZS⁺20, ZTJ⁺21, AKA⁺22, AHSZ21, AZDF22, AC21, BK22, BMSS17, CJA⁺19, CJW17, CLS19a, CXWY21, CMR⁺21, DSN17, DTK20, DAV20, FWP21, FHZ⁺19, GRU22, Gir18, HHBS18, HLP⁺21, HSX⁺21, JZLL17, KAK20, KTM⁺21, KKT⁺22, LW16, LHL20, LYW⁺21, LGL⁺22, LHH⁺18, Nak08a, PR21, PSY21, RSH22, SCE21, STN22, SJB21, SJB22, SJ21, Six17j, TPE20, Tro14a, Tro14b, TLS⁺21, WGC19, WHA⁺20]. **system** [WLN⁺21, Wij16, YZL⁺19, YYDC21, YZL22, ZCJ⁺21, ZSM22, ZWX20a, ZZW⁺21, ZDM⁺21, ZYL22, ZWX⁺20b, ZWX⁺19a, ZWX⁺19b, ZWY⁺21]. **Systematic** [BTvdH20, KT22, OO19, SJB20, THFI21, ZHZ⁺22, AHH20, NAK⁺22, SC21, TBB21, VDVC21]. **SystemC** [CSLD17]. **Systems** [ATZ⁺21, AvM18, AGT⁺22, Bai19, BART17, BSLM20, BATB20, BLKD20, CPNX20, Coh20, CMM⁺22, EBD⁺20, FYZ⁺21, GSF⁺20, GK14, GCD16, GSWV20, Gou19, HM20, HTCW17, HTCW18, HHO⁺21, IGRS16, Kan20, KL18a, LLH⁺20, LDWS17, LX17, LSZ⁺21, Mai18, MCJ17, Mor17a, Mor17i, OR17, PSGM22, Ros11, RDL⁺20, SS17a, Shu17, SPS⁺21, Sve17, WLXC17,

WLC⁺22b, WKEM20, WDS21, WPG⁺22, Yew18, ZHZ⁺22, AMME21, AHH20, Ano21e, BAS⁺22, BJ20, BAR21, Cha85, CAMS20, DMR19b, FCH21, FD20a, GLO⁺22, GAdFGMA21, GC08, Ker18b, Kra15, Kra16a, LLH21, LCB⁺20, LJC⁺20, LLJ21, LHO⁺20, NVE⁺21, RCD⁺19, SHL⁺20, Six17i, Sko19, TYY⁺19, TBB21, URC19, WSC⁺20, YLM21, CGT⁺21, Six17i, Six17j].

T [Che18]. **T-S** [Che18]. **Table** [YLZ20a]. **Taboo** [Roi13]. **Tactics** [van20]. **Takeover** [BBM⁺18]. **takes** [Sto20]. **Taking** [KVL19]. **tale** [dS17a]. **Talk** [Gar17, Spo17, Zoh17]. **talking** [GH17]. **Talks** [McG18, BWZ17]. **tallying** [YYN⁺20]. **Tamper** [HL16, SW21]. **Tamper-Proof** [SW21]. **Tamper-Resistant** [HL16]. **Tampering** [GRKČ15]. **tangible** [BOS15]. **Tangle** [GPPB⁺21, Hal21, SM20]. **TangleCV** [RSJ21]. **Taproot** [AV22]. **targets** [Seg18]. **Tariff** [KUEE17, KUEE18, KUE17]. **task** [KOS⁺21]. **Tasks** [KSAB⁺21]. **Tax** [Int14, Nar19, WLSZ17, Lyn14]. **Taxonomy** [TT19, VRK21]. **TC** [SYH22a, SYH22b]. **TD** [HSGY20]. **TD-Root** [HSGY20]. **Teaching** [van20]. **tech** [RIMP22]. **Technical** [AAAKJ22, Gya21, JLLK23, Kan20, Ksh20, Sir16b, Spr13, TS16, Via16, YF22, EBHBL16, Liv20, MYSZ19, BP17b]. **Technique** [KUBS22, NPG⁺22, RSJ21, Riz16, WK19]. **Techniques** [AGT⁺22, OAS⁺21, OF15, RT20, SOA⁺21, AAPZ19, CXY21, Heal13, MF19, MyPLK22, VDVC21]. **Technische** [BP17b]. **Technological** [DMH18l, KYLA22, Nav17]. **Technologie** [Ale18b, DF17b, DF17a, HP17, HP18, KFR17, KFR18, TNM17, BP17b]. **Technologien** [GR17]. **Technologies** [ATD17, BT18a, CIL⁺21, CR16, ELFCFL20, EGB18, GBSAS17, Gen17, Ksh20, PP16, ROH16, SJZG19, TT19, YNS16, AR15, BLMQ19, FFL21, NBF⁺16, SCP⁺20, YSD⁺20, Ano16c, SM-16]. **Technology** [AKP17, AKP18, ACW17, AH19, AIM19, Ano19c, Ant21, AHWB20, BART17, Ber17, BK17a, BK18, BCEM15, But19, CPM17, Cus14b, Esc18, Eya17, EN19, FAC22, Fot17, Fug19, GANAHHJ17, GLD⁺18, Ger16, HSB17c, HSB18d, HSB18g, HSB18i, HTCW17, HTCW18, HHO⁺21, Hut17, JB17a, JB18a, Joh18, KLDS20, KT22, KSCD16, Koe17, KD16, KYV19, LSM17, MGDEK17, MGDEK18, NRP⁺20, Nia19, àNOE17, OOF⁺17, Øln16, ØJ17, OEO16, OEO17, RC16, RKT19, SPJ⁺17, SLS20, SK15, Sch19b, SS17a, SJB20, Smo18, SCZ⁺21, Swe16, Tre21, TBY17, VFS⁺19, Wey19, WDS21, YMRS18, Ale18b, Ano21e, ARK20, BR17, BP17b, CZ16, CSG⁺20, CXLC18, CPSGAA20, DF17b, Fan22, FA21, GGDK20, Gir18, GKA⁺21, HP17, JLX21, KK20b, KFR17, MGM⁺17, PL20, Pec17a, Pil16, PSY21, Raj18, RIMP22, RKY⁺20]. **technology** [SSL⁺19, SK18, SRA⁺22, SSV22, SYZ16, TT16, TTC16, URC20, WGL⁺21, Wat17, ZW17, ZZ16]. **TEE** [LWL⁺22a]. **telecare** [LLH21]. **Telegram** [Fir18, Smu18]. **telematico** [MS15]. **Telemedicine** [Shu17, WWZ⁺21]. **Tell** [Ber17, Pec17a]. **temporal** [QNM⁺19]. **Temporality** [Swa16]. **temporarily** [Lee13]. **Temporary** [AKWW19, DLK⁺21]. **Ten** [Mei18]. **tenant** [HZL⁺20]. **tender** [LLJ21]. **TenderMint** [Kwo14]. **Tensions** [KPW19]. **Tensor** [FYZ⁺21]. **Tensor-based** [FYZ⁺21]. **Term** [Dre17e, LJG15, YF22, GAF18, NTRK22, PASA22]. **Terminal** [ECHL16]. **Terror** [Car15]. **Tessera** [Li14a, Li14b]. **test** [ACKJ22]. **test/vaccine** [ACKJ22]. **testbed** [GHJ22]. **Testing** [BHMW16, CQLL18, WDLS17]. **Thanks** [CPM17]. **Theft** [Ano19a, AGGM16, Bra13, YWW⁺18, YWS⁺18, Ano18e, Far18a]. **Thefts** [dre14, Ano13b, Duc13]. **Their** [AMGBK22, CDD17, JSK⁺17, MLD19, Ito18, Sar21]. **Them** [ABL⁺18a, Mic14,

Hol18, Ito18, Lau11a, Nor17a, Sha17].
Theorem [Hir17, Ano18h]. **Theoretic** [JLG⁺14, LJG15, LBS⁺15, SCYP17, Tro15b].
Theories [EZR⁺22, ROH16]. **Theory** [BHM20, Doz18, Hut17, OF15, RFM⁺18, Wu19, AZR⁺20, DB16, FD20b, Ito18, WMD⁺20, YZC22]. **There** [Pop18a, VM15, Tro15a]. **these** [Cim19].
they'll [Pec17b]. **Thickness** [Lin21]. **Thickness-Based** [Lin21]. **Thieves** [Hol18, Ano18i]. **Thin** [JLX⁺19].
Thin-client [JLX⁺19]. **thing** [LP17b, LP17c, LP18b]. **Things** [Ban19, BKV22, FA21, AJA⁺22, AA20, AAC⁺19b, AKT21, Älv18, AAKJ22, AZDF22, Big20, CXC⁺20, CLH⁺20, CVM17, DGP17, GLF20, HYLY19, JCG⁺21, JB21, JCG⁺22, KTA⁺20, Ksh17a, Ksh17b, LL16, LL17a, LQYG19, LLCF21, LWZ⁺21a, Mic14, PK19, PC21, QFLM17, RKT19, RWG21, RDDB19, RS21b, Ses18, SM20, Son18, SCZ⁺21, SGDT19, Sve17, TSY⁺21, TBB21, UHK⁺21, XAZY17, XAZY18, ZW17, ZWH⁺20, ZLT⁺19, MFR⁺21].
Things-Integrated [PK19]. **Think** [EH24].
Thinking [Dre17v]. **Third** [FWB15, IKY05]. **thirst** [Far18a].
Thirteenth [Uni14]. **thousands** [Nic17].
Thread [CSLD17]. **Thread-** [CSLD17].
Threat [RS21a, ZBF22]. **threaten** [Mea19].
Threats [AMGBK22, EGB18, EN19, WHI⁺21].
Three [FYK⁺17, HLC17c, HLC19].
Three-Party [FYK⁺17, HLC17c, HLC19].
Threshold [GGN16, HSS⁺20, iK17, DS17b, G GK⁺14, JFG18, WMD⁺21].
Threshold-Optimal [GGN16].
Throughput [MPSP17, RZJ20, SS12, XLM⁺17, BF20].
ticket [Per20]. **Tickets** [Tac17]. **tie** [DMR19a]. **TIIA** [ZBF22]. **Tikiri** [BTF⁺21]. **Time** [EZ17, EZ18, GSF⁺20, HZ21, JCG17, KK17a, LLHW20, Lei16, LPSP20, RRCL17, RT20, RSW96, Swa16, WLW22, WKD22, Wör16, WWZ⁺22, XLM⁺17, BHS93, Bys19, DB16, HS91, HGDD20, IKC21, Ker18b, Koo18, Lam89, Nor17b, PR16, YTLD19, Cor19].
Time- [HZ21]. **Time-lock** [RSW96].
time-locked [YTLD19]. **Time-Series** [LPSP20]. **time-stamp** [HS91].
time-stamping [BHS93]. **Time-travel** [WWZ⁺22]. **TimeBank** [Lin21]. **Timed** [ADM14b, RSW96]. **timed-release** [RSW96]. **times** [ECA⁺20, GHJ22, GGKR21, SGK21].
Timestamp [SPB17]. **Timestamp-Free** [SPB17]. **timestamping** [MAQ99].
Timestamps [DHES16]. **Timing** [NAH16].
Tip [Hal21, KRL17]. **Tips** [MB15].
Tithonus [RC19]. **TLS** [XJY17]. **Together** [Dre17c, Pec15]. **Token** [KLZ⁺21].
Tokenization [Liu16, MZ19]. **Tokenizer** [MBF⁺20]. **Tokens** [DMH18g, Muf16, BLZ20, Ito18, LDM⁺21].
Tolerance [XZY⁺21, TYY⁺19]. **Tolerant** [Coe20b, BVCH22, BSV17, GRM22, VG20].
Tolerate [GS15b]. **Tolls** [MB15]. **too** [G.17]. **Took** [Zet13]. **Tool** [ESLB20, Kha15, LWZ⁺21b]. **Tooling** [YCP⁺21]. **Toolkit** [KMMW17]. **Tools** [vO20, MBB13b, MBB13a, Raj18, VDVC21, vO21]. **Top** [Mei18]. **Topological** [ALGK19]. **Topology** [DSBPS⁺18, NAH16].
TOR [Esc18, AABE20, BP15]. **torrent** [Bak09]. **Tourism** [Ano21c]. **Town** [ZCC⁺16]. **TPPSUPPLY** [STN22].
Traceability [But19, CMT⁺21, GCH⁺22, GDKJ22, IK19, Ksh21, KFTS17, LX17, PK19, Ano21c, Che18, FLL⁺22, XLL⁺19].
traceable [STN22, SJX⁺20]. **TraceChain** [FLL⁺22]. **Tracers** [Gre22]. **traces** [GTMP14]. **Tracing** [But19, HSJ⁺21, YP21, ZLL⁺19a]. **Tracking** [Bra13, GWX⁺21, NSNF17, RRM18, VM15, dAdSM⁺22]. **Trade** [KLDS20, SIDV14].
Trade-offs [KLDS20, SIDV14]. **Tradeoffs** [TWFO20]. **Trading**

[AAAO20, Bik16, MCHM17, MHM17, MBC⁺17b, NTRK22, NCS17, Smi18, Via16, WMG⁺21, WKD22, YF22, AKA⁺22, ALP15, Bla18, CJA⁺19, DSPSNAHJ20, DLK⁺21, GWL20, GS15a, GLW⁺20, GLY⁺21, HLP⁺21, JAK19, KMAJ21, LFX⁺20, LT17, LWCX21, MLM15, MMMV21, ML20, PW17a, Uri17, WZQ⁺17, YKJK21].

Traditional [Bai19, CMT⁺21, WLW22].

Traffic [BSB19, ESLB20, KKM14, LLH⁺20, WRB15, HZT⁺22, MISS22, PK22, QHNL21].

Traffickers [PHD⁺17]. **Trail** [RSGA⁺21].

TrailChain [GDKJ22]. **training** [DCK21, LLL⁺21c]. **Traitor** [KT15].

Transaction

[AK14, AC17, ARL19, BMTZ17, BLSD17, CPL⁺21, DW14, Dim19, Dre17d, Dre17t, GHJ21, GCD16, GGS19, HL16, HM20, Hou14b, HYP⁺22, KK17a, Leo20, LLYL19, LLL⁺21b, LZZ⁺22, MPC⁺23, MAAAW⁺22, MB15, OKH13, OAS⁺21, PP16, RAH⁺15, RJK⁺17, RS13, RMS17, SZ15, SXZ⁺21, TDW⁺22, TNJJ22, TSCT18, Van14b, WLS⁺16, XLM⁺17, YK15, Bar16, BDP⁺15, Cha85, ECA⁺20, FMR⁺19, GS20b, GHJ22, GGS20, HP17, KAK21, LLZ⁺17, LLL⁺21a, LYZ⁺21, PK22, RDDB19, SZ13, VG17, WQHX17, WQHX20, Woo14].

Transaction-Confirmation [KK17a].

Transactional [DHES16, Kad18].

Transactions

[Als23, ADMM15, ABL18b, Ape14, CZJ⁺17, CXS⁺17, CP17b, DSBPS⁺18, Dre17a, Dre17z, EH24, FNP17, FMR⁺16, GRKČ15, HBG16, HJPS16, Int14, IST19, JJFC22, KM20, LUBS18, LK17, MPC⁺23, Mic16, MFR⁺21, MBB14, Muf16, NST⁺17, NMt16, PS16, RMS17, SCAA13, TOM17, WTW⁺23, ZG15, ZGGT16, AABE20, ADMM13, Ano21a, BAPS22, BYR⁺20, BCK⁺21, BILN21, CLS⁺19c, CGR18, CEN14, DSPSHJNA18, DSPSNAHJ20, Gof19, GGKR21, KSA22, KK20b, Koo18, LLC⁺20, PSDSNAHJ19, Per22, dSR21, SMB22, WLGL19, XZXP21, YSLH17, YTLD19].

Transactive

[BLSD17, EBD⁺20, LDWS17, WDLS17].

Transaktionskosten [HP17, HP18].

Transaktionssysteme [Six17e].

Transcript [Ali15]. **Transfer** [GMH21, Pan96, PBHM21]. **transferable** [Sar21]. **Transformation** [DTM20, KMMW17, CDS⁺19].

Transformations [OZ16, ZLW19].

Transforming [Eya17]. **Transition** [RSV15]. **transmediale** [BGPW16].

Transmission [Yan21, LDLS22].

Transparency

[BKS19, Bon16b, Bre17, CM16, Ksh18b, KKM19, MPC⁺23, MG17, Ano21c, MBB⁺15].

Transparent [DGSW15, ASM19, DF17b].

transparente [DF17b, DF17a].

transportation [BAS⁺22, CJA⁺19].

TRAQR [PK21]. **Travel** [LD17, WWZ⁺22].

Traveling [Chr13]. **Treated** [Int14].

Treatment [BMTZ17]. **Tree** [CCC19, Bit09, DCK21, SCE21, ZGZ21].

tree-based [ZGZ21]. **Trees** [Coe08, Kam17, SZ13]. **Trend** [BS15, CA21].

Trends [BVGC22, Coh20, Du21, JLLK23, Lei16, MB15, TODM19, Zoh17, CSZ⁺21, JCG⁺21, PDJ22, SBA21, ALB21, Smu18].

Trials [ACV17]. **tributario** [MS15]. **Tried** [Cim18b]. **tries** [Pal18]. **trillions** [Nor17c].

Trims [Vig15]. **trotz** [PB17]. **Trouble** [Kru18]. **True** [Mez19]. **truly** [AB20].

Trump [Men19, WM19]. **Trust** [ACM17d, CCH⁺20, FB17b, HHBS18, KPW19, KGS⁺19, LSM17, OFA22, SK15, SK17, Sch19a, Smo18, Tam19, TS20, Wer18, YPFY21, AZDF22, BDP17b, Cra17, GKA⁺21, How20, KBS⁺21, LHL21, MAQ99, PHRH21, P16, PdWWS16, TLS⁺21, XJB⁺17, ZZW⁺21, DGP17, PK21].

Trustable [CMM⁺22]. **TrustChain** [OdVP20]. **Trusted** [AP20, Ano21e, BM20, EHA22, FWB15, LWL⁺22a, MZLW20, MBC⁺17b, HYWY22,

KGA⁺22, SWY⁺21, YYN⁺20, ZWS⁺20]. **TrustedBaaS** [MZLW20]. **Trustful** [AKA⁺22, Chi18]. **Trustless** [KET⁺17, Kra16b, KGS⁺19, MBF⁺20, TLS⁺21]. **Trustworthy** [AAD⁺21, KPW19, XWW17, ZHC⁺20, FY19, HSGY20, MMMV21, TGC⁺21, ZNX⁺21, ZWGC19]. **TrustZone** [GMS17]. **TrustZone-backed** [GMS17]. **Truthful** [ZLS⁺22]. **try** [Nor17a]. **Trying** [WREK18, Pop15, Pop16b]. **Tuning** [SS12]. **Turkey** [Ano18m, Ün21]. **Turning** [Rao14]. **Turnover** [Smi18]. **Tutorial** [JW16b, KAKC20, Moh17, NHM16]. **TV** [Ro13]. **Tweetchain** [BLNN17b]. **Twice** [Dre17s]. **twin** [DCK21]. **Twins** [Pop17b, QXC⁺21, Gei16]. **Twitter** [HBJB14]. **Two** [ADM14a, Gal18, GCL16, Gya21, KOS⁺21, Kha19, ML15, ML17, RS96a, RS96b, Via16, EAvM20, LZY22, Lin17, WLL21, dS17a]. **Two-Factor** [ML15, ML17]. **two-layer** [LZY22]. **Two-Party** [ADM14a, Lin17]. **two-phase** [EAvM20]. **Two-sided** [KOS⁺21]. **Two-Stage** [Gya21, WLL21]. **TxProbe** [DSBPS⁺18]. **type** [CAMS20]. **types** [TML⁺22]. **Typestate** [COE⁺20a, CAMS20]. **Tyranny** [CXG⁺18].

U.S. [Int14]. **UAE** [ACM17a, ACM17b, ACM17d]. **UAV** [CSG⁺20, MISS22]. **UAV-based** [MISS22]. **UAVs** [KKK⁺21]. **uBaaS** [LXL⁺19]. **UC** [CDD17]. **UC-Secure** [CDD17]. **Ulbricht** [Gre13]. **Ultimate** [Smo18, Mil15]. **Ultra** [SYK17]. **Ultra-Dense** [SYK17]. **Ultrasound** [Shu17]. **un’analisi** [Cap15]. **Unauthorized** [Ker18b]. **Unchain** [PZZ⁺20]. **Unchaining** [Kla19]. **uncle** [WLW⁺19]. **Uncoded** [ZWL22]. **Unconfirmed** [WTW⁺23]. **uncovered** [Pal18]. **Uncovering** [MMR16, PHD⁺17]. **Under-price** [SOA⁺21]. **underground** [UJ16]. **Underlying** [SZ17, KGA⁺22, SZ18]. **understand** [DMH18b]. **Understanding** [Bog17, CLZ⁺20, Dre17w, Fra14, HSY⁺21, HWW⁺20, Lew15, NST⁺17, PP16, dKW17]. **Understandings** [MSC15]. **underworld** [Ano14a]. **Unenumerated** [Sza08]. **Unexpected** [Kuz19b, Kuz19a]. **unextractability** [HZ20]. **Unfair** [CGJ⁺17]. **unified** [LXL⁺19, Hut17]. **Uniform** [Ger16]. **Union** [Gim16]. **Unit** [XLL⁺21]. **Unit-assisted** [XLL⁺21]. **United** [Uni14]. **Universal** [OO91, ZWX20a]. **Universally** [Dim20]. **Universe** [Wal18, Wal19]. **University** [CRS83]. **Unknown** [NPS⁺17]. **Unleashed** [LPSZ18]. **unlikely** [Cim19]. **Unlimited** [ZP17a]. **unmanned** [LGL⁺22, WLN⁺21]. **Unofficial** [Joh19]. **Unpacking** [DMH18m]. **Unraveling** [CXS⁺17]. **Unregulated** [ACM15, Ali15]. **unseen** [Far18a]. **Unsupervised** [MMT16a]. **until** [Ito18]. **Untraceable** [Cha81, Cha83]. **Untrusted** [WXR⁺16, SAL20, WLL⁺13]. **unusual** [DMR17a]. **Unverifiable** [KSAB⁺21]. **update** [Ano18l, HYLY19, LL16, LL17a, YL20b]. **Updates** [BFS17, BFS18, SDK⁺17, ZLT⁺19]. **UpHaaR** [SPB⁺22]. **Upheaval** [Gev16]. **Urban** [JMK17]. **Urgent** [Ano18l]. **Ursa** [RZJ20]. **USA** [IKY05, Jue04, JLX21, Ün21]. **Usability** [KRL17, EBSC15]. **usable** [CAMS20]. **Usage** [KSCD16, AZR⁺20]. **USD** [HG15]. **Use** [BSB16, BK14, But19, CDZ⁺20, FRSU17, Hut17, IM16, KPP⁺20, KCD17, Koe17, KB14, KMB15, LSO⁺15, LD17, Nar19, PPW⁺15, VBC⁺17, WBK⁺17, WXH21, Zam19, BLMQ19, Fai19, FNP17, KFR17, Kug18, Raj18, SG21, DF17b, SG19]. **used** [DSN17, LP18c, LP18d]. **Useful** [KSAB⁺21]. **useless** [Ano18a]. **User** [AKR⁺13, ACC⁺17, BBBB15, CR17, Dre17k, GZH⁺14, KJGW17, NTKS17, Riz16, SVL17, PCC22, dAdSM⁺22]. **User-Centric** [ACC⁺17]. **Users**

[Cim18b, DS15, GCL16, GDTP17, HBJB14, JMM14, JSKV16, MMR16, Nak18, RRM18, SK17, Son18, XCG⁺17, AABE20, Ano13b, Cim19, DMR17a, DMR18, DMR19a, Far18b, MBB⁺15, Pal18, Seg18]. **Uses** [BB14, MCF20]. **Ushare** [CR17]. **Using** [AK17, AS18, AIM19, AAJ21, Ale18a, Alz19, Ano19b, AC17, AGGM16, Ban18, BT18a, BD19, Bon16b, CQLL18, CCC19, Coh20, CMM⁺22, CPMM21, CXW⁺21, DSBPS⁺18, DH17, Dre17x, Dre17y, DDX17, GPPB⁺21, GG17, HS16c, HSJ⁺21, Hut17, JJFC22, JLLK23, KPK17, KMMW17, KRL17, KT15, KKM14, LDWS17, LLW17, LSM17, Liu16, LGGB⁺21, MGS22, MCS⁺21, Mis17, Moh19, MGDEK17, MGDEK18, NT21, àNOE17, NVWF14, OAS⁺21, Øln16, Ort16, OAB⁺17, PK19, PMMP19, RST11, RRM18, Rin18, RSGSHGCG21, RDDL17, SD16a, SYK17, Shu17, Shu19, SCAA13, SCZ⁺21, SL17, SDK⁺17, SS19, VM15, WHI⁺21, WDLL19, WRB15, WXR⁺16, WA15b, WK19, YNS16, YK15, YF22, ZW17, ZC16, ZZJ17, dKW17, ATZ⁺21, AKA⁺22, AMLH18, AB20, AHC⁺21, Ano21d, AGK22b, AV22, Bee16, BJ20, Ber13, BILN21, Cae15, CSG⁺20]. **using** [CAA⁺22, CJW17, Che18, CLS19b, CLS20, CS15, DAT21, DRS22, DGP20, DHH⁺22, EAvM20, FA21, GGJ22, Gir18, GKA⁺21, HYWY22, HZLH19, JJ22, KW20, MF19, MISS22, McC18, MTR⁺21, MLYL20, MGE20, MMMV21, NVE⁺21, PR21, PHH⁺20, PGS⁺21, PK21, PC21, RT20, RDDB19, RS21b, SKA⁺20, SI16, SZdLZ22, SMB22, SMHK21, SRA⁺22, SSV22, Son16b, TNJJ22, TS20, VD21, WHJ17, WHJ20, WZW⁺20, WA15a, YV17, YZC22, ZLJW20]. **usury** [TF16]. **UTAUT** [Hut17]. **uth** [CHL19]. **Utility** [KMMW17, Ker18b, TWFO20]. **utilization** [ZFW24]. **Utilizing** [KAS⁺22, PSHW20]. **UTXO** [CW20, WCZ21]. **UTXO-based** [WCZ21].

v0.0.2 [Cas12]. **Vaccine** [CXW⁺21, ACKJ22]. **vague** [LX21]. **Validating** [AA20]. **Validation** [TADS20, VG17]. **validator** [Sal22]. **Validity** [ZP17a]. **valuable** [CSG⁺18]. **Valuation** [Ber18, Nia19]. **Value** [McL13, MBC⁺17b, Mor17e, NST⁺17, PMMP19, WLSZ17, WKEM20, CF15, DF17b, Fan22, FB17a, LX21, Ün21, Van14a]. **Value-Added** [WLSZ17]. **values** [SG21]. **ValueShuffle** [RMS17]. **VANET** [KBS⁺21]. **VANETs** [LHL21, TS20]. **VAR** [Ünv21]. **Variable** [GKL17]. **Variation** [WPXZ20]. **Variational** [Gya21]. **Variations** [SJZG19]. **Varying** [HZ21]. **vault** [Gir18]. **VEC** [ZDL17b, ZDL17a]. **VECM** [Son16b]. **Vector** [Gya21, DCK21]. **Vehicle** [vdHEM⁺17, JAK19, KGA⁺22, KH17, KUE17, LGL⁺22, SK18]. **vehicle-to-grid** [JAK19]. **Vehicle-to-x** [vdHEM⁺17]. **Vehicles** [DAAY22, DRS22, KMAJ21, KUBS22, RSJ21, Shi19, EFFM21, KTCI21, XLL⁺21, XBX⁺22, ZLS⁺22]. **Vehicular** [JCG17, LMH16, RLS⁺21, YMHY21, BAS⁺22, LCB⁺20, SYCC21]. **VeidBlock** [AK17]. **Velocity** [JB18b]. **Venezuela** [Ano17e, Ano18m, Joh19, Osb18b]. **Verbrauchers** [Blo18]. **Veriblock** [SS20]. **verifiability** [CLXW22, ZWX20a]. **Verifiable** [AK17, Dim20, SAL20, SCAA13, WPG⁺22, dCdCM14, vdHKZ14, CTGJ22, PHRH21, PR21, YCX18, YYN⁺20]. **Verification** [BM20, BK22, BLMZ20, BDLF⁺16, Coe08, ISM17, Kue18, LMWL17, LLYL19, SY22, Son16a, AHSZ21, CFM⁺22, FMR⁺19, HYLY19, HS19b, LWQ⁺21, LZZ⁺20, CFvdPS15, NYZ⁺20, PSHW20, RLS⁺21, WLN⁺21, YZL22, YLZ⁺20b]. **Verified** [ACC⁺17, KOJ⁺20]. **verifier** [WHJ17, WHJ20]. **Verify** [But13a]. **Verifying** [ABBS18, BLMZ22, Dre17z]. **versatile** [ZWX⁺19b]. **Version** [BLBS17, Wol18]. **Versions** [Abr18]. **VerSum** [vdHKZ14]. **Versus**

[Bai19, Ksh18b, Ksh20]. **Vertical** [GSF⁺20]. **vertrouwen** [PdWWS16]. **Via** [LUBS18, Spo17, AJA⁺22, ADA17, ADM14a, BLMR14, CZJ⁺17, CLZ⁺20, DCK21, DN93, GGK⁺14, HM20, IK19, KMOD17, KKJG⁺16, Lar13, LK17, LTBY20, MBT19, Per09, RV21, TD17b, TOM17, YML⁺22, YZL22]. **viable** [Sha18]. **VIBES** [SZJ17]. **Vicious** [DDPS22]. **victims** [Edw15]. **Video** [BGM20, KTM⁺21]. **View** [Pop18b, WCY19]. **viewpoint** [CPSGAA20]. **views** [YCM20]. **Vindication** [Pop17b]. **Violable** [SC20]. **Violation** [ALP15]. **Virgin** [But19]. **Virtual** [Ano12, Ano18d, Ano18j, Ber13, BOS15, Gei16, GC08, Hir17, Int14, Kra16b, Lyn14, Mul14b, Pop18a, Sch14a, VM15, YLZ20a, AF16, Bra15a, CRdK16, HSC21, LL18, LWCX21, San14b, San14a, WLL⁺13, Dus14]. **virtuali** [AF16]. **Virtualization** [CQLL18]. **virtuelle** [San14b, San14a]. **Vision** [Big20, DAAY22]. **Visual** [BS17a, KFB12, TSH12]. **Visualization** [SXYL23, THFI21, YSZ⁺19, BDP⁺15, GHG⁺21]. **Visualized** [Bog17]. **VMware** [HMS17]. **Voatz** [JBK⁺19]. **Volatile** [SK14]. **Volatility** [BSKR21, Kat17, Ort16, YK15, ZzH21, Ara21, PCP20, SKG22, VX17]. **Volume** [Kha19, ZWLS18, SKG22]. **volumes** [MLM15]. **Volunteer** [AAJ21]. **Vote** [ZC16, LX21]. **Voter** [MG17]. **VOTING** [CMR⁺16, JRB⁺17, BMSS17, BMSS19, Dim20, HTCW17, HTCW18, HHO⁺21, JBK⁺19, KAK21, KV18, MG17, HSC21, KAK20, Mea19, PR21, YYN⁺20, ZWX20a, ZLJW20]. **Voting-system** [BMSS17]. **VQL** [WPG⁺22]. **VR** [Per20]. **vs** [GP17a, Vuk16]. **Vulnerabilities** [Ami21, CPNX20, SPZ⁺20]. **Vulnerability** [EH24, Gou19, BEM⁺20, Fir18, YML⁺22]. **Vulnerable** [ES14b, VTL17, ES18, YML⁺22]. **Vulpedia** [YML⁺22]. **WAHC** [BBMS14, BCJR15, CSN14, CMR⁺16, JRB⁺17]. **Währung** [San14a, Ker14]. **Wall** [Nor17c]. **Wallet** [BDWW14, DNY17, GGN16, GMS17, JKKX16, Per22, SXYL23, WGL19, Ano14a, CJW17, DS17b, FTS⁺20, Goo18, Nic17, Pal18, Sch13, UJ16, WLGL19]. **Wallet-Assisted** [DNY17]. **Wallets** [Chi13, GAK17, GS15b, VBC⁺17, DSN17, GGK⁺14, KBS17, VSM⁺19]. **Walras** [DB16]. **WannaCry** [Ano18k, RSR17]. **Want** [MHH⁺16, Fin17b, VSM⁺19]. **wants** [Nor17a, Per22]. **Warehouse** [Liu19]. **Water** [Ker18b]. **Watermarking** [NPG⁺22]. **Wave** [Tre21]. **Wavelet** [DVRM16, PASA22]. **Way** [Bhe17b, MAAN19, SBA21]. **WBAN** [SJ21]. **WBAN-IoT** [SJ21]. **WBANs** [WHA⁺20]. **Weak** [RRM18, WYZ⁺20]. **Wealth** [RS14, LP18c, LP18d]. **Wearable** [BCJR15]. **Weaver** [DHES16, McG18]. **web** [UJ16, ZSM22, DGP17, MLM15, MLM16, WB17]. **Web3** [HYZ⁺24]. **WeChat** [ZLX⁺17]. **Weg** [FRSU17, PdWWS16]. **weighted** [DS17b, XWY⁺21]. **Weights** [WK19]. **Wertschöpfungskette** [DF17a, DF17b]. **West** [Jue04]. **WETSEB** [TODM19]. **Whale** [LK17]. **Where** [BBM⁺18, HSB17a, HSB18e, RBB19]. **which** [KK20b, Pal18]. **while** [Nor17a]. **whitepapers** [LTBY20]. **Who** [AABM17, BB14, Nak18, Smo18, Ste17]. **Wi** [SI16]. **Wi-Fi** [SI16]. **Wie** [RE18, KFR17, KFR18]. **WiFi** [BLMQ19]. **Wiki** [Ano17c]. **Wild** [LSO⁺15]. **Wildlife** [FHS⁺17]. **will** [Cim19, Fai17, Fai19, Far18b, Hol18, Ito18, Nor17a, Pec17a, Sto20]. **willingness** [SG21]. **Window** [HZ21, RRF22]. **Windows** [Tun18]. **Wing** [Lut17]. **Wings** [BS17b, BS18]. **Winklevoss** [Pop17b]. **Wireless** [BL22, HCB⁺22, SYK17, SDK⁺17, KDS⁺20, LCSR21, LCZL21, NAR⁺22b, WZW⁺20]. **Wisdom** [Mue18]. **Withholding**

[BS16, BRS17, KKS⁺17d, KKS⁺17c, SPB17, TSL⁺17, GPM18, HS19a, HS20, WdLY⁺19, ZLL⁺18]. **Within** [HQ15, Älv18, And18, Gof19, KKK⁺21, KAK21]. **Without** [CKWN16, FWB15, Cha85, Hal18, Kwo14, Möl13, WHW22, YYN⁺20]. **Witness** [Bhe17b, Pou20]. **Wolfram** [Wol18]. **Women** [Shu17]. **Wonderland** [Zet13]. **Work** [AMEF21, Ast16, Bac03, BBH⁺13, BLMR14, BK17b, CIL⁺21, Coe08, GKW⁺16, HM20, HMS17, KSAB⁺21, Lar13, MGS22, MJS⁺14, ÖY17, QXC⁺21, SLY15, Tro15a, Vuk16, Ano17d, DMH18b, Dry14, Kin13, LC04, Pec17b, RE18, Shi16, Tro14a, Tro14b, Tro15b, JB21]. **Work-in-progress** [ÖY17]. **workers** [KOM⁺20]. **Workings** [FNP17, Lev17]. **works** [BWZ17, RE18, Six17h]. **Workshop** [ACM17b, ACM17d, SDT17, TODM19, Spo17]. **Workshops** [BBMS14, CSN14, CMR⁺16, GANAHHJ17, JRB⁺17, BCJR15]. **World** [Bec18, CGJ⁺17, Dre17j, ECHL16, Hul17, NCS17, OO19, Pav18, Swa15a, Cae15, Fai17, GKJ⁺20, Kel15, KH16, Pec17b, Pec17a, TT16, TTC16]. **Worlds** [Kra16b]. **Worm** [SLG⁺21]. **worth** [Gal18]. **writings** [Cha14]. **WSN** [NAR22a]. **WSNs** [GKA⁺21]. **WTSC** [JRB⁺17].

x [vdHEM⁺17, WSC⁺20]. **X-repute** [WSC⁺20]. **XR** [OFA22]. **XRP** [Ale18b, Ale18b]. **XRP-Coin** [Ale18b].

year [Per20]. **Years** [LF16]. **Yielding** [TOM17]. **York** [IKY05].

Z [MG16, ZLL⁺19b]. **Z-Channel** [ZLL⁺19b]. **Z14** [GADO17, MDN⁺18]. **Zahlungsmittel** [SKG13, Six17c]. **Zcash** [AGK22a]. **Zero** [CGGN17, CPMM21, Fir18, MB17a, PSDSNAHJ19, XCZ⁺22, YL20a]. **Zero-Collateral** [MB17a]. **zero-confirmation** [PSDSNAHJ19]. **Zero-day** [Fir18]. **Zero-Knowledge** [CGGN17, XCZ⁺22]. **zero-**

knowledge-proof-based [YL20a]. **ZeroBlock** [SPB17]. **Zerocash** [BSCG⁺14, SCG⁺14, ZLL⁺19b]. **Zerocoin** [DFKP13, MGGR13]. **zkrcpChain** [XCZ⁺22]. **ZombieCoin** [AMLH15, AMLH18]. **Zukunft** [SKG13]. **Zum** [LPW17b, LPW17a, LPW18, FRSU17]. **zur** [Six17a].

References

Altshuler:2013:SPS

[A⁺13]

Yaniv Altshuler et al., editors. *Security and privacy in social networks*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 1-4614-4138-2. vi + 253 pp. LCCN HM742 .S43 2013. URL <http://www.loc.gov/catdir/enhancements/fy1306/2012943943-d.html>; <http://www.loc.gov/catdir/enhancements/fy1306/2012943943-t.html>

AlSuwaidan:2020:VAH

[AA20]

Lulwah AlSuwaidan and Nuha Almegren. Validating the adoption of heterogeneous Internet of Things with blockchain. *Future Internet*, 12(6):107, June 21, 2020. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/6/107>.

Alzoubi:2022:ITB

[AAAKJ22]

Yehia Ibrahim Alzoubi, Ahmad Al-Ahmad, Hasan Kahtan, and Ashraf Jara-dat. Internet of Things

- and blockchain integration: Security, privacy, technical, and design challenges. *Future Internet*, 14(7):216, July 21, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/7/216>.
- [AAAAO20] F. S. Ali, M. Aloqaily, O. Alfandi, and O. Ozkasap. Cyberphysical blockchain-enabled peer-to-peer energy trading. *Computer*, 53(9):56–65, 2020. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [AABE20] Husam Al Jawaheri, Mashael Al Sabah, Yazan Boshmaf, and Aiman Erbad. Deanonymizing Tor hidden service users through Bitcoin transactions analysis. *Computers & Security*, 89(??):Article 101684, February 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404818309908>.
- [AABM17] Sarah Azouvi, Mustafa Al-Bassam, and Sarah Meiklejohn. Who am i? Secure identity registration on distributed ledgers. In *Data Privacy Management, Cryptocurrencies and Blockchain Technology*, Lecture Notes in Computer Science, pages 373–389. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_21.
- [AAC⁺19a] Gauhar Ali, Naveed Ahmad, Yue Cao, Qazi Ejaz Ali, Fazal Azim, and Haitham Cruickshank. BCOn: Blockchain based access CONtrol across multiple conflict of interest domains. *Journal of Network and Computer Applications*, 147(??):??, December 1, 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519303005>.
- [AAC⁺19b] Gauhar Ali, Naveed Ahmad, Yue Cao, Muhammad Asif, Haitham Cruickshank, and Qazi Ejaz Ali. Blockchain based permission delegation and access control in Internet of Things (BACI). *Computers & Security*, 86(??):318–334, September 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (elec-

- tronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404819301208>■
- Ardagna:2021:TDT**
- [AAD⁺21] Claudio A. Ardagna, Rasool Asal, Ernesto Damiani, Nabil El Ioini, Mehdi Elahi, and Claus Pahl. From trustworthy data to trustworthy IoT: a data collection methodology based on blockchain. *ACM Transactions on Cyber-Physical Systems (TCPS)*, 5(1):11:1–11:26, January 2021. CODEN ???? ISSN 2378-962X (print), 2378-9638 (electronic). URL <https://dl.acm.org/doi/10.1145/3418686>■
- Amiri:2019:CCA**
- [AAE19] Mohammad Javad Amiri, Divyakant Agrawal, and Amr El Abbadi. CAPER: a cross-application permissioned blockchain. *Proceedings of the VLDB Endowment*, 12(11):1385–1398, July 2019. CODEN ???? ISSN 2150-8097.
- Abdelraheem:2017:SER**
- [AAG17] Mohamed Ahmed Abdelraheem, Tobias Andersson, and Christian Gehrman. Searchable encrypted relational databases: Risks and countermeasures. In [AAJ21] Garcia-Alfaro et al. [GANAHHJ17], pages 70–85. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_5.
- Ansah:2019:BPB**
- Albert Kofi Kwansah Ansah, Daniel Adu-Gyamfi, and Stephen Anokye. BiSign: pairing-based anonymity in bitcoin cryptocurrency. *Int. J. Inf. Priv. Secur. Integr.*, 4(2):115–133, 2019. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/ijipsi/ijipsi4.html#AnsahAA19>■
- Adjei-Arthur:2022:BAC**
- Bonsu Adjei-Arthur, Jianbin Gao, Qi Xia, Eliezer da Silva Tavares, Hu Xia, Sandro Amofa, and Yu Wang. A blockchain-adaptive contractual approach for multi-contracting organizational entities. *Future Generation Computer Systems*, 132(?): 93–107, July 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000462>■
- AlRidhawi:2021:IBM**
- Ismaeel Al Ridhawi, Moayad Aloqaily, and Yaser Jararweh. An incentive-based mechanism for volunteer computing using blockchain.■

ACM Transactions on Internet Technology (TOIT), 21(4):87:1–87:22, July 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3419104>.

Atsalakis:2019:BPF

- [AAPZ19] George S. Atsalakis, Ioanna G. Atsalaki, Fotios Pasiouras, and Constantin Zopounidis. Bitcoin price forecasting with neuro-fuzzy techniques. *European Journal of Operational Research*, 276(2):770–780, 2019. CODEN EJORDT. ISSN ???? URL <https://dblp.org/db/journals/eor/eor276.html#AtsalakisAPZ19>.

Al-Bassam:2017:SSC

- [AB17] Mustafa Al-Bassam. SCPKI: A smart contract-based PKI and identity system. In *Proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts*, BCC '17, pages 35–40. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4974-9. URL <http://doi.acm.org/10.1145/3055518.3055530>.

Alzahrani:2020:NPA

- [AB20] Naif Alzahrani and Nirupama Bulusu. A new product anti-counterfeiting blockchain using a truly decentralized dynamic consensus protocol. *Concurrency*

and Computation: Practice and Experience, 32(12):e5232:1–e5232:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

AlOmar:2019:PFP

Abdullah Al Omar, Md Zakirul Alam Bhuiyan, Anirban Basu, Shinsaku Kiyomoto, and Mohammad Shahriar Rahman. Privacy-friendly platform for healthcare data in cloud based on blockchain environment. *Future Generation Computer Systems*, 95(??):511–521, June 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18314201>.

Amani:2018:TVE

Sidney Amani, Myriam Bégel, Maksym Bortin, and Mark Staples. Towards verifying Ethereum smart contract bytecode in Isabelle/HOL. In *Proceedings of the 7th ACM SIGPLAN International Conference on Certified Programs and Proofs*, CPP 2018, pages 66–77. ACM Press, New York, NY 10036, USA, 2018. ISBN 1-4503-5586-2. URL <http://doi.acm.org/10.1145/3167084>.

- [ABC17] Nicola Atzei, Massimo Bartoletti, and Tiziana Cimoli. A survey of attacks on Ethereum smart contracts (SoK). In *Principles of Security and Trust*, pages 164–186. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-662-54455-5. URL http://link.springer.com/chapter/10.1007/978-3-662-54455-6_8. **Atzei:2017:SAE**
- [Abe18] Robert Abel. Hacked cryptocurrency exchange to reimburse customers after largest heist in history. Web story., January 29, 2018. URL <https://www.scmagazine.com/tokyo-based-cryptocurrency-exchange-coincheck-sunday-told-customers-it-would-be-repaying-about-90-percent-of-stolen-funds/article/740219/>. **Abel:2018:HCE**
- [ABF⁺16] Thomas Allan, Billy Bob Brumley, Katrina Falkner, Joop van de Pol, and Yuval Yarom. Amplifying side channels through performance degradation. In *Proceedings of the 32Nd Annual Conference on Computer Security Applications*, ACSAC '16, pages 422–435. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4771-1. **Allan:2016:ASC**
- [ABL⁺18a] Divesh Aggarwal, Gavin Brennen, Troy Lee, Miklos Santha, and Marco Tomamichel. Quantum attacks on Bitcoin, and how to protect against them. *Ledger*, 3(??): ??, 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/127>. **Aggarwal:2018:QAB**
- [ABL18b] Leonardo Aniello, Roberto Baldoni, and Federico Lombardi. A blockchain-based solution for enabling log-based resolution of disputes in multi-party transactions. In *Proceedings of 5th International Conference in Software Engineering for Defence Applications*, Advances in Intelligent Systems and Computing, pages 53–58. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-70578-1_6. **Aniello:2018:BBS**
- [Abr16] Michael Abramowicz. Autonocoin: A proof-of-belief cryptocurrency. *Ledger*, 1 **Abramowicz:2016:APB**

- (??):119–133, 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/37>.
- Achenbach:2017:BIR**
- [ABR17] Dirk Achenbach, Ingmar Baumgart, and Jochen Rill. [AC19] Die Blockchain im Rampenlicht. (German) [The blockchain in the spotlight]. *Datenschutz und Datensicherheit — DuD*, 41(11):673–677, October 2017. CODEN 2017 ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0856-2>.
- Abrams:2018:OBB**
- [Abr18] Lawrence Abrams. Opera blocks in-browser CryptoCurrency mining in new mobile browser versions. Web blog., January 22, 2018. URL <https://www.bleepingcomputer.com/news/security/opera-blocks-in-browser-cryptocurrency-mining-in-new-mobile-browser-versions/>. [AC21]
- Awan:2017:BTA**
- [AC17] Malik Khurram Awan and Agostino Cortesi. Blockchain transaction analysis using dominant sets. In *Computer Information Systems and Industrial Management*, pages 229–239. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-59105-6_20.
- Ak:2019:BPC**
- Elif Ak and Berk Canberk. BCDN: a proof of concept model for blockchain-aided CDN orchestration and routing. *Computer Networks (Amsterdam, Netherlands: 1999)*, 161(??):162–171, October 9, 2019. CODEN 2017 ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128618313549>.
- An:2021:EPP**
- Haoyang An and Jiageng Chen. ElearnChain: a privacy-preserving consortium blockchain system for e-learning educational records. *Journal of Information Security and Applications (JISA)*, 63(??):??, December 2021. CODEN 2017 ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621002088>.
- Aggarwal:2019:BSC**
- Shubhani Aggarwal, Rajat Chaudhary, Gagangeet Singh Aujla, Neeraj Kumar, Kim-Kwang Raymond Choo, and Albert Y. Zomaya.

- Blockchain for smart communities: Applications challenges and opportunities. *Journal of Network and Computer Applications*, 144(??):13–48, October 15, 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519302231>. **Ali:2015:BP**Ua
- Syed Taha Ali, Dylan Clarke, and Patrick McCorry. Bitcoin: Perils of an unregulated global P2P currency. In *Security Protocols XXIII*, pages 283–293. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-26096-0. URL http://link.springer.com/chapter/10.1007/978-3-319-26096-9_29. **ACM:2017:ACP**
- ACM, editor. *ASIA CCS’17: proceedings of the 2017 ACM Asia Conference on Computer and Communications Security: April 2–6, 2017, Abu Dhabi, UAE*. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4944-7. LCCN ????. URL <http://dl.acm.org/citation.cfm?id=3052973>. **ACM:2017:BPA**
- ACM, editor. *BCC’17: proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts: April 2, 2017, Abu Dhabi, UAE*. ACM Press, New York, NY 10036, 52(4):841–867, April 2022. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- [ACC⁺17] Daniel Augot, Hervé Chabanne, Thomas Chenevier, William George, and Laurent Lambert. A user-centric system for verified identities on the Bitcoin blockchain. In *Data Privacy Management, Cryptocurrencies and Blockchain Technology*, Lecture Notes in Computer Science, pages 390–407. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-67816-7. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_22. **Augot:2017:UCS**
- [ACM17a] Daniel Augot, Hervé Chabanne, Thomas Chenevier, William George, and Laurent Lambert. A user-centric system for verified identities on the Bitcoin blockchain. In *Data Privacy Management, Cryptocurrencies and Blockchain Technology*, Lecture Notes in Computer Science, pages 390–407. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-67816-7. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_22. **Abid:2022:NBB**
- [ACKJ22] Amal Abid, Saoussen Cheikhrouhou, Slim Kallel, and Mohamed Jmaiel. Novid-Chain: Blockchain-based privacy-preserving platform for COVID-19 test/vaccine certificates. *Software—Practice and Experience*, 52(4):841–867, April 2022. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- [ACM17b] Amal Abid, Saoussen Cheikhrouhou, Slim Kallel, and Mohamed Jmaiel. Novid-Chain: Blockchain-based privacy-preserving platform for COVID-19 test/vaccine certificates. *Software—Practice and Experience*, 52(4):841–867, April 2022. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).

- USA, 2017. ISBN 1-4503-4974-9. URL <http://dl.acm.org/citation.cfm?id=3055518>.
- [ACM17c] **ACM:2017:EPI** [ACW17]
ACM, editor. *eGose '17: Proceedings of the International Conference on Electronic Governance and Open Society: Challenges in Eurasia, St. Petersburg, Russia*. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5412-2.
- [ACM17d] **ACM:2017:IPA**
ACM, editor. *IoTPTS'17: proceedings of the 3rd ACM International Workshop on IoT Privacy, Trust, and Security: April 2, 2017, Abu Dhabi, UAE*. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4969-2. URL <http://dl.acm.org/citation.cfm?id=3055245>.
- [ACV17] **Angeletti:2017:PPD**
Fabio Angeletti, Ioannis Chatzigiannakis, and Andrea Vitaletti. Privacy preserving data management in recruiting participants for digital clinical trials. In *Proceedings of the First International Workshop on Human-centered Sensing, Networking, and Systems, HumanSys'17*, pages 7–12. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5480-7. URL <http://doi.acm.org/10.1145/3144730.3144733>.
- Akoka:2017:MET**
Jacky Akoka and Isabelle Comyn-Wattiau. A method for emerging technology evaluation. Application to blockchain and smart data discovery. In *Conceptual Modeling Perspectives*, pages 247–258. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-67271-1_7_17.
- Ali:2017:IDP**
Muhammad Salek Ali, Koustabh Dolui, and Fabio Antonelli. IoT data privacy via blockchains and IPFS. In *Proceedings of the Seventh International Conference on the Internet of Things, IoT '17*, pages 14:1–14:7. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5318-5. URL <http://doi.acm.org/10.1145/3131542.3131563>.
- Andrychowicz:2014:FTP**
Marcin Andrychowicz, Stefan Dziembowski, and Daniel Malinowski Łukasz Mazurek. Fair two-party computations via Bitcoin deposits. In Christin and Safavi-Naini [CSN14],
- [ADA17] **ADA:2017:ADA**
ACM, editor. *ADA '17: Proceedings of the 2017 ACM SIGPLAN Conference on Programming Language Design and Implementation*. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5480-7. URL <http://dl.acm.org/citation.cfm?id=3055518>.
- [ADM14a] **ADM:2014:ADM**
ACM, editor. *ADM '14: Proceedings of the 2014 ACM SIGPLAN Conference on Programming Language Design and Implementation*. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-5480-7. URL <http://dl.acm.org/citation.cfm?id=3055518>.

pages 105–121. ISBN 3-662-44774-6 (paperback). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_8.

Andrychowicz:2014:MBC

[ADM14b]

Marcin Andrychowicz, Stefan Dziembowski, and Daniel Malinowski Łukasz Mazurek. Modeling Bitcoin contracts by timed automata. In *Formal Modeling and Analysis of Timed Systems*, pages 7–22. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-10512-4 (paperback). URL http://link.springer.com/chapter/10.1007/978-3-319-10512-3_2.

Andrychowicz:2013:HDM

[ADMM13]

Marcin Andrychowicz, Stefan Dziembowski, Daniel Malinowski, and Łukasz Mazurek. How to deal with malleability of Bitcoin transactions. *CoRR*, ??(??):??, ??? 2013. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1312.3230>; <https://dblp.org/db/journals/corr/corr1312.html#AndrychowiczDMM13>

Andrychowicz:2014:SMC

[ADMM14]

M. Andrychowicz, S. Dziembowski, D. Malinowski, and

L. Mazurek. Secure multiparty computations on Bitcoin. In *Proceedings of the 35th IEEE Symposium on Security and Privacy*, 18–21 May 2014, pages 443–458. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2014. ISSN 1081-6011 (print), 2375-1207 (electronic).

Andrychowicz:2015:MBT

[ADMM15]

Marcin Andrychowicz, Stefan Dziembowski, Daniel Malinowski, and Łukasz Mazurek. On the malleability of Bitcoin transactions. In Brenner et al. [BCJR15], pages 1–18. ISBN 3-662-48050-6 (paperback), 3-662-48051-4 (e-book). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_1.

Andrychowicz:2016:SMC

[ADMM16]

Marcin Andrychowicz, Stefan Dziembowski, Daniel Malinowski, and Łukasz Mazurek. Secure multiparty computations on Bitcoin. *Communications of the ACM*, 59(4):76–84, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2016/4/200175/fulltext>.

- [ADQH22] Jacques Bou Abdo, Shuvalaxmi Dass, Basheer Qolomany, and Liaquat Hossain. Evolutionary random graph for bitcoin overlay and blockchain mining networks. *CoRR*, abs/2206.09011(??):??, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/corr/corr2206.html#abs-2206-09011>.
- [ADZ23] Carol Alexander, Jun Deng, and Bin Zou. Hedging with automatic liquidation and leverage selection on bitcoin futures. *European Journal of Operational Research*, 306(1):478–493, ??? 2023. CODEN EJORDT. ISSN ??? URL <https://dblp.org/db/journals/eor/eor306.html#AlexanderDZ23>.
- [AF16] Massimo Amato and Luca Fantacci. *Per un pugno di Bitcoin: rischi e opportunità delle monete virtuali. (Italian) [For a handful of Bitcoins: risks and opportunities of virtual currency]*. Itinerari. Egea, Università Bocconi editore, Milano, Italy, 2016. ISBN 88-8350-229-9. viii + 190 pp. LCCN HG1710 .P47 2016. 16.50 EUR. URL [http://www.loc.gov/catdir/](http://www.loc.gov/catdir/toc/casalini15/3022729.pdf)
- [AFMdM14] Giuseppe Ateniese, Antonio Faonio, Bernardo Magri, and Breno de Medeiros. Certified Bitcoins. In *Applied cryptography and network security*, volume 8479 of *Lecture Notes in Computer Science*, pages 80–96. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014.
- [AGGM16] Leonid Azriel, Ran Ginosar, Shay Gueron, and Avi Mendelson. Using scan side channel for detecting IP theft. In *Proceedings of the Hardware and Architectural Support for Security and Privacy 2016*, HASP 2016, pages 1:1–1:8. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4769-X.
- [AGK22a] Cuneyt Gurcan Akcora, Yulia R. Gel, and Murat Kantarcioglu. Blockchain networks: Data structures of bitcoin, Monero, Zcash, Ethereum, Ripple, and Iota. *WIREs Data Mining Knowl. Discov.*, 12(1):??, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/corr/corr2206.html#abs-2206-09011>.

- org/db/journals/widm/widm12.html#AkcoraGK22.
- [AGK22b] **Arasi:2022:AAB**
V. Ezhil Arasi, K. Indra Gandhi, and K. Kulothungan. Auditable attribute-based data access control using blockchain in cloud storage. *The Journal of Supercomputing*, 78(8):10772–10798, May 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04293-3>. [AH19]
- [AGT⁺22] **Antwi:2022:SNO**
Robert Antwi, James Dzisi Gadze, Eric Tutu Tchao, Axel Sikora, Henry Nunoo-Mensah, Andrew Selasi Agbemenu, Kwame Oponie-Boachie Obour Agyekum, Justice Owusu Agyemang, Dominik Welte, and Eliel Keelson. A survey on network optimization techniques for blockchain systems. *Algorithms (Basel)*, 15(6), June 2022. CODEN ALGOCH. ISSN 1999-4893 (electronic). URL <https://www.mdpi.com/1999-4893/15/6/193>. [AHC⁺21]
- [AH12] **Aszalos:2012:PAP**
László Aszalós and Andrea Huszti. Payment approval for PayWord. *Lecture Notes in Computer Science*, 7690:161–176, 2012. [AHH20]
- Al-Housni:2019:ESB**
Nasser Al-Housni. An exploratory study in blockchain technology. M.Phil., The University of Manchester (United Kingdom), Manchester, UK, 2019. 89 pp. URL <http://search.proquest.com/pqdtglobal/docview/2199337101>.
- Aniello:2021:ABT**
Leonardo Aniello, Basel Halak, Peter Chai, Riddhi Dhall, Mircea Mihalea, and Adrian Wilczynski. Anti-BIUFF: towards counterfeit mitigation in IC supply chains using blockchain and PUF. *International Journal of Information Security*, 20(3):445–460, June 2021. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-020-00513-8>; <http://link.springer.com/content/pdf/10.1007/s10207-020-00513-8.pdf>.
- Almasoud:2020:SCB**
Ahmed S. Almasoud, Farookh Khadeer Hussain, and Omar K. Hussain.

- Smart contracts for blockchain-based reputation systems: a systematic literature review. *Journal of Network and Computer Applications*, 170(??):??, November 15, 2020. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S108480452030285X>. ■
- [AHSZ21] Yves Christian Elloh Adja, Badis Hammi, Ahmed Serhrouchni, and Sherali Zeadally. A blockchain-based certificate revocation management and status verification system. *Computers & Security*, 104(??): Article 102209, May 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S016740482100033X>. ■
- [AHWB20] Man Ho Au, Jinguang Han, Qianhong Wu, and Colin Boyd. Special issue on cryptographic currency and blockchain technology. *Future Generation Computer Systems*, 107(??):758–759, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19314840>. ■
- [AJA⁺22] Zain Abubaker, Nadeem Javaid, Ahmad Almogren, Mariam Akbar, Mansour Zuair, and Jalel Ben-Othman. Blockchain service provisioning and malicious node detection via federated learning in scalable Internet of Sensor Things networks. *Computer Networks (Amsterdam, Netherlands: 1999)*, 204(??):??, February 26, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621005570>. ■
- [AK14] Elli Androulaki and Ghasan O. Karame. Hiding transaction amounts and balances in Bitcoin. In *Trust and Trustworthy Computing*, pages 161–178. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-08593-X. URL http://link.springer.com/chapter/10.1007/978-3-319-08593-7_11. ■
- [AK17] Abdul Ghafoor Abbasi and Zaheer Khan. VeidBlock: Verifiable identity using blockchain and ledger in a software defined network. ■

- In *Companion Proceedings of the 10th International Conference on Utility and Cloud Computing, UCC '17 Companion*, pages 173–179. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5195-6. URL <http://doi.acm.org/10.1145/3147234.3148088>.
- [AKA⁺22] **Abubaker:2022:TDT** Zain Abubaker, Asad Ullah Khan, Ahmad Almogren, Shahid Abbas, Atia Javaid, Ayman Radwan, and Nadeem Javaid. Trustful data trading through monetizing IoT data using BlockChain based review system. *Concurrency and Computation: Practice and Experience*, 34(5):e6739:1–e6739:??, February 28, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [AKGN18] **Anta:2018:FID** Antonio Fernández Anta, Kishori Konwar, Chrysis Georgiou, and Nicolas Nicolaou. Formalizing and implementing distributed ledger objects. *ACM SIGACT News*, 49(2):58–76, June 2018. CODEN SIGNDM. ISSN 0163-5700 (print), 1943-5827 (electronic).
- [AKP17] **Adams:2017:BGD** Richard Adams, Beth Kewell, and Glenn Parry. Blockchain for good? Digital ledger technology and sustainable development goals. In *World Sustainability Series*, pages 127–140. Springer International Publishing, ????, October 2017.
- [AKP18] **Adams:2018:BGD** Richard Adams, Beth Kewell, and Glenn Parry. Blockchain for good? digital ledger technology and sustainable development goals. In Leal Filho et al. [LMC18]. ISBN 3-319-67121-9 (print), 3-319-67122-7 (e-book). ISSN 2199-7373. LCCN HC79.E5. URL http://link.springer.com/chapter/10.1007/978-3-319-67122-2_7.
- [AKR⁺13] **Androulaki:2013:EUP** Elli Androulaki, Ghasan O. Karame, Marc Roeschlin, Tobias Scherer, and Srdjan Čapkun. Evaluating user privacy in Bitcoin. In Sadeghi [Sad13], pages 34–51. ISBN 3-642-39884-7. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-642-39884-1_4.
- [AKT21] **Ali:2021:IBF** Mansoor Ali, Hadis Karimipour, and Muhammad Tariq. Integration of blockchain and federated

- learning for Internet of Things: Recent advances and future challenges. *Computers & Security*, 108(?): Article 102355, September 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404821001796>. [Ale18b]
- [AKWW19] Georgia Avarikioti, Lukas Kaeppli, Yuyi Wang, and Roger Wattenhofer. Bitcoin security under temporary dishonest majority. *CoRR*, abs/1908.00427(?): ??, ??? 2019. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1908.00427>; <https://dblp.org/db/journals/corr/corr1908.html#abs-1908-00427>. [ALGK19]
- [ALB21] Argimiro Arratia and Albert X. López-Barrantes. Do Google Trends forecast bitcoins? Stylized facts and statistical evidence. *J. Bank. Financial Technol.*, 5(1):45–57, ??? 2021. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/jbft/jbft5.html#ArratiaL21>.
- [Ale18a] Ahrash Aleshi. Secure Aircraft Maintenance Records Using Blockchain (SAMR). M.Sc.C., Embry-Riddle Aeronautical University, Daytona Beach, FL, USA, 2018. 71 pp. URL <http://search.proquest.com/pqdtglobal/docview/2035443375>.
- Alexander:2018:RXE**
- Roman Alexander. *Ripple und XRP für Einsteiger: Das Handbuch für den XRP-Coin und die Blockchain Technologie (Kryptowährungen)*. (German) [Ripple and XRP for Beginners: The Manual for the XRP coin and Blockchain technology (Crypto currencies)]. ???, ???, 2018. ISBN 1-976895-92-8. 85 (est.) pp. URL <http://crypto-pay.org>.
- Akcora:2019:BTB**
- Cuneyt Gurcan Akcora, Yitao Li, Yulia R. Gel, and Murat Kantarcioglu. BitcoinHeist: Topological data analysis for ransomware detection on the bitcoin blockchain. *CoRR*, ??(??):??, ??? 2019. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1906.07852>; <https://dblp.org/db/journals/corr/corr1906.html#abs-1906-07852>.
- Ali:2015:BPUB**
- [Ali15] Syed Taha Ali. Bitcoin: Perils of an unregulated
- Aleshi:2018:SAM**
- [Ale18a] Ahrash Aleshi. Secure Aircraft Maintenance Records

- global P2P currency (transcript of discussion). In *Security Protocols XXIII*, pages 294–306. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-26096-0. URL http://link.springer.com/chapter/10.1007/978-3-319-26096-1_9_30. [ALP15]
- [Ali19] Isra Mohamed Ali. Design and implementation of an IDPS for the blockchain network. M.S., Hamad Bin Khalifa University, Doha, Qatar, 2019. 91 pp. URL <http://search.proquest.com/pqdtglobal/docview/2311651908>. **Ali:2019:DII**
- [AlM19] Dalal AlMahmood. Promoting retail Sukuk using blockchain technology. M.S., Hamad Bin Khalifa University (Qatar), Doha, Qatar, 2019. 146 pp. URL <http://search.proquest.com/pqdtglobal/docview/2235423767>. **AlMahmood:2019:PRS**
- [ALMLS16] E. Anceaume, T. Lajoie-Mazenc, R. Ludinard, and B. Sericola. Safety analysis of Bitcoin improvement proposals. In *2016 IEEE 15th International Symposium on Network Computing and Applications (NCA)*, pages 318–325. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2016. **Alam:2015:NVI**
- [ALPBT17] M. T. Alam, H. Li, and A. Patidar. Notice of violation of IEEE publication principles: Bitcoin for smart trading in smart grid. In *The 21st IEEE International Workshop on Local and Metropolitan Area Networks*, pages 1–2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2015. ISSN 1944-0367 (print), 1944-0375 (electronic). **Anceaume:2017:BDS**
- [ALPBT17] Emmanuelle Anceaume, Romaric Ludinard, Maria Potop-Butucaru, and Frédéric Tronel. Bitcoin a distributed shared register. In *Stabilization, Safety, and Security of Distributed Systems*, pages 456–468. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-69084-1. URL http://link.springer.com/chapter/10.1007/978-3-319-69084-1_34.

- [Als23] **Alsaif:2023:MLB**
Suleiman Ali Alsaif. Machine learning-based ransomware classification of bitcoin transactions. *Appl. Comput. Intell. Soft Comput.*, 2023(??):6274260:1–6274260:10, ??? 2023. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/acisc/acisc2023.html#Alsaif23>. [AMEF21]
- [Älv18] **Alvebrink:2018:IBA**
Johan Älvebrink. Investigation of blockchain applicability to Internet of Things within supply chains. Master's, Uppsala Universitet, Uppsala, Sweden, 2018. URL <http://search.proquest.com/pqdtglobal/docview/2101259101>.
- [Alz19] **Alzahrani:2019:SAC**
Naif Saeed Alzahrani. *A Secure Anti-Counterfeiting System Using Near Field Communication, Public Key Cryptography, Blockchain, and Bayesian Games*. Ph.D., Portland State University, Portland, OR, USA, 2019. 176 pp. URL <http://search.proquest.com/pqdtglobal/docview/2305527274>. [AMGBK22]
- [AM15] **Angel:2015:EPP**
James J. Angel and Douglas McCabe. The ethics of payments: Paper, plastic, or Bitcoin? *Journal of Business Ethics*, 132(3):603–611, September 2015. CODEN ??? ISSN 0167-4544 (print), 1573-0697 (electronic). URL <http://link.springer.com/article/10.1007/s10551-014-2354-x>. **Akbar:2021:DHD**
Nur Arifin Akbar, Amgad Muneer, Narmine El-Hakim, and Suliman Mohamed Fati. Distributed hybrid double-spending attack prevention mechanism for proof-of-work and proof-of-stake blockchain consensus. *Future Internet*, 13(11):285, November 12, 2021. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/11/285>. **Ahmadjee:2022:SBA**
Sabreen Ahmadjee, Carlos Mera-Gómez, Rami Bahsoon, and Rick Kazman. A study on blockchain architecture design decisions and their security attacks and threats. *ACM Transactions on Software Engineering and Methodology*, 31(2):36e:1–36e:45, April 2022. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic). URL <https://dl.acm.org/doi/10.1145/3502740>. **Amin:2016:SFL**
Maitri Amin. A survey of

financial losses due to malware. In *Proceedings of the Second International Conference on Information and Communication Technology for Competitive Strategies*, ICTCS '16, pages 145:1–145:4. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-3962-X.

Amiet:2021:BVP

[Ami21]

Nils Amiet. Blockchain vulnerabilities in practice. *Digital Threats: Research and Practice (DTRAP)*, 2(2): 8:1–8:7, March 2021. CODEN ??? ISSN 2692-1626 (print), 2576-5337 (electronic). URL <https://dl.acm.org/doi/10.1145/3407230>.

Ali:2015:ZPN

[AMLH15]

Syed Taha Ali, Patrick McCorry, Peter Hyun-Jeen Lee, and Feng Hao. ZombieCoin: Powering next-generation botnets with Bitcoin. In Brenner et al. [BCJR15], pages 34–48. ISBN 3-662-48050-6 (paperback), 3-662-48051-4 (e-book). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_3.

Ali:2018:ZMN

[AMLH18]

Syed Taha Ali, Patrick McCorry, Peter Hyun-Jeen Lee, and Feng Hao. ZombieCoin 2.0: managing

next-generation botnets using Bitcoin. *International Journal of Information Security*, ??(?):456–468, ??? 2018. CODEN ??? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-017-0379-8>.

Al-Marridi:2021:RLA

[AMME21]

Abeer Z. Al-Marridi, Amr Mohamed, and Aiman Erbad. Reinforcement learning approaches for efficient and secure blockchain-powered smart health systems. *Computer Networks (Amsterdam, Netherlands: 1999)*, 197(?):??, October 9, 2021. CODEN ??? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621003005>.

Ateniese:2017:RBX

[AMVA17]

Giuseppe Ateniese, Bernardo Magri, Daniele Venturi, and Ewerton Andrade. Redactable blockchain — or — rewriting history in Bitcoin and friends. In *2017 IEEE European Symposium on Security and Privacy (EuroSP)*, pages 111–126. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2017. ISBN 1-5090-5761-7. URL <http://>

- [//ieeexplore.ieee.org/document/7961975/](http://ieeexplore.ieee.org/document/7961975/).
- [And14] **Andreessen:2014:WBM**
 Marc Andreessen. Why Bitcoin matters. *New York Times*, ??(??):??, January 21, 2014. CODEN NY-TIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095.
- [And18] **Andersson:2018:EBC**
 Marcus Andersson. Embracing blockchain: the challenges of collaborative innovation within the financial industry. Master's, Uppsala Universitet, Uppsala, Sweden, 2018. URL <http://search.proquest.com/pqdtglobal/docview/2101261427>.
- [ANMM22] **Auer:2022:TBI**
 Sophia Auer, Sophia Nagler, Somnath Mazumdar, and Raghava Rao Mukkamala. Towards blockchain-IoT based shared mobility: Car-sharing and leasing as a case study. *Journal of Network and Computer Applications*, 200(??):??, April 2022. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521003015>.
- [Ano12] **Anonymous:2012:VCS**
 Anonymous. Virtual currency schemes. Techni-
- [Ano13a] **Anonymous:2013:LC**
 Anonymous. List of cryptocurrencies. Wikipedia article., 2013. URL https://en.wikipedia.org/wiki/List_of_cryptocurrencies.
- [Ano13b] **Anonymous:2013:MBT**
 Anonymous. Massive Bitcoin thefts and seizures leave many users nervous and poorer. *Computer Fraud & Security*, 2013(12):1–3, December 30, 2013. CODEN ???? ISSN 1361-3723 (print), 1873-7056 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1361372313701064>.
- [Ano14a] **Anonymous:2014:MYW**
 Anonymous. Mind your wallet: Why the underworld loves Bitcoin. Reuters news story., 2014. URL <http://www.cnn.com/2014/03/14/mind-your-wallet-why-the-underworld-loves-bitcoin.html>.
- [Ano14b] **Anonymous:2014:RBS**
 Anonymous. *Regulation of Bitcoin in selected jurisdictions*. Law Library
- cal report, European Central Bank, Kaiserstrasse 29, 60311 Frankfurt am Main, Germany, October 2012. 55 pp. URL <https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>.

- of Congress, Washington, DC, USA, January 2014. 24 pp. LCCN K4431.R44 2014. URL <http://hdl.loc.gov/LOC.LAW/LLGLRD.024>.
- [Ano15] Anonymous. Bitcoinages. *IEEE Spectrum*, 52(12):26, December 2015. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Ano16a] Anonymous. The blockchain has a dark side [news]. *IEEE Spectrum*, 53(6):12–13, June 2016. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Ano16b] Anonymous. Blockchain und Recht. (German) [Blockchain and law]. *Informatik Spektrum*, 39(5):402–410, August 2016. CODEN INSKDW. ISSN 0170-6012 (print), 1432-122X (electronic). URL <http://link.springer.com/article/10.1007/s00287-016-0991-4>.
- [Ano16c] Anonymous. Book review: *Bitcoin and Cryptocurrency Technologies*, Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller and Steven Goldfeder. *Network Security*, 2016(8):4, August 2016. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485816300745>.
- [Ano17a] Anonymous. Bitcoin: A peer-to-peer electronic cash system: The paper that first introduced Bitcoin. Web site, 2017. URL <https://bitcoin.org/en/bitcoin-paper>. Includes links to translations of the 2008 Nakamoto paper to several other languages.
- [Ano17b] Anonymous. [Bitcoin] developer documentation. Web site., 2017. URL <https://bitcoin.org/en/developer-documentation>.
- [Ano17c] Anonymous. Bitcoin wiki. Web site, 2017. URL https://en.bitcoin.it/wiki/Main_Page.
- [Ano17d] Anonymous. How does Bitcoin work? Web site., 2017. URL <https://bitcoin.org/en/how-it-works>.
- [Ano17e] Anonymous. Venezuela plans a cryptocurrency,

- Maduro says. *New York Times*, ??(?):??, December 3, 2017. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2017/12/03/world/americas/venezuela-cryptocurrency-maduro.html>.
- [Ano18a] **Anonymous:2018:BOC** [Ano18e] Anonymous. Bitcoin and other cryptocurrencies are useless: For blockchains, the jury is still out. *The Economist*, ??(?):??, August 30, 2018. CODEN EONOEH. ISSN 0013-0613 (print), 1476-8860 (electronic). URL <https://www.economist.com/leaders/2018/08/30/bitcoin-and-other-cryptocurrencies-are-useless>.
- [Ano18b] **Anonymous:2018:BFN** [Ano18f] Anonymous. Bitcoin full node on FreeBSD. Web site., 2018. URL <https://bsdmag.org/5374-2/>.
- [Ano18c] **Anonymous:2018:BS** [Ano18g] Anonymous. Blockchain size. Web chart., January 2018. URL <https://blockchain.info/charts/blocks-size>.
- [Ano18d] **Anonymous:2018:CLV** [Ano18h] Anonymous. Countries look to virtual currencies to sidestep sanctions. *New York Times*, ??(?):??, January 3, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/03/technology/russia-venezuela-virtual-currencies.html>.
- Anonymous:2018:CCH** Anonymous. Cryptocurrencies hit by hacking attacks, theft and fraud. *Network Security*, 2018(2):1–2, February 2018. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485818300114>.
- Anonymous:2018:CMC** Anonymous. Cryptocurrency market capitalizations. Web site, January 2018. URL <https://coinmarketcap.com/>.
- Anonymous:2018:EDC** Anonymous. Erratum: Developing a cryptocurrency assessment framework: Function over form. *Ledger*, 3(?):??, ??? 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/151>. See [BBH18].
- Anonymous:2018:GST** Anonymous. Gibbard–Satterthwaite theorem. On-

- line encyclopedia article, 2018. URL https://en.wikipedia.org/wiki/Gibbard%E2%80%93Satterthwaite_theorem.
- [Ano18i] Anonymous. Iceland police arrest suspected Bitcoin server thieves. BBC News Web story., March 5, 2018. URL <http://www.bbc.com/news/technology-43288495>.
- [Ano18j] Anonymous. Kodak to issue its own virtual currency: DealBook briefing. *New York Times*, ??(??): ??, January 9, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/09/business/dealbook/jana-apple-tech.html>.
- [Ano18k] Anonymous. North Korea blamed for WannaCry, PoS attacks and Bitcoin phishing. *Network Security*, 2018 (1):1–2, January 2018. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485818300011>.
- [Ano18l] Anonymous. Urgent update regarding deposits of NEM. Web site., January 26, 2018. URL <https://coincheck.com/en/blog/4673>.
- Anonymous:2018:IPA** [Ano18m]
- Anonymous. Venezuela cryptocurrency to draw investment from Turkey, Qatar — official. *New York Times*, ??(??):??, February 16, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/reuters/2018/02/16/technology/16reuters-crypto-currency-venezuela.html>.
- Anonymous:2018:KIO**
- Anonymous:2018:NKB**
- Anonymous:2018:UUR**
- Anonymous:2019:BCE**
- Anonymous. [Binance Cryptocurrency Exchange loses millions to theft]. Web news stories., May 10, 2019. URL <http://binance.zendesk.com/hc/en-us/articles/360028031711-Binance-Security-Breach-Update>; <http://www.cnn.com/2019/05/08/binance-bitcoin-hack-over-40-million-of-cryptocurrency-stolen.html>; http://www.vice.com/en_us/article/pajapb/40m-hack-is-expensive-lesson-for-binance-ceo-says; <http://www.wired.com/story/hack-binance-cryptocurrency-exchange/>; <http://www.zdnet.com/article/hackers-steal-41-million-from-cryptocurrency-exchange-binance/>.

- [Ano19b] **Anonymous:2019:GCU** Anonymous. Giving currency to not using currency. AMS Mathematical Moments Web site, 2019. URL <http://www.ams.org/publicoutreach/mathmoments/mm134-bitcoin.pdf>. [Ano21b]
- [Ano19c] **Anonymous:2019:PBT** Anonymous. Preface: Blockchain: From technology to solutions. *IBM Journal of Research and Development*, 63(2-3):1-2, March/May 2019. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic). [Ano21c]
- [Ano20] **Anonymous:2020:DS** Anonymous. Demystifying Stablecoins. *ACM Queue: Tomorrow's Computing Today*, 18(1):??, January 2020. CODEN AQCUAE. ISSN 1542-7730 (print), 1542-7749 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3387945.3388781>.
- [Ano21a] **Anonymous:2021:AMI** Anonymous. Analysis of multi-input multi-output transactions in the Bitcoin network. *Concurrency and Computation: Practice and Experience*, 33(1):e5629:1-e5629:??, January 10, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [Ano21d]
- Anonymous:2021:BAB** Anonymous. Blockchain applications beyond the cryptocurrency casino: The punishment not reward blockchain architecture. *Concurrency and Computation: Practice and Experience*, 33(1):e5749:1-e5749:??, January 10, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- Anonymous:2021:ETT** Anonymous. Ensuring transparency and traceability of food local products: a blockchain application to a Smart Tourism Region. *Concurrency and Computation: Practice and Experience*, 33(1):e5857:1-e5857:??, January 10, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- Anonymous:2021:IES** Anonymous. Implementation and evaluation of smart contracts using a hybrid on- and off-blockchain architecture. *Concurrency and Computation: Practice and Experience*, 33(1):e5811:1-e5811:??, January 10, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

- [Ano21e] **Anonymous:2021:TSR**
 Anonymous. Trusted systems of records based on blockchain technology — a prototype for mileage storing in the automotive industry. *Concurrency and Computation: Practice and Experience*, 33(1):e5630:1–e5630:??, January 10, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [Ant16]
- [àNOE17] **Nijeholt:2017:DFP**
 Hidde Lycklama à Nijeholt, Joris Oudejans, and Zakeriya Erkin. DecReg: A framework for preventing double-financing using blockchain technology. In *Proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts*, BCC '17, pages 29–34. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4974-9. URL <http://doi.acm.org/10.1145/3055518.3055529>. [Ant20]
- [Ant15] **Antonopoulos:2015:MB**
 Andreas M. Antonopoulos. *Mastering Bitcoin*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2015. ISBN 1-4493-7404-2, 1-4919-0260-4. xxi + 272 pp. LCCN HG1710 .A58 2014. [Ant21]
- Antonia:2016:BD**
 Cameron Antonia. *Bitcoin for dummies*. John Wiley, New York, NY, USA, 2016. ISBN 1-119-07613-7 (paperback). ??? pp. LCCN ???
- Ante:2020:PNS**
 Lennart Ante. A place next to Satoshi: foundations of blockchain and cryptocurrency research in business and economics. *Scientometrics*, 124(2):1305–1333, August 2020. CODEN SCNTDX. ISSN 0138-9130 (print), 1588-2861 (electronic). URL <http://link.springer.com/article/10.1007/s11192-020-03492-8>; <http://link.springer.com/content/pdf/10.1007/s11192-020-03492-8.pdf>.
- Antal:2021:DLT**
 Claudia Antal. Distributed ledger technology review and decentralized applications development guidelines. *Future Internet*, 13(3):62, February 27, 2021. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/3/62>.
- Ahmed:2020:BCI**
 M. Ahmed and A. K. Pathan. Blockchain: Can

it be trusted? *Computer*, 53(4):31–35, 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

Apeltsin:2014:CPH

[Ape14]

Leonard Apeltsin. A CryptoCubic protocol for hacker-proof off-chain bitcoin transactions. *CoRR*, ??(??):??, ??? 2014. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1408.2824>; <https://dblp.org/db/journals/corr/corr1408.html#Apeltsin14>■

Anthopoulos:2015:ICT

[AR15]

Leonidas G. Anthopoulos and Christopher G. Reddick, editors. *Information and communication technologies in public administration: innovations from developed countries*, volume 196 of *Public administration and public policy: a comprehensive publication program*. CRC Press, Boca Raton, FL 33431-9868, USA, 2015. ISBN 1-4822-3929-9 (hardcover). xvii + 333 pp. LCCN JF1525.A8 I4674 2015.

Aras:2021:SHG

[Ara21]

Serkan Aras. Stacking hybrid GARCH models for forecasting bitcoin volatility. *Expert Systems with Applications*, 174(??): [ARL19]

114747, ??? 2021. CODEN ESAPEH. ISSN ??? URL <https://dblp.org/db/journals/eswa/eswa174.html#Aras21>.

AlOmar:2017:MBB

[ARBK17]

Abdullah Al Omar, Mohammad Shahriar Rahman, Anirban Basu, and Shin-saku Kiyomoto. MediBchain: A blockchain based privacy preserving platform for health-care data. In *Security, Privacy, and Anonymity in Computation, Communication, and Storage*, pages 534–543. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-72395-2_49.■

Asaf:2020:BTN

Khizra Asaf, Rana Asif Rehman, and Byung-Seo Kim. Blockchain technology in Named Data Networks: a detailed survey. *Journal of Network and Computer Applications*, 171(??):??, December 1, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303088>■

Azzolini:2019:STF

Damiano Azzolini, Fab-

rizio Riguzzi, and Evelina Lamma. Studying transaction fees in the bitcoin blockchain with probabilistic logic programming. *Inf.*, 10(11):335, 2019. CODEN 2019 ISSN 2019 URL <https://dblp.org/db/journals/information10.html#AzzoliniRL19>; <https://www.wikidata.org/entity/Q111688792>.

Alcaraz:2020:BAA

[ARL20]

Cristina Alcaraz, Juan E. Rubio, and Javier Lopez. Blockchain-assisted access for federated smart grid domains: Coupling and features. *Journal of Parallel and Distributed Computing*, 144(??):124–135, October 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520302914>.

[AS18]

Aron:2012:BSF

[Aro12]

Jacob Aron. BitCoin software finds new life. *New Scientist*, 213(2847):20, January 14, 2012. CODEN NWSCAL. ISSN 0262-4079 (print), 1364-8500 (electronic).

Alqassem:2014:TRA

[AS14]

I. Alqassem and D. Svetinovic. Towards reference architecture for cryptocurrencies:

Bitcoin architectural analysis. In *2014 IEEE International Conference on Internet of Things (iThings), and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom)*, pages 436–443. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2014.

Al-Samaraee:2018:RPD

Suray Al-Samaraee. Reliable platoon data provenance using blockchain. M.S., Southern Illinois University at Carbondale, Carbondale, IL, USA, 2018. 91 pp. URL <http://search.proquest.com/pqdtglobal/docview/2191129898>.

Altarawneh:2021:AAP

Amani Altarawneh, Fei Sun, Richard R. Brooks, Owulakemi Hambolu, Lu Yu, and Anthony Skjellum. Availability analysis of a permissioned blockchain with a lightweight consensus protocol. *Computers & Security*, 102(??):Article 102098, March 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820303710>.

- [ASK⁺21] **Alam:2021:BBI**
 Shadab Alam, Mohammed Shuaib, Wazir Zada Khan, Sahil Garg, Georges Kad-doum, M. Shamim Hos-sain, and Yousaf Bin Zikria. Blockchain-based initia-tives: Current state and challenges. *Computer Net-works (Amsterdam, Nether-lands: 1999)*, 198(??):??, October 24, 2021. CO-DEN ???? ISSN 1389-1286 (print), 1872-7069 (elec-tronic). URL <http://www.sciencedirect.com/science/article/pii/S138912862100373X>
- [AST16] **Aste:2016:FCB**
 Tomaso Aste. The fair cost of Bitcoin proof of work. *SSRN Electronic Journal*, page ??, June 27, 2016. ISSN 1556-5068.
- [ATD17] **Aste:2017:BTF**
 Tomaso Aste, Paolo Tasca, and Tiziana Di Mat-teo. Blockchain technolo-gies: The foreseeable im-pact on society and indus-try. *Computer*, 50(9):18–28, September 2017. CO-DEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://www.computer.org/csdl/mags/co/2017/09/mco2017090018-abs.html>.
- [ASM19] **Ahmad:2019:STA**
 Ashar Ahmad, Muham-mad Saad, and Aziz Mo-haisen. Secure and trans-parent audit logs with BlockAudit. *Journal of Network and Computer Ap-plications*, 145(??):Article 102406, ???? 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (elec-tronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519302401>
- [ASSK21] **Aditya:2021:SBR**
 U. S. P. Srinivas Aditya, Roshan Singh, Pranav Ku-mar Singh, and Anshu-man Kalla. A survey on blockchain in robotics: Is-sues, opportunities, chal-lenges and future direc-tions. *Journal of Net-work and Computer Ap-plications*, 196(??):??, De-cember 15, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (elec-tronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521002435>
- Abduljabbar:2021:SPS**
 Tamara Abdulmunim Ab-duljabbar, Xiaohui Tao, Ji Zhang, Xujuan Zhou, Lin Li, and Yi Cai. A sur-vey of privacy solutions us-ing blockchain for recom-mender systems: Current status, classification and open issues. *The Com-puter Journal*, 64(7):1104–1129, July 2021. CODEN CMPJA6. ISSN 0010-4620

- (print), 1460-2067 (electronic). URL <http://academic.oup.com/comjnl/article/64/7/1104/6289879> ■
- Azouvi:2022:PSP** [AW18]
 Sarah Azouvi and Marko Vukolic. Pikachu: Securing PoS blockchains from long-range attacks by checkpointing into bitcoin PoW using Taproot. *CoRR*, ??(??):??, 2022. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/corr/corr2208.html#abs-2208-05408>.
- Ali:2021:BBF** [AZDF22]
 Muhammad Salek Ali, Massimo Vecchio, and Fabio Antonelli. A blockchain-based framework for IoT data monetization services. *The Computer Journal*, 64(2):195–210, February 2021. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL <http://academic.oup.com/comjnl/article/64/2/195/5911075> ■
- Alharby:2018:BSF** [AvM18]
 Maher Alharby and Aad van Moorsel. BlockSim: a simulation framework for blockchain systems. *ACM SIGMETRICS Performance Evaluation Review*, 46(3):135–138, December 2018. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic).
- Arnosti:2018:BN0**
 Nick Arnosti and S. Matthew Weinberg. Bitcoin: a natural oligopoly. *CoRR*, ??(??):??, 2018. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1811.08572>; <https://dblp.org/db/journals/corr/corr1811.html#abs-1811-08572>.
- Amiri-Zarandi:2022:LLB**
 Mohammad Amiri-Zarandi, Rozita A. Dara, and Evan Fraser. LBTM: a lightweight blockchain-based trust management system for Social Internet of Things. *The Journal of Supercomputing*, 78(6):8302–8320, April 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04231-3>.
- Anser:2020:SMU**
 Muhammad Khalid Anser, Ghulam Hussain Khan Zaigham, Muhammad Imran Rasheed, Abdul Hameed Pitafi, Jawad Iqbal, and Adeel Luqman. Social media usage and individuals’ intentions toward adopting bitcoin: The role of

- the theory of planned behavior and perceived risk. *Int. J. Commun. Syst.*, 33 (17):??, ??? 2020. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/ijcomsys/ijcomsys33.html#AnserZRPIL20>
- [AZV17] Maria Apostolaki, Aviv Zohar, and Laurent Vanbever. Hijacking Bitcoin: Routing attacks on cryptocurrencies. In *2017 IEEE Symposium on Security and Privacy (SP)*, pages 375–392. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2017. ISBN 1-5090-5532-0. ISSN 1081-6011 (print), 2375-1207 (electronic). URL <http://ieeexplore.ieee.org/document/7958588/>
- [BABD17] Shehar Bano, Mustafa Al-Bassam, and George Danezis. The road to scalable blockchain designs. *login: the USENIX Association newsletter*, 42(4):??, Winter 2017. CODEN LOGNEM. ISSN 1044-6397. URL <https://www.usenix.org/publications/login/winter2017/bano>
- [Bac97] Adam Back. Hash cash postage implementation. Announcement on e-mail list cypherpunks@toad.com. March 28, 1997. URL <http://www.hashcash.org/papers/hashcash.pdf>
- [Bac01] Adam Back. Hash cash. Web document., 2001. URL <http://cypherspace.org/hashcash/>; <https://web.archive.org/web/20010614013848/>
- [Bac02a] Adam Back. Hashcash — a denial of service counter measure. Web document., 2002. URL <http://www.hashcash.org/papers/hashcash.pdf>
- [Bac02b] Adam Back. Hashcash — amortizable publicly auditable cost-functions. Web document., August 1, 2002. URL <http://www.hashcash.org/papers/amortizable.pdf>
- [Bac03] Adam Back. The Hashcash proof-of-work function. Internet Network Working Group draft, June 2003. URL <http://www.hashcash.org/papers/draft-hashcash.txt>
- [bAHRAK17] Norul Suhaliana bt Abd Halim, Md Arafatur Rahman, Sai

- ful Azad, and Muhammad Nomani Kabir. Blockchain security hole: Issues and solutions. In *Recent Trends in Information and Communication Technology*, pages 739–746. Springer International Publishing, 2017.
- [bAHRak18] Norul Suhaliana bt Abd Halim, Md Arafatur Rahman, Saiful Azad, and Muhammad Nomani Kabir. Blockchain security hole: Issues and solutions. In *Recent Trends in Information and Communication Technology*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-59427-9_76.
- [Bai19] Samuel Addo Baidoo. *Regulatory Effects on Traditional Financial Systems Versus Blockchain and Emerging Financial Systems*. Ph.D., Walden University, Minneapolis, MN, USA, 2019. 158 pp. URL <http://search.proquest.com/pqdtglobal/docview/2275281673>.
- [BAJ20] Nazanin Zahed Benisi, Mehdi Aminian, and Bahman Javadi. Blockchain-based decentralized storage networks: a survey. *Journal of Network and Computer Applications*, 162(??):??, July 15, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520301302>.
- [Bak09] Arno Bakker. Merkle hash torrent extension. Web document., August 2009. URL http://www.bittorrent.org/beps/bep_0030.html.
- [BAK22] Hamza Baniata, Ahmad Anagreh, and Attila Kertesz. DONS: Dynamic optimized neighbor selection for smart blockchain networks. *Future Generation Computer Systems*, 130(??):75–90, May 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X2100491X>.
- [Ban18] Agniva Banerjee. Data privacy management using privacy compliant blockchain structures. M.S., University of Maryland, Baltimore County, Baltimore County, MD, USA, 2018. 82 pp. URL <http://>

- [//search.proquest.com/pqdtglobal/docview/2103904485](https://search.proquest.com/pqdtglobal/docview/2103904485) [Bar14]
- [Ban19] Debrath Banerjee. Blockchain in Internet of Things (IoT). M.S., Arkansas State University, Jonesboro, AR, USA, 2019. 144 pp. URL [http://search.proquest.com/pqdtglobal/docview/2295593230](https://search.proquest.com/pqdtglobal/docview/2295593230) [Bar16]
- [BANT20] Sara Bergman, Mikael Asplund, and Simin Nadjm-Tehrani. Permissioned blockchains and distributed databases: a performance study. *Concurrency and Computation: Practice and Experience*, 32(12):e5227:1–e5227:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [Bar17]
- [BAPS22] Shrey Baheti, Parwat Singh Anjana, Sathya Peri, and Yogesh Simmhan. DiPETrans: a framework for distributed parallel execution of transactions of blocks in blockchains. *Concurrency and Computation: Practice and Experience*, 34(10):e6804:1–e6804:??, May 1, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [Bar18]
- [Barski:2014:BB] Conrad Barski. *Bitcoin for the befuddled*. No Starch Press, San Francisco, CA, USA, 2014. ISBN 1-59327-573-0. ??? pp. LCCN ???
- [Bargar:2016:EBS] Dylan Bargar. The economics of the blockchain: a study of its engineering and transaction services marketplace. M.A., Clemson University, Clemson, SC, USA, 2016. 49 pp. URL [http://search.proquest.com/pqdtglobal/docview/1805168683](https://search.proquest.com/pqdtglobal/docview/1805168683)
- [Bariviera:2017:IBR] Aurelio F. Bariviera. The inefficiency of Bitcoin revisited: a dynamic approach. *Economics Letters*, 161:1–4, 2017. CODEN ECLEDS. ISSN 0165-1765 (print), 1873-7374 (electronic).
- [Barth:2018:CMS] Bradley Barth. Combo-Jack malware steals digital payments, cryptocurrency, by modifying info saved to clipboards. SC Magazine Web story., March 6, 2018. URL <https://www.scmagazine.com/combojack-malware-steals-digital-payments-cryptocurrency-by-modifying-info-saved-to-clipboards/article/749086/>.

- [BAR21] **Bordel:2021:DCE**
 Borja Bordel, Ramón Alcarria, and Tomás Robles. Denial of chain: Evaluation and prediction of a novel cyberattack in blockchain-supported systems. *Future Generation Computer Systems*, 116(??):426–439, March 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X20330375>.
- [BATB20] **Bouachir:2020:BFC**
 O. Bouachir, M. Aloqaily, L. Tseng, and A. Boukerche. Blockchain and fog computing for cyberphysical systems: The case of smart industry. *Computer*, 53(9):36–45, 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [BART17] **Beck:2017:BTB**
 Prof.Dr.Roman Beck, Prof.Dr.Michel Avital, Prof.Dr.Matti Rossi, and Prof.Dr.Jason Bennett Thatcher. Blockchain technology in business and information systems research. *Business & Information Systems Engineering*, 59(6):381–384, November 2017. CODEN ???? ISSN 1867-0202 (print), 2363-7005 (electronic). URL <http://link.springer.com/article/10.1007/s12599-017-0505-1>.
- [BAS⁺22] **Baker:2022:BBF**
 Thar Baker, Muhammad Asim, Hezekiah Samwini, Nauman Shamim, Mohammed M. Alani, and Rajkumar Buyya. A blockchain-based fog-oriented lightweight framework for smart public vehicular transportation systems. *Computer Networks (Amsterdam, Netherlands: 1999)*, 203(??):??, February 11, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S138912862100548X>.
- [BB14] **Bohr:2014:WUB**
 J. Bohr and M. Bashir. Who uses Bitcoin? An exploration of the Bitcoin community. In *2014 Twelfth Annual International Conference on Privacy, Security and Trust*, pages 94–101. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, July 2014.
- [BB15] **Barguil:2015:SIS**
 João M. M. Barguil and Paulo S. L. M. Barreto. Security issues in Sarkar’s e-cash protocol. *Information Processing Letters*, 115(11):801–803, Novem-

- ber 2015. CODEN IF-PLAT. ISSN 0020-0190 (print), 1872-6119 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0020019015001039> [BBGP19]
- [BBBB15] Aaron W. Baur, Julian Bühler, Markus Bick, and Charlotte S. Bonorden. Cryptocurrencies as a disruption? Empirical findings on user adoption and future potential of Bitcoin and Co. In *Open and Big Data Management and Innovation*, pages 63–80. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-25013-2. URL http://link.springer.com/chapter/10.1007/978-3-319-25013-7_6
- [BBDN21] Mellila Bouam, Charles Bouillaguet, Claire Delaplace, and Camille Noûs. Computational records with aging hardware: Controlling half the output of SHA-256. *Parallel Computing*, 106(??):??, September 2021. CODEN PA-COEJ. ISSN 0167-8191 (print), 1872-7336 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167819121000557>
- [BBH⁺13] Jörg Becker, Dominic Breuker, Tobias Heide, Justus Holler, Hans Peter Rauer, and Rainer Böhme. Can we afford integrity by proof-of-work? Scenarios inspired by the Bitcoin currency. In *The Economics of Information Security and Privacy*, pages 135–156. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 3-642-39498-1. URL http://link.springer.com/chapter/10.1007/978-3-642-39498-0_7
- [BBH18] Andrew Burnie, James Burnie, and Andrew Henderson. Developing a cryptocurrency assessment framework: Function over form. *Ledger*, 3(??):??, 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/>
- [Bellini:2019:EID] Alessandro Bellini, Emanuele Bellini, Monica Gherardelli, and Franco Pirri. Enhancing IoT data dependability through a blockchain mirror model. *Future Internet*, 11(5):117, May 21, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/5/117>
- [Becker:2013:CWA] Jörg Becker, Dominic Breuker, Tobias Heide, Justus Holler, Hans Peter Rauer, and Rainer Böhme. Can we afford integrity by proof-of-work? Scenarios inspired by the Bitcoin currency. In *The Economics of Information Security and Privacy*, pages 135–156. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 3-642-39498-1. URL http://link.springer.com/chapter/10.1007/978-3-642-39498-0_7
- [Burnie:2018:DCA] Andrew Burnie, James Burnie, and Andrew Henderson. Developing a cryptocurrency assessment framework: Function over form. *Ledger*, 3(??):??, 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/>

article/view/121. See erratum [Ano18g].

Biasini:2018:RWM

[BBM⁺18]

Nick Biasini, Edmund Brumaghin, Warren Mercer, Josh Reynolds, Azim Khodijbaev, and David Liebenberg. Ransom where? Malicious cryptocurrency miners takeover, generating millions: The dark side of the digital gold rush. Web article, January 31, 2018. URL <http://blog.talosintelligence.com/2018/01/malicious-xmr-mining.html>.

[BBP19]

Bartoletti:2019:JBM

Massimo Bartoletti, Bryn Bellomy, and Livio Pompanu. A journey into Bitcoin metadata. *Journal of Grid Computing*, 17(1): 3–22, March 2019. CODEN ???? ISSN 1570-7873 (print), 1572-9184 (electronic). URL <https://dblp.org/db/journals/grid/grid17.html#BartolettiBP19>; <https://link.springer.com/article/10.1007/s10723-019-09473-3>.

Barber:2012:BBH

Simon Barber, Xavier Boyen, Elaine Shi, and Ersin Uzun. Bitter to better: How to make Bitcoin a better currency. In Keromytis [Ker12], pages 399–414. CODEN LNCSD9. ISBN 3-642-32946-2. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25 F3 2012. URL http://link.springer.com/chapter/10.1007/978-3-642-32946-3_29.

[BBSU12]

Bohme:2014:FCD

[BBMS14]

Rainer Böhme, Michael Brenner, Tyler Moore, and Matthew Smith, editors. *Financial cryptography and data security: FC 2014 Workshops, Bitcoin and WAHC 2014, Christ Church, Barbados, March 7, 2014, Revised Selected Papers*, volume 8438 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-662-44773-8 (paperback). LCCN ????. URL <http://www.loc.gov/catdir/enhancements/fy1501/2014950823-d.html>; <http://www.loc.gov/catdir/enhancements/fy1501/2014950823-t.html>.

[BC16a]

Boyd:2016:FCP

Colin Boyd and Christopher Carr. Fair client puzzles from the Bitcoin blockchain. In *Information Security and Privacy*, pages 161–177. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016.

- ISBN 3-319-40252-8 (paperback), 3-319-40253-6 (e-book). URL http://link.springer.com/chapter/10.1007/978-3-319-40253-6_10.
- [BC16b] Jerry Brito and Andrea M. Castillo. *Bitcoin: a primer for policymakers*. Mercatus Center, George Mason University, Arlington, VA, USA, 2016. ISBN 1-942951-16-7 (paperback), 1-942951-17-5. 109 pp. LCCN HG1710 .B75 2016.
- [BCJR15] **Brito:2016:BPP**
- [BCCR20] Massimo Bartoletti, Salvatore Carta, Tiziana Cimoli, and Roberto Saia. Dissecting Ponzi schemes on Ethereum: Identification, analysis, and impact. *Future Generation Computer Systems*, 102(??):259–277, January 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18301407>.
- [BCEM15] **Bartoletti:2020:DPS**
- [BCK+21] **Bansal:2021:NGS**
- [BCJR15] Michael Brenner, Nicolas Christin, Benjamin Johnson, and Kurt Rohloff, editors. *Financial cryptography and data security. FC 2015 international workshops, BITCOIN, WAHC, and Wearable, San Juan, Puerto Rico, January 30, 2015. Revised selected papers*, volume 8976 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-662-48050-6 (paperback), 3-662-48051-4 (e-book). LCCN QA76.9.A25.
- [BCEM15] Rainer Böhme, Nicolas Christin, Benjamin Edelman, and Tyler Moore. Bitcoin: Economics, technology, and governance. *The Journal of Economic Perspectives*, 29(2):213–238, 2015. ISSN 0895-3309 (print), 1944-7965 (electronic). URL <http://www.jstor.org/stable/24292130>.
- [BCEM15] **Bohme:2015:BET**
- [BCK+21] Gaurang Bansal, Vinay Chamola, Georges Kadoum, Md. Jalil Piran, and Mubarak Alrashoud. Next generation stock exchange: Recurrent neural learning model for distributed ledger transactions. *Computer Networks (Amsterdam, Netherlands: 1999)*, 193(??):??, July 5, 2021. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621001183>.

- [BCM16] **Bogner:2016:DSA** Andreas Bogner, Mathieu Chanson, and Arne Meeuw. A decentralised sharing app running a smart contract on the Ethereum blockchain. In *Proceedings of the 6th International Conference on the Internet of Things, IoT'16*, pages 177–178. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4814-9. URL <http://doi.acm.org/10.1145/2991561.2998465>.
- [BCV19] **Bartolucci:2019:PME** Silvia Bartolucci, Fabio Caccioli, and Pierpaolo Vivo. A percolation model for the emergence of the bitcoin lightning network. *CoRR*, ??(??):??, ??? 2019. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1912.03556>; <https://dblp.org/db/journals/corr/corr1912.html#abs-1912-03556>.
- [BD19] **Bennet:2019:EEM** Adam J. Bennet and Shakib Daryanoosh. Energy-efficient mining on a quantum-enabled blockchain using light. *Ledger*, 4(??):??, ??? 2019. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/143>.
- [BDE⁺13] **Bamert:2013:SPB** Tobias Bamert, Christian Decker, Lennart Elsen, Roger Wattenhofer, and Samuel Welten. Have a snack, pay with Bitcoins. In IEEE, editor, *Proceedings of the IEEE International Conference on Peer-to-Peer Computing (P2P) 2013, Trento, Italy*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013. ISBN 1-4799-0521-6.
- [BDF⁺22] **Benedetti:2022:PLB** Marco Benedetti, Francesco De Sclavis, Marco Favorito, Giuseppe Galano, Sara Giammusso, Antonio Muci, and Matteo Nardelli. A PoW-less bitcoin with certified Byzantine consensus. *CoRR*, abs/2207.06870(??):??, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/corr/corr2207.html#abs-2207-06870>.
- [BdL13] **Bergstra:2013:BBE** Jan A. Bergstra and Karl de Leeuw. Bitcoin and beyond: Exclusively informational monies. *CoRR*, ??(??):??, ??? 2013. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1304.4758>; <https://dblp.org>.

org/db/journals/corr/corr1304.html#abs-1304-4758.

Bhargavan:2016:FVS

[BDLF⁺16]

Karthikeyan Bhargavan, Antoine Delignat-Lavaud, Cédric Fournet, Anitha Gollamudi, Georges Gonthier, Nadim Kobeissi, Natalia Kulatova, Aseem Rastogi, Thomas Sibut-Pinote, Nikhil Swamy, and Santiago Zanella-Béguelin. Formal verification of smart contracts: Short paper. In *Proceedings of the 2016 ACM Workshop on Programming Languages and Analysis for Security*, PLAS '16, pages 91–96. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4574-3. URL <http://doi.acm.org/10.1145/2993600.2993611>.

Babaioff:2011:BRB

[BDOZ11]

Moshe Babaioff, Shahar Dobzinski, Sigal Oren, and Aviv Zohar. On Bitcoin and red balloons. *ACM SIGecom Exchanges*, 10(3):5–9, December 11, 2011. ISSN 1551-9031.

Babaioff:2012:BRB

[BDOZ12]

Moshe Babaioff, Shahar Dobzinski, Sigal Oren, and Aviv Zohar. On Bitcoin and red balloons. In *Proceedings of the 13th ACM Conference on Electronic Commerce*, EC '12, pages 56–73.

[BDP⁺15]

[BDP17a]

[BDP17b]

ACM Press, New York, NY 10036, USA, 2012. ISBN 1-4503-1415-5.

Battista:2015:BVF

G. D. Battista, V. D. Donato, M. Patrignani, M. Pizzonia, V. Roselli, and R. Tamassia. BitConeView: visualization of flows in the Bitcoin transaction graph. In *2015 IEEE Symposium on Visualization for Cyber Security (VizSec)*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2015.

Berg:2017:BEB

Chris Berg, Sinclair Davidson, and Jason Potts. The blockchain economy: A beginner's guide to institutional cryptoeconomics. *Medium*, ??(??):??, September 26, 2017. URL <https://medium.com/@cryptoeconomics/the-blockchain-economy-a-beginners-guide-to-institutional-cryptoeconomics-64bf2f2beec4>.

Berg:2017:BIT

Chris Berg, Sinclair Davidson, and Jason Potts. Blockchains industrialise trust. *SSRN Electronic Journal*, ??(??):??, November 19, 2017. ISSN 1556-5068. URL <https://papers.ssrn.com/sol3/>

- papers.cfm?abstract_id=3074070.
- [BDW17] Conrad Burchert, Christian Decker, and Roger Wattenhofer. Scalable funding of Bitcoin micropayment channel networks. In *Stabilization, Safety, and Security of Distributed Systems*, pages 361–377. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-69084-1. URL http://link.springer.com/chapter/10.1007/978-3-319-69084-1_26.
- [BDWW14] Tobias Bamert, Christian Decker, Roger Wattenhofer, and Samuel Welten. Blue-Wallet: The secure Bitcoin wallet. In *Security and Trust Management*, pages 65–80. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-11851-X. URL http://link.springer.com/chapter/10.1007/978-3-319-11851-2_5.
- [Bee18] Armando Becerra. Bitcoin y privacidad 101. *Res. Comput. Sci.*, 75(??):87–90, ??? 2014. CODEN ????
- [Bee16] Jethro G. Beekman. A Denial of Service attack against fair computations using Bitcoin deposits. *Information Processing Letters*, 116(2):144–146, February 2016. CODEN IFPLAT. ISSN 0020-0190 (print), 1872-6119 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0020019015001647>.
- [Bee18] Ryan Beegel. The impact of quantum computing on blockchain security. M.S., Utica College, Utica, NY, USA, 2018. 47 pp. URL <http://search.proquest.com/pqdtglobal/docview/2039675779>.
- [Bee18] Roman Beck. Beyond Bitcoin: The rise of blockchain world. *Computer*, 51(2):54–58, February 2018. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://www.computer.org/csdl/mags/co/2018/02/mco2018020054.html>.
- [Bee18] Beekman:2016:DSA
- [Bee18] Burchert:2017:SFB
- [Bee18] Becerra:2014:BP
- [Bee18] Beck:2018:BBR
- [Bee18] ISSN ????. URL http://rsc.cic.ipn.mx/2014_75/Bitcoin%20y%20Privacidad%20101.pdf; <https://dblp.org/db/journals/rsc/rsc75.html#Becerra14>.

- [Bel18] **Bellinger:2018:RBM**
Matthew Bellinger. *The Rhetoric of Bitcoin: Money, Politics, and the Construction of Blockchain Communities*. Ph.D., University of Washington, Seattle, WA, USA, 2018. 223 pp. URL <http://search.proquest.com/pqdtglobal/docview/2186898171>. [Ber17]
- [BEM⁺20] **Bohme:2020:RVD**
Rainer Böhme, Lisa Eckey, Tyler Moore, Neha Narula, Tim Ruffing, and Aviv Zohar. Responsible vulnerability disclosure in cryptocurrencies. *Communications of the ACM*, 63(10): 62–71, September 2020. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/10.1145/3372115>. [Ber18]
- [Ber13] **Berson:2013:VMS**
Susan A. Berson. Virtual money: Some basic rules for using ‘Bitcoin’. *ABA Journal*, 99(7):32, 2013. ISSN 0747-0088 (print), 2162-7983 (electronic). URL <http://www.jstor.org/stable/24595821>. [BERHE19]
- [Ber15] **Berlatsky:2015:B**
Noah Berlatsky, editor. *Bitcoin*. At issue series. Greenhaven Press, a part of Gale, Cengage Learning, Farmington Hills, MI, USA, 2015. ISBN 0-7377-7314-6 (hardcover), 0-7377-7315-4 (paperback). 89 pp. LCCN HG221 .B5737 2015. [Ber17]
- Berg:2017:WDA**
Chris Berg. What diplomacy in the Ancient Near East can tell us about blockchain technology. *Ledger*, 2(??):55–64, 2017. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/104>. [Ber18]
- Berengueres:2018:VCM**
Jose Berengueres. Valuation of cryptocurrency mining operations. *Ledger*, 3(??):??, 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/123>. [Ber18]
- Buocz:2019:BGA**
Thomas Buocz, Tina Ehrke-Rabel, Elisabeth Hödl, and Iris Eisenberger. Bitcoin and the GDPR: Allocating responsibility in distributed networks. *Comput. Law Secur. Rev.*, 35(2):182–198, 2019. CODEN 2379 ISSN 2379-5980. URL <https://dblp.org/db/journals/clsr/clsr35.html#BuoczEHE19>. [BERHE19]
- Buchnik:2020:FHT**
Yehonatan Buchnik and Roy Friedman. FireLedger: [BF20]

- a high throughput blockchain consensus protocol. *Proceedings of the VLDB Endowment*, 13(9):1525–1539, May 2020. CODEN ???? ISSN 2150-8097. URL <https://dl.acm.org/doi/abs/10.14778/3397230.3397246>. [BGN⁺22]
- Brunnler:2017:LBU**
- [BFS17] Kai Brännler, Dandolo Flumini, and Thomas Studer. A logic of blockchain updates. In *Logical Foundations of Computer Science*, pages 107–119. Springer International Publishing, 2017. [BGPW16]
- Brunnler:2018:LBU**
- [BFS18] Kai Brännler, Dandolo Flumini, and Thomas Studer. A logic of blockchain updates. In *Logical Foundations of Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-72056-2_7. [BH15]
- Barman:2020:BVS**
- [BGM20] Nabajeet Barman, Deepak G C, and Maria G. Martini. Blockchain for video streaming: Opportunities, challenges, and open issues. *Computer*, 53(7):45–56, July 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- Benkoczi:2022:QBM**
- Robert Benkoczi, Daya Ram Gaur, Naya Nagy, Marius Nagy, and Shahadat Hossain. Quantum bitcoin mining. *Entropy*, 24(3):323, 2022. CODEN ENTRFG. ISSN ???? URL <https://dblp.org/db/journals/entropy/entropy24.html#BenkocziGNH22>.
- Bishop:2016:ABT**
- Ryan Bishop, Kristoffer Gansing, Jussi Parikka, and Elvia Wilk, editors. *Across and beyond: a transmediale reader on post-digital practices, concepts, and institutions*. Sternberg Press, Berlin, Germany, 2016. ISBN 3-95679-289-0. 348 pp. LCCN N7433.92 .A37 2016.
- Barkatullah:2015:GCF**
- Javed Barkatullah and Timo Hanke. Goldstrike 1: CoinTerra’s first-generation cryptocurrency mining processor for Bitcoin. *IEEE Micro*, 35(2):68–76, March/April 2015. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic). URL <http://www.computer.org/csdl/mags/mi/2015/02/mmi2015020068-abs.html>.

- [Bhe17a] **Bheemaiah:2017:BA** Kariappa Bheemaiah. *The Blockchain Alternative*. Apress, Berkeley, CA, USA, 2017. ISBN 1-4842-2673-9 (paperback), 1-4842-2674-7 (e-book). xx + 248 pp. LCCN HG4026 .B522 2017. URL <http://link.springer.com/book/10.1007/978-1-4842-2674-2>. [Bhe17e]
- [Bhe17b] **Bheemaiah:2017:CEN** Kariappa Bheemaiah. Complexity economics: A new way to witness capitalism. In *The Blockchain Alternative* [Bhe17a], pages 155–225. ISBN 1-4842-2673-9 (paperback), 1-4842-2674-7 (e-book). LCCN HG4026 .B522 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2674-2_4. [BHH19]
- [Bhe17c] **Bheemaiah:2017:DBE** Kariappa Bheemaiah. Debt-based economy: The intricate dance of money and debt. In *The Blockchain Alternative* [Bhe17a], pages 1–24. ISBN 1-4842-2673-9 (paperback), 1-4842-2674-7 (e-book). LCCN HG4026 .B522 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2674-2_1. [BHI⁺14]
- [Bhe17d] **Bheemaiah:2017:FF** Kariappa Bheemaiah. Fragmentation of finance. In *The Blockchain Alternative* [Bhe17a], pages 25–82. ISBN 1-4842-2673-9 (paperback), 1-4842-2674-7 (e-book). LCCN HG4026 .B522 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2674-2_2. [Bheemaiah:2017:IC]
- [Bheemaiah:2017:IC] Kariappa Bheemaiah. Innovating capitalism. In *The Blockchain Alternative* [Bhe17a], pages 83–154. ISBN 1-4842-2673-9 (paperback), 1-4842-2674-7 (e-book). LCCN HG4026 .B522 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2674-2_3. [Benhamouda:2019:SPD]
- [Benhamouda:2019:SPD] F. Benhamouda, S. Halevi, and T. Halevi. Supporting private data on Hyperledger Fabric with secure multiparty computation. *IBM Journal of Research and Development*, 63 (2–3):3:1–3:8, March/May 2019. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic). [Barkatullah:2014:GCF]
- [Barkatullah:2014:GCF] J. Barkatullah, T. Hanke, R. Iyengar, R. Lewelling, and J. O’Connor. Goldstrike 1: Cointerra’s first generation crypto-currency processor for Bitcoin mining machines. In *2014*

- IEEE Hot Chips 26 Symposium (HCS)*, pages 1–16. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, August 2014. [BHS93]
- [BHM20] Dorje Brody, Lane Hughston, and Bernhard Meister. Theory of cryptocurrency interest rates. *SIAM Journal on Financial Mathematics*, 11(1):148–168, 2020. CODEN SJFMBJ. ISSN 1945-497X.
- [BHMB21] Yannis Bakos, Hanna Halaburda, and Christoph Mueller-Bloch. Economic and business dimensions: When permissioned blockchains deliver more decentralization than permissionless. *Communications of the ACM*, 64(2):20–22, January 2021. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/10.1145/3442371>.
- [Bik16] Kamil Bikowski. Application of machine learning algorithms for Bitcoin automated trading. In *Machine Intelligence and Big Data in Industry*, pages 161–168. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-30315-5. URL http://link.springer.com/chapter/10.1007/978-3-319-30315-4_14.
- [Bik20] Gioele Bigini. A review on blockchain for the Internet of Medical Things: Definitions, challenges, applications, and vision. *Future Internet*, 12(12):208, November 25, 2020. CODEN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/12/208>.
- [Bayer93] D. Bayer, Stuart Haber, and W. Scott Stornetta. Improving the efficiency and reliability of digital time-stamping. In *Sequences II: Methods in Communication, Security and Computer Science*, pages 329–334. 1993.
- [Baquer2016:SBS] Khaled Baquer, Danny Yuxing Huang, Damon McCoy, and Nicholas Weaver. Stressing out: Bitcoin stress testing. In Clark et al. [CMR⁺16], pages 3–18. ISBN 3-662-53357-X. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-53357-4_1.
- [Brody2020:TCI] Dorje Brody, Lane Hughston, and Bernhard Meister. Theory of cryptocurrency interest rates. *SIAM Journal on Financial Mathematics*, 11(1):148–168, 2020. CODEN SJFMBJ. ISSN 1945-497X.
- [Bakos2021:EBD] Yannis Bakos, Hanna Halaburda, and Christoph Mueller-Bloch. Economic and business dimensions: When permissioned blockchains deliver more decentralization than permissionless. *Communications of the ACM*, 64(2):20–22, January 2021. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/10.1145/3442371>.
- [Bigini2020:RBI] Gioele Bigini. A review on blockchain for the Internet of Medical Things: Definitions, challenges, applications, and vision. *Future Internet*, 12(12):208, November 25, 2020. CODEN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/12/208>.
- [Bikowski2016:AML] Kamil Bikowski. Application of machine learning algorithms for Bitcoin automated trading. In *Machine Intelligence and Big Data in Industry*, pages 161–168. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-30315-5. URL http://link.springer.com/chapter/10.1007/978-3-319-30315-4_14.

- [BILN21] **Bisogni:2021:ENE**
Carmen Bisogni, Gerardo Iovane, Riccardo Emanuele Landi, and Michele Nappi. ECB2: a novel encryption scheme using face biometrics for signing blockchain transactions. *Journal of Information Security and Applications (JISA)*, 59(??):??, June 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000545>. [BK17a]
- [Bit09] **BCD:2009:BCI**
Bitcoin Core Developers. Bitcoin core integration/staging tree. Web site, 2009. URL <https://github.com/bitcoin/bitcoin/>.
- [BJ20] **Benil:2020:CBS**
T. Benil and J. Jasper. Cloud based security on outsourcing using blockchain in e-health systems. *Computer Networks (Amsterdam, Netherlands: 1999)*, 178(??):Article 107344, September 4, 2020. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128619316986>. [BK17b] [BK17c]
- [BK14] **Bentov:2014:HUB**
Ido Bentov and Ranjit Kumaresan. How to use Bitcoin to design fair protocols. In *Advances in Cryptology CRYPTO 2014*, pages 421–439. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-662-44380-5 (paperback), 3-662-44381-3 (e-book). URL http://link.springer.com/chapter/10.1007/978-3-662-44381-1_24.
- Bhardwaj:2017:BTD**
Shweta Bhardwaj and Manish Kaushik. Blockchain — technology to drive the future. In *Smart Computing and Informatics*, pages 263–271. Springer Singapore, October 2017.
- Biryukov:2017:EAP**
Alex Biryukov and Dmitry Khovratovich. Equihash: Asymmetric proof-of-work based on the generalized birthday problem. *Ledger*, 2(??):1–30, ??? 2017. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/48>.
- Boshrooyeh:2017:IAI**
Sanaz Taheri Boshrooyeh and Alptekin Küpçü. Anonymous: Anonymous invitation-based system. In Garcia-Alfaro et al. [GANAHHJ17], pages 219–235. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743

(print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_13.

Bhardwaj:2018:BTB

[BK18]

Shweta Bhardwaj and Manish Kaushik. Blockchain — technology to drive the future. In *Smart Computing and Informatics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-981-10-5547-8_28. [BKP14]

Baniata:2022:PPA

[BK22]

Hamza Baniata and Attila Kertesz. PriFoB: a privacy-aware fog-enhanced blockchain-based system for global accreditation and credential verification. *Journal of Network and Computer Applications*, 205(??):??, September 2022. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804522000935>. [BKS19]

Bore:2017:TBE

[BKM⁺17]

Nelson Bore, Samuel Karumba, Juliet Mutahi, Shelby Solomon Darnell, Charity Wayua, and Komminist Welde-mariam. Towards blockchain-

enabled school information hub. In *Proceedings of the Ninth International Conference on Information and Communication Technologies and Development*, ICTD '17, pages 19:1–19:4. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5277-4. URL <http://doi.acm.org/10.1145/3136560.3136584>.

Biryukov:2014:DCB

Alex Biryukov, Dmitry Khovratovich, and Ivan Pustogarov. Deanonymisation of clients in Bitcoin P2P network. In *Proceedings of the 2014 ACM SIGSAC Conference on Computer and Communications Security*, CCS '14, pages 15–29. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-2957-8. URL <http://doi.acm.org/10.1145/2660267.2660379>.

Bertino:2019:DTB

Elisa Bertino, Ahish Kundu, and Zehra Sura. Data transparency with blockchain and AI ethics. *Journal of Data and Information Quality (JDIQ)*, 11(4):16:1–16:??, September 2019. CODEN ???? ISSN 1936-1955. URL https://dl.acm.org/ft_gateway.cfm?id=3312750.

- [BKT17] Alex Biryukov, Dmitry Khovratovich, and Sergei Tikhomirov. Findel: Secure derivative contracts for Ethereum. In *Financial Cryptography and Data Security*, pages 453–467. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-70278-5. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_28. **Biryukov:2017:FSD**
- [Bla18] Benjamin M. Blau. Price dynamics and speculative trading in Bitcoin. *Research in International Business and Finance*, 43(??):15–21, January 2018. CODEN ????. ISSN 0275-5319 (print), 1878-3384 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0275531917304750>. **Blau:2018:PDS**
- [BKV22] Gaurav Baranwal, Dinesh Kumar, and Deo Prakash Vidyarthi. BARA: a blockchain-aided auction-based resource allocation in edge computing enabled industrial internet of things. *Future Generation Computer Systems*, 135(??):333–347, October 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22001728>. **Baranwal:2022:BBA**
- [BLB⁺21] Sotirios Brotsis, Konstantinos Limniotis, Guel-toum Bendiab, Nicholas Kolokotronis, and Stavros Shiales. On the suitability of blockchain platforms for IoT applications: Architectures, security, privacy, and performance. *Computer Networks (Amsterdam, Netherlands: 1999)*, 191(??):??, May 22, 2021. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621001225>. **Brotsis:2021:SBP**
- [BL22] Karam Eddine Bilami and Pascal LORENZ. Lightweight blockchain-based scheme to secure wireless M2M area networks. *Future Internet*, 14(5):158, May 23, 2022. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/5/158>. **Bilami:2022:LBB**
- [BLBS17] Jonathan Bell, Thomas D. LaToza, Foteini Baldimitsi, and Angelos Stavrou. Advancing open science with version control and blockchains. In *Proceedings of the 12th Interna-*

tional Workshop on Software Engineering for Science, SE4Science '17, pages 13–14. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5386-2791-4.

Braeken:2020:BCS

[BLKD20]

A. Braeken, M. Liyanage, S. S. Kanhere, and S. Dixit. Blockchain and cyberphysical systems. *Computer*, 53(9):31–35, 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

Brincat:2019:UBT

[BLMQ19]

Alberto Attilio Brincat, Alfio Lombardo, Giacomo Morabito, and Salvatore Quattropiani. On the use of Blockchain technologies in WiFi networks. *Computer Networks (Amsterdam, Netherlands: 1999)*, 162(??): Article 106855, 2019. CODEN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128619306073>

Bentov:2014:PAE

[BLMR14]

Iddo Bentov, Charles Lee, Alex Mizrahi, and Meni Rosenfeld. Proof of activity: Extending Bitcoin's proof of work via proof of stake [extended ab-

stract]y. *ACM SIGMETRICS Performance Evaluation Review*, 42(3):34–37, December 2014. CODEN 1557-9484 (print), 1557-9484 (electronic). URL <https://dblp.org/db/journals/sigmetrics/sigmetrics42.html#BentovLMR14>; <https://www.wikidata.org/entity/Q111687941>.

Bartoletti:2020:VRB

[BLMZ20]

Massimo Bartoletti, Stefano Lande, Mauriziourgia, and Roberto Zunino. Verification of recursive bitcoin contracts. *CoRR*, abs/2011.14165(??):??, 2020. CODEN 14165; URL <https://arxiv.org/abs/2011.14165>; <https://dblp.org/db/journals/corr/corr2011.html#abs-2011-14165>.

Bartoletti:2022:VLR

[BLMZ22]

Massimo Bartoletti, Stefano Lande, Mauriziourgia, and Roberto Zunino. Verifying liquidity of recursive bitcoin contracts. *Log. Methods Comput. Sci.*, 18(1):??, 2022. CODEN 18(1):??, 2022. CODEN 18(1):??, 2022. ISSN 18(1):??, 2022. URL <https://dblp.org/db/journals/lmcs/lmcs18.html#BartolettiLMZ22>

Buccafurri:2017:OLB

[BLNN17a]

Francesco Buccafurri, Gianluca Lax, Serena Nico-

- lazzo, and Antonino Nocera. Overcoming limits of blockchain for IoT applications. In *Proceedings of the 12th International Conference on Availability, Reliability and Security*, ARES '17, pages 26:1–26:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5257-X. URL <http://doi.acm.org/10.1145/3098954.3098983>. [BLP17]
- Buccafurri:2017:TAB**
- [BLNN17b] Francesco Buccafurri, Gianluca Lax, Serena Nicolazzo, and Antonino Nocera. Tweetchain: An alternative to blockchain for crowd-based applications. In *Web Engineering*, Lecture Notes in Computer Science, pages 386–393. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-60131-1_24. [BLPB17]
- Blocher:2018:CSB**
- [Blo18] Walter Blocher. C2B statt B2C? — Auswirkungen von Blockchain, Smart Contracts & Co. auf die Rolle des Verbrauchers. (German) [C2B instead of B2C? — impact of blockchain, smart contracts & co. on the role of the consumer]. In *Entgrenzung des Konsums*, pages 87–107. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., October 2018. URL http://link.springer.com/chapter/10.1007/978-3-658-19339-3_6. [Bartoletti:2017:PSP]
- Bartoletti:2017:PSP**
- Massimo Bartoletti, Stefano Lande, and Alessandro Sebastian Podda. A proof-of-stake protocol for consensus on Bitcoin subchains. In Jakobsson et al. [JRB⁺17], pages 568–584. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_36. [Bartoletti:2017:GFB]
- Bartoletti:2017:GFB**
- Massimo Bartoletti, Stefano Lande, Livio Pompanu, and Andrea Bracciali. A general framework for blockchain analytics. In *Proceedings of the 1st Workshop on Scalable and Resilient Infrastructures for Distributed Ledgers*, SERIAL '17, pages 7:1–7:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5173-5. URL <http://doi.acm.org/10.1145/3152824.3152831>. [Bergquist:2017:DCT]
- Bergquist:2017:DCT**
- Jonatan Bergquist, Aron Laszka, Monika Sturm, and Abhishek Dubey. On the

- design of communication and transaction anonymity in blockchain-based transactive microgrids. In *Proceedings of the 1st Workshop on Scalable and Resilient Infrastructures for Distributed Ledgers*, SERIAL '17, pages 3:1–3:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5173-5. URL <http://doi.acm.org/10.1145/3152824.3152827>.
- [BLZ20] Massimo Bartoletti, Stefano Lande, and Roberto Zunino. Computationally sound bitcoin tokens. *CoRR*, ??(??):??, 2020. CODEN ???? ISSN ???? URL <https://arxiv.org/abs/2010.01347>; <https://dblp.org/db/journals/corr/corr2010.html#abs-2010-01347>.
- [BM20] R. Bala and R. Manoharan. Enhanced bitcoin protocol with effective block creation and verification by trusted miners. *EAI Endorsed Trans. Scalable Inf. Syst.*, 7(27):e8, 2020. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/sis/sis7.html#BalaM20>.
- [BMC⁺15] Joseph Bonneau, Andrew Miller, Jeremy Clark, Arvind Narayanan, Joshua A. Kroll, and Edward W. Felten. SoK: Research perspectives and challenges for Bitcoin and cryptocurrencies. In *2015 IEEE Symposium on Security and Privacy*, pages 104–121. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2015. ISSN 1081-6011 (print), 2375-1207 (electronic). URL <http://www.jbonneau.com/doc/BMCNKF15-IEEEESP-bitcoin.pdf>.
- [BMSS17] Stefano Bistarelli, Marco Mantilacci, Paolo Santancini, and Francesco Santini. An end-to-end voting-system based on Bitcoin. In *Proceedings of the Symposium on Applied Computing, SAC '17*, pages 1836–1841. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4486-0.
- [BMSS19] Stefano Bistarelli, Ivan Mercanti, Paolo Santancini, and Francesco Santini. End-to-end voting with non-permissioned and permissioned ledgers. *Journal of Grid Computing*, 17(1):97–118, March 2019. CODEN ???? ISSN 1570-7873 (print), 1572-9184 (electronic). URL

<https://link.springer.com/article/10.1007/s10723-019-09478-y>. [BNMH17]

Badertscher:2017:BTL

- [BMTZ17] Christian Badertscher, Ueli Maurer, Daniel Tschudi, and Vassilis Zikas. Bitcoin as a transaction ledger: A composable treatment. In *Advances in cryptology — CRYPTO 2017. 37th annual international cryptology conference, Santa Barbara, CA, USA, August 20–24, 2017. Proceedings. Part I*, pages 324–356. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-63687-1 (paperback), 3-319-63688-X (ebook). URL http://link.springer.com/chapter/10.1007/978-3-319-63688-7_11. [BO17]

Bonneau:2014:MAB

- [BNM⁺14] Joseph Bonneau, Arvind Narayanan, Andrew Miller, Jeremy Clark, Joshua A. Kroll, and Edward W. Fellen. Mixcoin: Anonymity for Bitcoin with accountable mixes. In Christin and Safavi-Naini [CSN14], pages 486–504. ISBN 3-662-45472-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-45472-5_31. [Bog17]

Bailis:2017:RPC

Peter Bailis, Arvind Narayanan, Andrew Miller, and Song Han. Research for practice: Cryptocurrencies, blockchains, and smart contracts; hardware for deep learning. *Communications of the ACM*, 60(5): 48–51, May 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2017/5/216321/fulltext>.

Bracamonte:2017:ESI

Vanessa Bracamonte and Hitoshi Okada. An exploratory study on the influence of guidelines on crowdfunding projects in the Ethereum blockchain platform. In *Social Informatics*, Lecture Notes in Computer Science, pages 347–354. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-67256-8. URL http://link.springer.com/chapter/10.1007/978-3-319-67256-4_27.

Bogner:2017:SUA

Andreas Bogner. Seeing is understanding: Anomaly detection in blockchains with visualized features. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive*

- and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers*, UbiComp '17, pages 5–8. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5190-5. URL <http://doi.acm.org/10.1145/3123024.3123157>. [Bon14a]
- [Böh13] Rainer Böhme. Internet protocol adoption: Learning from Bitcoin. In ????, editor, *Proceedings of the IAB Workshop on Internet Technology Adoption and Transition (ITAT)*, Cambridge, UK, page ?? ????, 2013. [Bon14b]
- [Boi18] Olivier Boireau. Securing the blockchain against hackers. *Network Security*, 2018(1):8–11, January 2018. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485818300060>. [Bon16a]
- [BOLL14] George Bissias, A. Pinar Ozisik, Brian N. Levine, and Marc Liberatore. Sybil-resistant mixing for Bitcoin. In *Proceedings of the 13th Workshop on Privacy in the Electronic Society*, WPES '14, pages 149–158. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-3148-3. [Bon16b]
- Bonneau:2014:EPC**
- Joseph Bonneau. Estimating the power consumption of Bitcoin. In ????, editor, *Proceedings of the Financial Cryptography and Data Security, 18th International Conference (rump session)*, Bridgetown, Barbados, 4 March 2014, page ?? ????, 2014.
- Bonneau:2014:WAM**
- Joseph Bonneau. Why ASICs may be good for Bitcoin. Web blog., December 12, 2014. URL <https://freedomto-tinker.com/blog/jbonneau/why-asics-may-be-good-for-bitcoin/>.
- Bonaiuti:2016:EIM**
- Gianni Bonaiuti. Economic issues on M-payments and Bitcoin. In *Bitcoin and Mobile Payments*, pages 27–51. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 1-137-57512-3. URL http://link.springer.com/chapter/10.1057/978-1-137-57512-8_2.
- Bonneau:2016:EUE**
- Joseph Bonneau. EthIKS: Using Ethereum to audit a CONIKS key transparency

log. In *Financial Cryptography and Data Security*, pages 95–105. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-662-53357-X. URL http://link.springer.com/chapter/10.1007/978-3-662-53357-4_7.

Briere:2015:VCT

[BOS15]

Marie Brière, Kim Oosterlinck, and Ariane Szafarz. Virtual currency, tangible return: Portfolio diversification with Bitcoin. *Journal of Asset Management*, 16(6): 365–373, October 2015. CODEN ??? ISSN 1470-8272 (print), 1479-179X (electronic). URL <http://link.springer.com/article/10.1057/jam.2015.5>; http://papers.ssrn.com/sol3/paper.cfm?abstract_id=2324780.

Boehm:2014:BFL

[BP14]

Franziska Boehm and Paulina Pesch. Bitcoin: A first legal analysis. In Christin and Safavi-Naini [CSN14], pages 43–54. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_4.

Biryukov:2015:BTI

[BP15]

A. Biryukov and I. Pustogarov. Bitcoin over Tor

isn't a good idea. In *2015 IEEE Symposium on Security and Privacy*, pages 122–134. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2015. ISSN 1081-6011 (print), 2375-1207 (electronic).

Bartoletti:2017:ABO

Massimo Bartoletti and Livio Pompianu. An analysis of Bitcoin OP_RETURN metadata. In Jakobsson et al. [JRB⁺17], pages 218–230. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_14.

Bohme:2017:TGD

Rainer Böhme and Paulina Pesch. Technische Grundlagen und datenschutzrechtliche Fragen der Blockchain-Technologie. (German) [Technical basics and data protection questions of blockchain technology]. *Datenschutz und Datensicherheit — DuD*, 41(8):473–481, August 2017. CODEN ??? ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0815-y>.

- [BPT⁺22] **Bhattacharya:2022:MMM** Pronaya Bhattacharya, Farnazbanu Patel, Sudeep Tanwar, Neeraj Kumar, and Ravi Sharma. MB-MaaS: Mobile blockchain-based mining-as-a-service for IIoT environments. *Journal of Parallel and Distributed Computing*, 168(??):1–16, October 2022. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731522001228>. [Bra13]
- [BR16] **Bolici:2016:MGD** Francesco Bolici and Sara Della Rosa. Mt.Gox is dead, long live Bitcoin! In *Empowering Organizations*, pages 285–296. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-23784-5. URL http://link.springer.com/chapter/10.1007/978-3-319-23784-8_22. [Bra15a]
- [BR17] **Benchoufi:2017:BTI** Mehdi Benchoufi and Philippe Ravaud. Blockchain technology for improving clinical research quality. *Trials*, 18(1), July 2017. CODEN ????. URL <http://link.springer.com/article/10.1186/s13063-017-2035-z>. [Bra17]
- Bradbury:2013:ATB** Danny Bradbury. Anti-theft Bitcoin tracking proposals divide Bitcoin communications. *CoinDesk*, November 15, 2013. URL <https://www.coindesk.com/bitcoin-tracking-proposal-divides-bitcoin-community/>.
- Bracey:2015:RPD** Earnest N. Bracey. *The role of politics in the development of virtual Bitcoin currency*. The Edwin Mellen Press, Lewiston, New York, 2015. ISBN 1-4955-0353-4 (hardcover). xviii + 223 pp. LCCN HG1710 .B7293 2015.
- Bradbury:2015:BSB** D. Bradbury. In blocks [security Bitcoin]. *Engineering Technology*, 10(2): 68–71, March 2015. ISSN 1750-9637 (print), 1750-9645 (electronic).
- Bradbury:2017:PB** Danny Bradbury. The problem with Bitcoin. *Computer Fraud & Security*, 2013(11):58–66, September 2017. ISSN 1361-3723 (print), 1873-7056 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1361372313701015>.

- [Bre17] **Brenig:2017:TTD**
Christian Brenig. *Transparency through decentralized consensus: the bitcoin blockchain and beyond*. Ph.D., Albert-Ludwigs-Universität, Freiburg, Germany, 2017. URL <http://search.proquest.com/pqdtglobal/docview/1966098099>. [BS15]
- [Bri21] **Brinkmann:2021:RBB**
Maik Brinkmann. The realities of blockchain-based new public governance: an explorative analysis of blockchain implementations in Europe. *Digital Government: Research and Practice (DGOV)*, 2(3):29:1–29:14, July 2021. CODEN ????. ISSN 2691-199X (print), 2639-0175 (electronic). URL <https://dl.acm.org/doi/10.1145/3462332>. [BS16]
- [BRS17] **Bag:2017:BBW**
S. Bag, S. Ruj, and K. Sakurai. Bitcoin block withholding attack: Analysis and mitigation. *IEEE Transactions on Information Forensics and Security*, 12(8):1967–1978, August 2017. ISSN 1556-6013 (print), 1556-6021 (electronic).
- [Brü17] **Bruhl:2017:BBD**
Volker Brühl. Bitcoins, Blockchain und Distributed Ledgers. *Wirtschaftsdienst*, 97(2):135–142, February 2017. [BS17a]
2017. CODEN ????. ISSN 0043-6275 (print), 1613-978X (electronic). URL <http://link.springer.com/article/10.1007/s10273-017-2096-3>.
- Beikverdi:2015:TCB**
A. Beikverdi and J. Song. Trend of centralization in Bitcoin’s distributed network. In *2015 IEEE/ACIS 16th International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2015.
- Bag:2016:YAN**
Samiran Bag and Kouichi Sakurai. Yet another note on block withholding attack on Bitcoin mining pools. In *Information Security*, pages 167–180. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-45871-X. URL http://link.springer.com/chapter/10.1007/978-3-319-45871-7_11.
- Bistarelli:2017:GBF**
Stefano Bistarelli and Francesco Santini. Go with the - Bitcoin- flow, with visual analytics. In *Proceedings*

of the 12th International Conference on Availability, Reliability and Security, ARES '17, pages 38:1–38:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5257-X.

[BSB16]

Bocek:2017:SCT

[BS17b]

Thomas Bocek and Burkhard Stiller. Smart contracts — blockchains in the wings. In *Digital Marketplaces Unleashed*, pages 169–184. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., September 2017.

Bocek:2018:SCB

[BS18]

Thomas Bocek and Burkhard Stiller. Smart contracts — blockchains in the wings. In Linnhoff-Popien et al. [LPSZ18], pages xxxiii + 935. ISBN 3-662-49274-1, 3-662-49275-X (e-book). LCCN QA75.5-76.95. URL http://link.springer.com/chapter/10.1007/978-3-662-49275-8_19.

[BSB19]

Bonnah:2020:DDS

[BS20]

Ernest Bonnah and Ju Shiguang. DecChain: a decentralized security approach in edge computing based on blockchain. *Future Generation Computer Systems*, 113(??):363–379, December 2020. CODEN FGSEVI. ISSN 0167-739X

(print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19323933>

Bashir:2016:WMP

Masooda Bashir, Beth Strickland, and Jeremiah Bohr. What motivates people to use Bitcoin? In *Social Informatics*, pages 347–367. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-47874-5. URL http://link.springer.com/chapter/10.1007/978-3-319-47874-6_25.

Beres:2019:CTA

Ferenc Béres, István András Seres, and András A. Benczúr. A cryptoeconomic traffic analysis of bitcoins lightning network. *CoRR*, abs/1911.09432(??):??, ????. 2019. CODEN ????. ISSN ????. URL <http://arxiv.org/abs/1911.09432>; <https://dblp.org/db/journals/corr/corr1911.html#abs-1911-09432>.

Ben-Sasson:2014:ZDA

Eli Ben-Sasson, Alessandro Chiesa, Christina Garman, Matthew Green, Ian Miers, Eran Tromer, and Madars Virza. Zerocash: Decentralized anonymous payments from Bitcoin. In IEEE,

editor, *Proceedings of the 2014 IEEE Symposium on Security and Privacy*, 18–21 May 2014, page ?? IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

Bolonhez:2022:CBQ

[BSF22]

Eduardo Bolonhez, Thuener Silva, and Bruno Fanzeres. A core-based quota allocation model for the bitcoin-refunded blockchain network. *Expert Systems with Applications*, 209(?): 118201, 2022. CODEN ESAPEH. ISSN 2009-9913. URL <https://dblp.org/db/journals/eswa/eswa209.html#BolonhezSF22>■

Bao:2020:LSP

[BSK⁺20]

Zijian Bao, Wenbo Shi, Saru Kumari, Zhi yin Kong, and Chien-Ming Chen. Lockmix: a secure and privacy-preserving mix service for Bitcoin anonymity. *International Journal of Information Security*, 19(3):311–321, June 2020. CODEN 2020. ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-019-00459-6>. ■

Bedowska-Sojka:2021:BSK

[BSKR21]

Barbara Bedowska-Sójka, Agata Kliber, and Aleksandra Rutkowska. Is bit-

[BSLM20]

coin still a king? Relationships between prices, volatility and liquidity of cryptocurrencies during the pandemic. *Entropy*, 23(11): 1386, 2021. CODEN ENTRFG. ISSN 2076-3413. URL [https://dblp.org/db/journals/entropy23.html#Bedowska-SojkaK21](https://dblp.org/db/journals/entropy/entropy23.html#Bedowska-SojkaK21).

Biswas:2020:BHC

Sujit Biswas, Kashif Sharif, Fan Li, and Saraju Mohanty. Blockchain for e-health-care systems: Easier said than done. *Computer*, 53(7):57–67, July 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

Bessani:2017:BFT

Alysson Bessani, João Sousa, and Marko Vukolić. A Byzantine fault-tolerant ordering service for the hyperledger fabric blockchain platform. In *Proceedings of the 1st Workshop on Scalable and Resilient Infrastructures for Distributed Ledgers*, SERIAL '17, pages 6:1–6:2. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5173-5. URL <http://doi.acm.org/10.1145/3152824.3152830>.

Barnett:2018:ADR

Jeremy Barnett and Philip Treleaven. Algorithmic dis-

[BT18a]

- pute resolution — the automation of professional dispute resolution using AI and blockchain technologies. *The Computer Journal*, 61(3):399–408, March 1, 2018. CODEN CM-PJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL <http://academic.oup.com/comjnl/article/61/3/399/4608879>.
- [BT18b] Chris Burniske and Jack Tatar. *Cryptoassets: the innovative investor’s guide to Bitcoin and beyond*. McGraw-Hill, New York, NY, USA, 2018. ISBN 1-260-02667-1. ??? pp. LCCN HG1710 .B86 2018.
- [BTF⁺21] Eranga Bandara, Deepak Tosh, Peter Foytik, Sachin Shetty, Nalin Ranasinghe, and Kasun De Zoysa. Tikiri — towards a lightweight blockchain for IoT. *Future Generation Computer Systems*, 119(??):154–165, June 2021. CODEN FG-SEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21000583>.
- [BTS⁺21] Makwana Bhavin, Sudeep Tanwar, Navneet Sharma, Sudhanshu Tyagi, and Neeraj Kumar. Blockchain and quantum blind signature-based hybrid scheme for healthcare 5.0 applications. *Journal of Information Security and Applications (JISA)*, 56(??):??, February 2021. CODEN ????? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620308255>.
- [Burniske:2018:CII] [BTvdH20] Bert-Jan Butijn, Damian A. Tamburri, and Willem-Jan van den Heuvel. Blockchains: a systematic multivocal literature review. *ACM Computing Surveys*, 53(3):61:1–61:37, July 2020. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3369052>.
- [Bandara:2021:TTL] [Bue18] Tom Buerkle. Kodak last-gasp hope: KodakCoin. *New York Times*, ??(??):??, January 9, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/09/business/dealbook/kodak-bitcoin.html>.
- [Bhavin:2021:BQB] [But13a] Vitalik Buterin. Dagger: A memory-hard to compute, memory-easy to verify Script alternative. Report, ????, ????, December 2013.
- [Butijn:2020:BSM] [Buterin:2013:DMH]

- URL <http://vitalik.ca/ethereum/dagger.html>;
<http://www.hashcash.org/papers/dagger.html>. [BVGC22]
- [But13b] Vitalik Buterin. Ethereum: A next-generation smart contract and decentralized application platform. Web document., 2013. URL <http://ethereum.org/ethereum.html>.
- [But19] Oona Arlene Buttafoco. Emerging solutions for the improvement of food traceability in the EU: Examining the use of blockchain technology for tracing extra virgin olive oil (EVOO). Master’s, Uppsala Universitet, Uppsala, Sweden, 2019. URL <http://search.proquest.com/pqdtglobal/docview/2301551202>. [BW14]
- [BVCH22] Rafael Belchior, André Vasconcelos, Miguel Correia, and Thomas Hardjono. Hermes: Fault-tolerant middleware for blockchain interoperability. *Future Generation Computer Systems*, 129(??):236–251, April 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21004337>. [BW17]
- [Belchior:2022:SBI] Rafael Belchior, André Vasconcelos, Sérgio Guerreiro, and Miguel Correia. A survey on blockchain interoperability: Past, present, and future trends. *ACM Computing Surveys*, 54(8):168:1–168:41, November 2022. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3471140>.
- [Bergstra:2014:BML] Jan A. Bergstra and Peter Weijland. Bitcoin: a money-like informational commodity. *CoRR*, ??(??):??, ??? 2014. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1402.4778>; <https://dblp.org/db/journals/corr/corr1402.html#BergstraW14>.
- [Burniske:2017:BRB] C. Burniske and A. White. Bitcoin: Ringing the bell for a new asset class. Research white paper, Ark Invest, 55 West 19th, 5th Floor New York, NY 10011, USA, January 2017. URL https://research.ark-invest.com/hubfs/1_Download_Files_ARK-Invest/White_Papers/Bitcoin-Ringing-The-Bell-For-A-New-Asset-Class.pdf.

- [BWZ17] **Bandelj:2017:MTE**
 Nina Bandelj, Frederick F. Wherry, and Viviana A. Rotman Zelizer, editors. *Money talks: explaining how money really works*. Princeton University Press, Princeton, NJ, USA, 2017. ISBN 0-691-16868-7 (hardcover). xii + 269 pp. LCCN HG221 .M8143 2017.
- [BYR⁺20] **Bai:2020:QEP**
 Shuangjie Bai, Geng Yang, Chunming Rong, Guoxiu Liu, and Hua Dai. QHSE: an efficient privacy-preserving scheme for blockchain-based transactions. *Future Generation Computer Systems*, 112(??):930–944, November 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21003345>.
- [Bys19] **Bystrom:2019:BRT**
 Hans Byström. Blockchains, real-time accounting, and the future of credit risk modeling. *Ledger*, 4(??):??, ??? 2019. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/100>.
- [BZ17] **Bartoletti:2017:CDM**
 Massimo Bartoletti and Roberto Zunino. Constant-deposit multiparty lotteries on Bitcoin. In Jakobsson et al. [JRB⁺17], pages 231–247. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_15.
- [BZK⁺21] **BrundoUriarte:2021:DSL**
 Rafael Brundo Uriarte, Huan Zhou, Kyriakos Kritikos, Zeshun Shi, Zhiming Zhao, and Rocco De Nicola. Distributed service-level agreement management with smart contracts and blockchain. *Concurrency and Computation: Practice and Experience*, 33(14):e5800:1–e5800:??, July 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- Cavalli:2021:CBM**
 Stefano Cavalli and Michele Amoretti. CNN-based multivariate data analysis for bitcoin trend prediction. *Appl. Soft Comput.*, 101(??):107065, ??? 2021. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/asc/asc101.html#CavalliA21>.
- Cheema:2022:BBS**
 Muhammad Asaad Cheema, Rafay Iqbal Ansari, Nouman Ashraf, Syed Ali Hassan, Hassaan Khaliq Qureshi, Ali Kashif Bashir, and

- Christos Politis. Blockchain-based secure delivery of medical supplies using drones. *Computer Networks (Amsterdam, Netherlands: 1999)*, 204(??):??, February 26, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621005661>. [CAMS20]
- [Cae15] Richard Caetano. *Learning Bitcoin: embrace the new world of flance by leveraging the power of cryptocurrencies using Bitcoin and Blockchain*. Community experience distilled. Packt Publishing, Birmingham, 2015. ISBN 1-78528-730-3 (paperback), 1-78528-615-3 (e-book). xi + 211 pp. LCCN HF5548.32 .C34 2015eb.
- [Cal21] Evarest Callens. Financial instruments entail liabilities: Ether, bitcoin, and litecoin do not. *Comput. Law Secur. Rev.*, 40(??):105494, ???? 2021. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/clsr/clsr40.html#Callens21>. [Cap15]
- [Cal22] Giulio Caldarelli. Overview of blockchain oracle research. *Future Internet*, 14(6):175, June 08, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/6/175>. [Coblenz:2020:CAT]
- Michael Coblenz, Jonathan Aldrich, Brad A. Myers, and Joshua Sunshine. Can advanced type systems be usable? An empirical study of ownership, assets, and typestate in Obsidian. *Proceedings of the ACM on Programming Languages (PACMPL)*, 4(OOPSLA):132:1–132:28, November 2020. URL <https://dl.acm.org/doi/10.1145/3428200>. [Cap:2012:BOS]
- Prof.Dr.Clemens H. Cap. Bitcoin das Open-Source-Geld. (German) [Bitcoin the open-source gold]. *HMD Praxis der Wirtschaftsinformatik*, 49(1):84–93, February 2012. CODEN ???? ISSN 1436-3011 (print), 2198-2775 (electronic). URL <http://link.springer.com/article/10.1007/BF03340666>. [Capaccioli:2015:CBU]
- Stefano Capaccioli. *Criptovalute e Bitcoin: un'analisi giuridica. (Italian) [Cryptocurrencies and Bitcoins: a legal analysis]*, volume 4 of *Informatica giuridica*. Giuffrè Editore, Milano, Italy, 2015. ISBN 88-14-20698-8. xvi + 285 pp. LCCN KKH961 .C37 2015.

- [Car15] **Carmona:2015:BCF**
 Anais Carmona. The Bitcoin: The currency of the future, fuel of terror. In *Evolution of Cyber Technologies and Operations to 2035*, pages 127–135. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-23585-0. URL http://link.springer.com/chapter/10.1007/978-3-319-23585-1_9. [CBWF17]
- [Cas12] **Castro:2012:BPN**
 Sebastian Castro. Bitcoin P2P network sniffer v0.0.2. Web site., 2012. URL <https://github.com/sebicas/bitcoin-sniffer>.
- [CAS21] **Chaudhari:2021:TMA**
 Deepesh Chaudhari, Rachit Agarwal, and Sandeep Kumar Shukla. Towards malicious address identification in bitcoin. *CoRR*, ??(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2112.11721>; <https://dblp.org/db/journals/corr/corr2112.html#abs-2112-11721>. [CC16]
- [CBST22] **Cortesi:2022:NAB**
 Eugenio Cortesi, Francesco Bruschi, Stefano Secci, and Sami Taktak. A new approach for Bitcoin pool-hopping detection. *Computer Networks (Amsterdam, Netherlands: 1999)*, 205(??):??, March 14, 2022. CODEN ??? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621006009>. **Chanson:2017:BPE**
 Mathieu Chanson, Andreas Bogner, Felix Wortmann, and Elgar Fleisch. Blockchain as a privacy enabler: An odometer fraud prevention system. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers*, UbiComp '17, pages 13–16. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5190-5. URL <http://doi.acm.org/10.1145/3123024.3123078>. **Cankaya:2016:IBE**
 Ebru Celikel Cankaya and Luke Daniel Carr. Implementing a Bitcoin exchange with enhanced security. In *Information Technology: New Generations*, pages 257–266. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-32467-5. URL http://link.springer.com/chapter/10.1007/978-3-319-32467-5_25.

- springer.com/chapter/
10.1007/978-3-319-32467-
8_24. [CCH⁺20]
- [CCA⁺20] **Coelho:2020:CPI**
Igor M. Coelho, Vitor N. Coelho, Rodolfo P. Araujo, Wang Yong Qiang, and Brett D. Rhodes. Challenges of PBFT-inspired consensus for blockchain and enhancements over neo dBFT. *Future Internet*, 12 (8):129, July 30, 2020. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/8/129>. [CCH21]
- [CCC19] **Chen:2019:IAS**
Yi-Cheng Chen, Yueh-Peng Chou, and Yung-Chen Chou. An image authentication scheme using Merkle tree mechanisms. *Future Internet*, 11(7):149, July 06, 2019. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/7/149>.
- [CCG21] **Chan:2021:SSB** [CCMN17]
Wai Kok Chan, Ji-Jian Chin, and Vik Tor Goh. Simple and scalable blockchain with privacy. *Journal of Information Security and Applications (JISA)*, 58 (??):??, May 2021. CODEN ??? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620308474>
- Cao:2020:BAA**
Sean Cao, Lin William Cong, Meng Han, Qixuan Hou, and Baozhong Yang. Blockchain architecture for auditing automation and trust building in public markets. *Computer*, 53(7): 20–28, July 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- Chow:2021:EAP**
Sherman S. M. Chow, Kim-Kwang Raymond Choo, and Jinguang Han. Editorial for accountability and privacy issues in blockchain and cryptocurrency. *Future Generation Computer Systems*, 114(??):647–648, January 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X20326637>
- Castellanos:2017:CGO**
J. Alejandro F. Castellanos, Debora Coll-Mayor, and José Antonio Notholt. Cryptocurrency as guarantees of origin: Simulating a green certificate market with the Ethereum blockchain. In *2017 IEEE International Conference on Smart Energy Grid Engineering (SEGE)*, pages 367–372. IEEE Computer Society Press, 1109 Spring

- Street, Suite 300, Silver Spring, MD 20910, USA, August 2017. URL <http://ieeexplore.ieee.org/document/8052827/>. [CDM20]
- Camenisch:2017:PUS**
- [CDD17] Jan Camenisch, Manu Drjvers, and Maria Dubovitskaya. Practical UC-Secure delegatable credentials with attributes and their application to blockchain. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security, CCS '17*, pages 683–699. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3. URL <http://doi.acm.org/10.1145/3133956.3134025>. [CDS+19]
- Croman:2016:SDB**
- [CDE+16] Kyle Croman, Christian Decker, Ittay Eyal, Adem Efe Gencer, Ari Juels, Ahmed Kosba, Andrew Miller, Prateek Saxena, Elaine Shi, Emin Gün Sirer, Dawn Song, and Roger Wattenhofer. On scaling decentralized blockchains. In Clark et al. [CMR+16], pages 106–125. ISBN 3-662-53356-1 (print), 3-662-53357-X (e-book). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-53357-4_8. [CDZ+20]
- Clark:2020:DS**
- Jeremy Clark, Didem Demirag, and Seyedehmahsa Moosavi. Demystifying Stablecoins. *Communications of the ACM*, 63(7):40–46, July 2020. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3386275>.
- Curbera:2019:BEH**
- F. Curbera, D. M. Dias, V. Simonyan, W. A. Yoon, and A. Casella. Blockchain: An enabler for healthcare and life sciences transformation. *IBM Journal of Research and Development*, 63(2–3):8:1–8:9, March/May 2019. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic).
- Clavin:2020:BGU**
- James Clavin, Sisi Duan, Haibin Zhang, Vandana P. Janeja, Karuna P. Joshi, Yelena Yesha, Lucy C. Erickson, and Justin D. Li. Blockchains for government: Use cases and challenges. *Digital Government: Research and Practice (DGOV)*, 1(3):22:1–22:21, December 2020. CODEN ???? ISSN 2691-199X (print), 2639-0175 (electronic). URL <https://dl.acm.org/doi/10.1145/3427097>.

- [CE12] **Clark:2012:CCD** Jeremy Clark and Alexander Essex. CommitCoin: Carbon dating commitments with Bitcoin. In Keromytis [Ker12], pages 390–398. CODEN LNCSD9. ISBN 3-642-32946-2. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25 F3 2012. URL http://link.springer.com/chapter/10.1007/978-3-642-32946-1_3_28.
- [CEW15] **Courtois:2015:DBM** N. T. Courtois, P. Emirdag, and Z. Wang. On detection of Bitcoin mining redirection attacks. In *2015 International Conference on Information Systems Security and Privacy (ICISSP)*, pages 98–105. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, February 2015.
- [CEL18] **Conti:2018:SSP** Mauro Conti, Sandeep Kumar E, Chhagan Lal, and Sushmita Ruj. A survey on security and privacy issues of bitcoin. *IEEE Commun. Surv. Tutorials*, 20(4):3416–3452, 2018. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/comsur/comsur20.html#ContiELR18>.
- [CFM⁺22] **Chen:2022:BBR** Lanxiang Chen, Qingxiao Fu, Yi Mu, Lingfang Zeng, Fatemeh Rezaeibagha, and Min-Shiang Hwang. Blockchain-based random auditor committee for integrity verification. *Future Generation Computer Systems*, 131(?):183–193, June 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000267>.
- [CEN14] **Courtois:2014:CBT** N. T. Courtois, P. Emirdag, and D. A. Nagy. Could Bitcoin transactions be 100× faster? In *2014 11th International Conference on Security and Cryptography (SECRYPT)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, August 2014.
- Cheah:2015:SBB** Eng-Tuck Cheah and John Fry. Speculative bubbles in Bitcoin markets? An empirical investigation into the fundamental value of Bitcoin. *Economics Letters*, 130:32–36, 2015. CODEN ECLEDS. ISSN 0165-1765 (print), 1873-7374 (electronic).

- MR3678694**
- [CFvdPS15] Kaylash Chaudhary, Ansgar Fehnker, Jaco van de Pol, and Marielle Stoelinga. Modeling and verification of the Bitcoin protocol. In *Proceedings Workshop on Models for Formal Analysis of Real Systems*, volume 196 of *Electron. Proc. Theor. Comput. Sci. (EPTCS)*, pages 46–60. EPTCS, [place of publication not identified], 2015.
- Catalini:2016:SSE**
- [CG16] C. Catalini and J. S. Gans. Some simple economics of the blockchain. Working Paper 2874598, Rotman School of Management, University of Toronto, Toronto, ON, Canada, 2016. URL https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2874598.
- Catalini:2020:SSE**
- [CG20] Christian Catalini and Joshua S. Gans. Some simple economics of the blockchain. *Communications of the ACM*, 63(7): 80–90, July 2020. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3359552>.
- Choo:2021:BES**
- [CGC21] Kim-Kwang Raymond Choo, Keke Gai, and Luca Chiaraviglio. Blockchain-enabled secure communications in smart cities. *Journal of Parallel and Distributed Computing*, 152(??):125–127, June 2021. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000423>.
- Chatzopoulos:2016:LAH**
- [CGFH16] Dimitris Chatzopoulos, Sujit Gujar, Boi Faltings, and Pan Hui. LocalCoin: An ad-hoc payment scheme for areas with high connectivity: Poster. In *Proceedings of the 17th ACM International Symposium on Mobile Ad Hoc Networking and Computing*, MobiHoc ’16, pages 365–366. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4184-5.
- Campanelli:2017:ZKC**
- [CGGN17] Matteo Campanelli, Rosario Gennaro, Steven Goldfeder, and Luca Nizzardo. Zero-knowledge contingent payments revisited: Attacks and payments for services. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security*, CCS ’17, pages 229–243. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3.

- [CGHC21] **Chen:2021:CPQ**
 Jiahui Chen, Wensheng Gan, Muchuang Hu, and Chien-Ming Chen. On the construction of a post-quantum blockchain for smart city. *Journal of Information Security and Applications (JISA)*, 58(??):??, May 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000284>. [CGN14]
- [CGJ⁺17] **Choudhuri:2017:FUW**
 Arka Rai Choudhuri, Matthew Green, Abhishek Jain, Gabriel Kapthuk, and Ian Miers. Fairness in an unfair world: Fair multiparty computation from public bulletin boards. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security, CCS '17*, pages 719–728. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3. URL <http://doi.acm.org/10.1145/3133956.3134092>. [CGR18]
- [CGLR19] **Chen:2019:FBB**
 Yuling Chen, Jinyi Guo, Changlou Li, and Wei Ren. FaDe: a blockchain-based fair data exchange scheme for big data sharing. *Future Internet*, 11(11):225, October 24, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/11/225>. [CGT⁺21]
- Courtois:2014:OSB**
 Nicolas T. Courtois, Marek Grajek, and Rahul Naik. Optimizing SHA256 in Bitcoin mining. In *Cryptography and Security Systems*, pages 131–144. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-662-44893-9. URL http://link.springer.com/chapter/10.1007/978-3-662-44893-9_12.
- Conti:2018:ESR**
 Mauro Conti, Ankit Gangwal, and Sushmita Ruj. On the economic significance of ransomware campaigns: a Bitcoin transactions perspective. *Computers & Security*, 79(??):162–189, November 2018. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818304334>.
- Choo:2021:ISI**
 Kkwang Raymond Choo, Uttam Ghosh, Deepak Tosh, Reza M. Parizi, and Ali Dehghantanha. Introduction to the special issue on Decentralized Blockchain Applications and Infrastructures for Next

- Generation Cyber-Physical Systems. *ACM Transactions on Internet Technology (TOIT)*, 21(2):38e:1–38e:3, June 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3464768>. [Cha14]
- [Cha81] David Chaum. Untraceable electronic mail, return addresses, and digital pseudonyms. *Communications of the ACM*, 24(2):84–88, 1981. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). [Che18]
- [Cha83] David Chaum. Blind signatures for untraceable payments. In Chaum et al. [CRS83], pages 199–203. ISBN 0-306-41637-9, 1-4757-0604-9 (print), 1-4757-0602-2. LCCN QA76.9.A25 C791 1983.
- [Cha85] David Chaum. Security without identification: transaction systems to make big brother obsolete. *Communications of the ACM*, 28(10):1030–1044, October 1985. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://www.acm.org/pubs/toc/> [Chi13]
- Abstracts/0001-0782/4373.html; <http://www.cl.cam.ac.uk/~fapp2/steganography/bibliography/1022.html>.
- Champagne:2014:BSC**
- Phil Champagne, editor. *The book of Satoshi: the collected writings of bitcoin creator Satoshi Nakamoto*. E53 Publishing LLC, 2014. ISBN 0-9960613-0-4 (hardcover), 0-9960613-1-2 (paperback). xix + 372 pp. LCCN HG1710 .P34 2014.
- Chen:2018:TCA**
- Rui-Yang Chen. A traceability chain algorithm for artificial neural networks using T-S fuzzy cognitive maps in blockchain. *Future Generation Computer Systems*, 80(??):198–210, March 2018. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X1730064X>
- Chirgwin:2013:ABB**
- Richard Chirgwin. Android bug batters Bitcoin wallets. *The Register*, ??(?):??, ??? 2013. URL https://www.theregister.co.uk/2013/08/12/android_bug_batters_bitcoin_wallets/
- Chiang:2018:BTC**
- Chun-Wei Chiang. Blockchain for trustful collaborations

between immigrants, citizens and governments. M.S., West Virginia University, Morgantown, WV, USA, 2018. 51 pp. URL <http://search.proquest.com/pqdtglobal/docview/2102140616>.

Conti:2019:BUB

[CHL19]

Mauro Conti, Muhammad Hassan, and Chhagan Lal. BlockAuth: Blockchain based distributed producer authentication in ICN. *Computer Networks (Amsterdam, Netherlands: 1999)*, 164(??):Article 106888, December 9, 2019. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128619308308>.

Christin:2013:TSR

[Chr13]

Nicolas Christin. Traveling the Silk Road: A measurement analysis of a large anonymous online marketplace. In *Proceedings of the 22Nd International Conference on World Wide Web, WWW '13*, pages 213–224. ACM Press, New York, NY 10036, USA, 2013. ISBN 1-4503-2035-X.

Churchill:2015:WSW

[Chu15]

Elizabeth F. Churchill. Why should we care about Bitcoin? *Interactions*

(New York, NY), 22(5):20–21, August 2015. CODEN IERAE3. ISSN 1072-5520 (print), 1558-3449 (electronic).

Campanile:2021:PRS

L. Campanile, M. Iacono, A. H. Levis, F. Marulli, and M. Mastroianni. Privacy regulations, smart roads, blockchain, and liability insurance: Putting technologies to work. *IEEE Security & Privacy*, 19(1):34–43, January/February 2021. ISSN 1540-7993 (print), 1558-4046 (electronic).

Cimpanu:2018:MSC

Catalin Cimpanu. \$3.3 million stolen from Coinsecure Bitcoin Exchange, inside job suspected. BleepingComputer Web story., April 12, 2018. URL <https://www.bleepingcomputer.com/news/security/33-million-stolen-from-coinsecure-bitcoin-exchange-inside-job-suspected/>.

Cimpanu:2018:MSM

Catalin Cimpanu. Microsoft stops malware campaign that tried to infect 400,000 users in 12 hours. BleepingComputer Web story., March 8, 2018. URL <https://www.bleepingcomputer.com/news/security/microsoft-stops-malware-campaign->

[CIL⁺21]

[Cim18a]

[Cim18b]

- that-trying-to-infect-400-000-users-in-12-hours/
- [Cim19] **Cimpanu:2019:MFF**
Catalin Cimpanu. \$145 million funds frozen after death of cryptocurrency exchange admin. Highly unlikely that the exchange and its users will ever get access to these funds ever again. ZD-Net Web site., February 2, 2019. URL <https://www.zdnet.com/article/145-million-funds-frozen-after-death-of-cryptocurrency-exchange-admin/>. [CK16]
- [CJA⁺19] **Chaudhary:2019:BBB**
Rajat Chaudhary, Anish Jindal, Gagangeet Singh Aujla, Shubhani Aggarwal, Neeraj Kumar, and Kim-Kwang Raymond Choo. *BEST: Blockchain-based secure energy trading in SDN-enabled intelligent transportation system*. *Computers & Security*, 85(??): 288–299, August 2019. CODEN CPSEU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S016740481831201X>. [CKWN16]
- [CJW17] **Chen:2017:BBP**
Po-Wei Chen, Bo-Sian Jiang, and Cia-Hui Wang. Blockchain-based payment collection supervision system using pervasive Bitcoin digital wallet. In *2017 IEEE 13th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob)*, pages 139–146. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2017. URL <http://ieeexplore.ieee.org/document/8115844/>.
- Chavez:2016:AHA**
J. J. G. Chávez and C. Kleber da Silva Rodrigues. Automatic hopping among pools and distributed applications in the Bitcoin network. In *2016 XXI Symposium on Signal Processing, Images and Artificial Vision (STSIWA)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, August 2016.
- Carlsten:2016:IBB**
Miles Carlsten, Harry Kalodner, S. Matthew Weinberg, and Arvind Narayanan. On the instability of Bitcoin without the block reward. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS '16*, pages 154–167. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://>

randomwalker.info/publications/mining_CCS.pdf.

Chen:2019:BBS

[CLC⁺19]

Lianxiang Chen, Wai-Kong Lee, Chin-Chen Chang, Kim-Kwang Raymond Choo, and Nan Zhang. Blockchain based searchable encryption for electronic health record sharing. *Future Generation Computer Systems*, 95(??): 420–429, June 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18314134>. [CLS19a]

Chi:2020:SED

[CLH⁺20]

Jiancheng Chi, Yu Li, Jing Huang, Jing Liu, Yingwei Jin, Chen Chen, and Tie Qiu. A secure and efficient data sharing scheme based on blockchain in industrial Internet of Things. *Journal of Network and Computer Applications*, 167(??): ??, October 1, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520301843>. [CLS19b]

Cheng:2021:AGS

[CLJ⁺21]

Lichen Cheng, Jiqiang Liu, Yi Jin, Yidong Li, and Wei Wang. Account guarantee scheme: Making anonymous accounts supervised in blockchain. *ACM Trans-* [CLS⁺19c]

actions on Internet Technology (TOIT), 21(1):11:1–11:19, February 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3406092>.

Chen:2019:DPB

Jian Chen, Zhihan Lv, and Houbing Song. Design of personnel big data management system based on blockchain. *Future Generation Computer Systems*, 101(??):1122–1129, December 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19313354>.

Chen:2019:BPP

Zheshi Chen, Chunhong Li, and Wenjun Sun. Bitcoin price prediction using machine learning: an approach to sample dimension engineering. *Journal of Computational and Applied Mathematics*, ??(??):Article 112395, ???? 2019. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S037704271930398X>.

Cheng:2019:PBM

Lichen Cheng, Jiqiang Liu, Chunhua Su, Kaitai Liang, Guangquan Xu, and Wei

- Wang. Polynomial-based modifiable blockchain structure for removing fraud transactions. *Future Generation Computer Systems*, 99(??):154–163, October 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19303012>. [CLT⁺20]
- [CLS20] Zheshi Chen, Chunhong Li, and Wenjun Sun. Bitcoin price prediction using machine learning: an approach to sample dimension engineering. *Journal of Computational and Applied Mathematics*, 365(??):Article 112395, February 2020. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S037704271930398X>. [CLXW22]
- [CLS⁺21] Weimin Chen, Xinran Li, Yuting Sui, Ningyu He, Haoyu Wang, Lei Wu, and Xiapu Luo. SAD-Ponzi: Detecting and characterizing Ponzi schemes in Ethereum smart contracts. *ACM SIGMETRICS Performance Evaluation Review*, 49(1):35–36, June 2021. CODEN ????. ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3543516.3460105>. [Cao:2020:BBA]
- Huikang Cao, Ruixuan Li, Wenlong Tian, Zhiyong Xu, and Weijun Xiao. Blockchain-based accountability for multi-party oblivious RAM. *Journal of Parallel and Distributed Computing*, 137(??):224–237, March 2020. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731519303387>. [Chen:2022:SBB]
- Biwen Chen, Xue Li, Tao Xiang, and Peng Wang. SBRAC: Blockchain-based sealed-bid auction with bidding price privacy and public verifiability. *Journal of Information Security and Applications (JISA)*, 65(??):??, March 2022. CODEN ????? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621002635>. [Chen:2020:UEG]
- Ting Chen, Zihao Li, Yuxiao Zhu, Jiachi Chen, Xiapu Luo, John Chi-Shing Lui, Xiaodong Lin, and Xiaosong Zhang. Understanding Ethereum via graph analysis. *ACM Transac-*

- tions on Internet Technology (TOIT)*, 20(2):18:1–18:32, May 2020. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3381036>. [CMJ21]
- [CM14] Brett Combs and Tom Mitsoff. *Bitcoin decoded*. Propellerhead Marketing Group, ????, USA, 2014. ISBN 0-615-95524-X. iii + 86 pp. LCCN HG231 .C662 2014; HF5548.32 .C6537 2014.
- [CM16] Melissa Chase and Sarah Meiklejohn. Transparency overlays and applications. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS ’16*, pages 168–179. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2978404>.
- [CM19] Jing Chen and Silvio Micali. Algorand: a secure and efficient distributed ledger. *Theoretical Computer Science*, 777(??):155–183, July 19, 2019. CODEN TC-SCDI. ISSN 0304-3975 (print), 1879-2294 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S030439751930091X>. [Chiu:2021:MDM]
- Wei-Yang Chiu, Weizhi Meng, and Christian D. Jensen. My data, my control: a secure data sharing and access scheme over blockchain. *Journal of Information Security and Applications (JISA)*, 63(??):??, December 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621001885>. [Corradini:2022:ETA]
- Flavio Corradini, Alessandro Marcelletti, Andrea Morichetta, Andrea Polini, Barbara Re, and Francesco Tiezzi. Engineering trustable and auditable choreography-based systems using blockchain. *ACM Transactions on Management Information Systems (TMIS)*, 13(3): 31:1–31:53, September 2022. CODEN ???? ISSN 2158-656X (print), 2158-6578 (electronic). URL <https://dl.acm.org/doi/10.1145/3505225>.
- [CMR⁺16] Jeremy Clark, Sarah Meiklejohn, Peter Y. A. Ryan, Dan Wallach, Michael Brenner, and Kurt Rohloff, editors. *Financial cryptography and data security FC*
- [Chen:2019:ASE]
- [Clark:2016:FCD]
- [Chase:2016:TOA]
- [Combs:2014:BD]

- 2016 International Workshops, BITCOIN, VOTING, and WAHC, Christ Church, Barbados, February 26, 2016: revised selected papers, volume 9604 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-662-53356-1 (print), 3-662-53357-X (e-book). LCCN QA76.9.A25. [CMT⁺21]
- [CMR⁺21] Mengji Chen, Taj Malook, Ateeq Ur Rehman, Yar Muhammad, Mohammad Dahman Alshehri, Aamir Akbar, Muhammad Bilal, and Muazzam A. Khan. Blockchain-enabled healthcare system for detection of diabetes. *Journal of Information Security and Applications (JISA)*, 58(??):??, May 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S221421262100020X>. [Cob17]
- [CMS21] Paulo Rupino Cunha, Paulo Melo, and Helder Sebastião. From bitcoin to central bank digital currencies: Making sense of the digital money revolution. *Future Internet*, 13(7):165, June 27, 2021. CODEN ???? ISSN 1999-5903.
- URL <https://www.mdpi.com/1999-5903/13/7/165>.
- Cocco:2021:BBT**
- Luisanna Cocco, Katiuscia Mannaro, Roberto Tonelli, Lorena Mariani, Matteo B. Lodi, Andrea Melis, Marco Simone, and Alessandro Fanti. A blockchain-based traceability system in agri-food SME: Case study of a traditional bakery. *IEEE Access*, 9:62899–62915, 2021. ISSN 2169-3536.
- Coblentz:2017:OSB**
- Michael Coblentz. Obsidian: A safer blockchain programming language. In *Proceedings of the 39th International Conference on Software Engineering Companion*, ICSE-C ’17, pages 97–99. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5386-1589-4.
- Coelho:2008:ACE**
- Fabien Coelho. An (almost) constant-effort solution-verification proof-of-work protocol based on Merkle trees. In Serge Vaudenay, editor, *Progress in Cryptology — AfriCrypt 2008: First International Conference on Cryptology in Africa, Casablanca, Morocco, June 11–14, 2008. Proceedings*, volume 5023

- of *Lecture Notes in Computer Science*, pages 80–93. Springer-Verlag, Berlin, [Coh20] Germany / Heidelberg, Germany / London, UK / etc., 2008. ISBN 3-540-68164-7. URL <http://www.hashcash.org/papers/merkle-proof.pdf>; https://link.springer.com/chapter/10.1007/978-3-540-68164-9_6.
- [COE⁺20a] Michael Coblenz, Reed Oei, Tyler Etzel, Paulette Koronkevich, Miles Baker, Yannick Bloem, Brad A. Myers, Joshua Sunshine, and Jonathan Aldrich. Obsidian: Typestate and assets for safer blockchain programming. *ACM Transactions on Programming Languages and Systems*, 42(3):14:1–14:82, December 2020. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). URL <https://dl.acm.org/doi/10.1145/3417516>. [Cou13]
- [Coe20b] Vitor Nazário Coelho. A MILP model for a Byzantine fault tolerant blockchain consensus. *Future Internet*, 12(11):185, October 29, 2020. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/11/185>. [Cou14]
- Coblenz:2020:OTA**
- Cohen:2020:FBT**
- Gil Cohen. Forecasting bitcoin trends using algorithmic learning systems. *Entropy*, 22(8):838, ??? 2020. CODEN ENTRFG. ISSN ????. URL <https://dblp.org/db/journals/entropy/entropy22.html#Cohen20>; <https://www.wikidata.org/entity/Q104107938>.
- Corso:2019:PAP**
- Amie Corso. Performance analysis of Proof-of-Elapsed-Time (PoET) consensus in the Sawtooth blockchain framework. M.S., University of Oregon, Eugene, OR, USA, 2019. 62 pp. URL <http://search.proquest.com/pqdtglobal/docview/2288064913>.
- Coutu:2013:DMB**
- Olivier Coutu. Decentralized mixers in Bitcoin. Web video., 2013. URL https://www.youtube.com/watch?v=6hc8qaR_Fok.
- Courtois:2014:LCR**
- Nicolas T. Courtois. On the longest chain rule and programmed self-destruction of crypto currencies. *arXiv.org*, ??(??):1–89, May 2, 2014. URL <http://arxiv.org/abs/1405.0534>; <http://dblp.org/rec/bib/journals/corr/Courtois14>.

- [Cou16] **Courtois:2016:FBS**
 Nicolas T. Courtois. Features or bugs: The seven sins of current Bitcoin. In *Banking Beyond Banks and Money*, pages 97–120. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-42448-3. URL http://link.springer.com/chapter/10.1007/978-3-319-42448-4_6. [CPM17]
- [CP17a] **Chow:2017:BMC**
 S. Chow and M. E. Peck. The Bitcoin mines of China. *IEEE Spectrum*, 54(10):46–53, October 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic). [CPMM21]
- [CP17b] **Connor:2017:EBT**
 Russell O. Connor and Marta Piekarska. Enhancing Bitcoin transactions with covenants. In Jakobsson et al. [JRB⁺17], pages 191–198. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_12.
- [CPL⁺21] **Chen:2021:PSD**
 Liang Chen, Jiaying Peng, Yang Liu, Jintang Li, Fenfang Xie, and Zibin Zheng. Phishing scams detection in Ethereum transaction network. *ACM Transactions on Internet Technology (TOIT)*, 21(1):10:1–10:16, February 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3398071>. [Cocco:2017:BBC]
- Cocco:2017:BBC**
 Luisanna Cocco, Andrea Pinna, and Michele Marchesi. Banking on blockchain: Costs savings thanks to the blockchain technology. *Future Internet*, 9(3):25, June 27, 2017. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/9/3/25>.
- Coutinho:2021:CHI**
 Felipe Ribas Coutinho, Victor Pires, Claudio Miceli, and Daniel S. Menasche. Crypto-hotwire: Illegal blockchain mining at zero cost using public infrastructures. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):4–7, May 2021. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3466826>. [3466830]
- Chen:2020:SES**
 Huashan Chen, Marcus Pendleton, Laurent Njilla, and Shouhuai Xu. A survey on Ethereum systems security: Vulnerabilities, at-

tacks, and defenses. *ACM Computing Surveys*, 53(3): 67:1–67:43, July 2020. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3391195>.

Colomo-Palacios:2020:CRB

- [CPSGAA20] Ricardo Colomo-Palacios, Mary Sánchez-Gordón, and Daniel Arias-Aranda. A critical review on blockchain assessment initiatives: a technology evolution viewpoint. *Journal of Software: Evolution and Process*, 32(11):e2272:1–e2272:??, November 2020. CODEN ??? ISSN 2047-7473 (print), 2047-7481 (electronic). [CR17]

Chen:2018:UVB

- [CQLL18] Chen Chen, Zhuyun Qi, Yirui Liu, and Kai Lei. Using virtualization for blockchain testing. In *Smart Computing and Communication*, Lecture Notes in Computer Science, pages 289–299. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-73830-7_29. [Cra17]

Coeckelbergh:2016:CNT

- [CR16] Mark Coeckelbergh and Wessel Reijers. Cryptocur-

rencies as narrative technologies. *ACM SIGCAS Computers and Society*, 45(3):172–178, January 2016. CODEN CMSCD3. ISSN 0095-2737 (print), 2167-3055 (electronic). URL <http://doi.acm.org/10.1145/2874239.2874264>.

Chakravorty:2017:UUC

Antorweep Chakravorty and Chunming Rong. Ushare: User controlled social media based on blockchain. In *Proceedings of the 11th International Conference on Ubiquitous Information Management and Communication*, IMCOM '17, pages 99:1–99:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4888-2. URL <http://doi.acm.org/10.1145/3022227.3022325>.

Craggs:2017:IBT

Barnaby Craggs. *Information bias and trust in bitcoin speculation*. Ph.D., Lancaster University (United Kingdom), Bailrigg, Lancashire, UK, 2017. URL <http://search.proquest.com/pqdtglobal/docview/2083755359>.

Ciaian:2016:DAV

Pavel Ciaian, Miroslava Rajcaniova, and d’Artis Kancs. The digital agenda of virtual currencies: Can BitCoin become a global

[CRdK16]

- currency? *Information Systems and e-Business Management*, 14(4):883–919, February 2016. CODEN ???? ISSN 1617-9846 (print), 1617-9854 (electronic). URL <http://link.springer.com/article/10.1007/s10257-016-0304-0>.
Cross:2018:WMC [CS20]
- [Cro18] Tim Cross. What to make of cryptocurrencies and blockchains. *The Economist*, ??(??):??, August 30, 2018. CODEN EONOE. ISSN 0013-0613 (print), 1476-8860 (electronic). URL <https://www.economist.com/technology-quarterly/2018/08/30/what-to-make-of-cryptocurrencies-and-blockchains>.
Chaum:1983:ACP
- [CRS83] David Chaum, Ronald L. Rivest, and Alan T. Sherman, editors. *Advances in Cryptology: Proceedings of CRYPTO '83 (21–24 August 1983: University of California, Santa Barbara)*. Plenum Press, New York, NY, USA; London, UK, 1983. ISBN 0-306-41637-9, 1-4757-0604-9 (print), 1-4757-0602-2. LCCN QA76.9.A25 C791 1983.
Crary:2015:PPA
- [CS15] Karl Crary and Michael J. Sullivan. Peer-to-peer affine commitment using Bitcoin. *ACM SIGPLAN Notices*, 50(6):479–488, June 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
Carver:2020:BSC
- Jeffrey C. Carver and Mirosław Staron. Blockchain and smart contract engineering. *IEEE Software*, 37(5):94–96, September/October 2020. CODEN IESOEG. ISSN 0740-7459 (print), 1937-4194 (electronic).
Courtois:2016:SOB
- Nicolas Courtois, Guangyan Song, and Ryan Castellucci. Speed optimizations in Bitcoin key recovery attacks. *Tatra Mountains Mathematical Publications*, 67:55–68, 2016. ISSN 1210-3195 (print), 1338-9750 (electronic).
Chatterjee:2018:BEI
- Jyotir Moy Chatterjee, Le Hoang Son, Srijani Ghatak, Raghvendra Kumar, and Manju Khari. BitCoin exclusively informational money: a valuable review from 2010 to 2017. *Quality & Quantity*, ??(??):191–198, ??? 2018. CODEN QQEJAV. ISSN 0033-5177 (print), 1573-

7845 (electronic). URL <http://link.springer.com/article/10.1007/s11135-017-0605-5>.

Ch:2020:SPU

[CSG⁺20]

Rupa Ch, Gautam Srivastava, Thippa Reddy Gadekallu, Praveen Kumar Reddy Maddikunta, and Sweta Bhattacharya. Security and privacy of UAV data using blockchain technology. *Journal of Information Security and Applications (JISA)*, 55(??):??, December 2020. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S221421262030822X>. [CSN14]

Cha:2021:BEC

[CSKP21]

Jeonghun Cha, Sushil Kumar Singh, Tae Woo Kim, and Jong Hyuk Park. Blockchain-empowered cloud architecture based on secret sharing for smart city. *Journal of Information Security and Applications (JISA)*, 57(??):??, March 2021. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620308383>. [CSZ⁺21]

Cheng:2017:TDL

[CSLD17]

Zhongqi Cheng, Tim Schmidt, Guantao Liu, and Rainer Doomer. Thread- and data-level parallel simulation in SystemC, a Bitcoin miner

case study. In IEEE, editor, *2017 IEEE International High Level Design Validation and Test Workshop (HLDVT)*, 5–6 October 2017, Santa Cruz, CA, USA, pages 74–81. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2017.

Christin:2014:FCD

Nicolas Christin and Reihaneh Safavi-Naini, editors. *Financial Cryptography and Data Security: FC 2014 Workshops, BITCOIN and WAHC 2014*, Christ Church, Barbados, March 7, 2014, Revised Selected Papers, volume 8438 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-662-44773-8 (print), 3-662-44774-6 (e-book). LCCN QA76.9.A25. URL <http://www.springerlink.com/content/978-3-662-44774-1>.

Cai:2021:CRS

Liang Cai, Yi Sun, Zibin Zheng, Jiang Xiao, and Weiwei Qiu. China region special section: Big trends: Blockchain in China. *Communications of the ACM*, 64(11):88–93, November 2021. CODEN CACMA2. ISSN 0001-0782

- (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/10.1145/3481627>.
Chenli:2022:PNB
- [CTGJ22] Changhao Chenli, Wenyi Tang, Frank Gomulka, and Taeho Jung. ProvNet: Networked bi-directional blockchain for data sharing with verifiable provenance. *Journal of Parallel and Distributed Computing*, 166(??):32–44, August 2022. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731522000818>.
Cocco:2019:ABM
- [CTM19] Luisanna Cocco, Roberto Tonelli, and Michele Marchesi. An agent based model to analyze the Bitcoin mining activity and a comparison with the gold mining industry. *Future Internet*, 11(1):8, January 02, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/1/8>.
Cocco:2021:BSS
- [CTM21] Luisanna Cocco, Roberto Tonelli, and Michele Marchesi. Blockchain and self sovereign identity to support quality in the food supply chain. *Future Internet*, 13(12):301, November 26, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/12/301>.
Cocco:2022:BSH
- [CTM22a] Luisanna Cocco, Roberto Tonelli, and Michele Marchesi. Bitcoin as a safe haven during COVID-19 disease. *Future Internet*, 14(4):98–??, March 22, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/4/98>.
Cocco:2022:SPI
- [CTM22b] Luisanna Cocco, Roberto Tonelli, and Michele Marchesi. A system proposal for information management in building sector based on BIM, SSI, IoT and blockchain. *Future Internet*, 14(5):140, April 30, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/5/140>.
Chen:2021:DPB
- [CTNS21] Xuan Chen, Shujuan Tian, Kien Nguyen, and Hiroo Sekiya. Decentralizing private blockchain-IoT network with OLSR. *Future Internet*, 13(7):168, June 28, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/7/168>.

- [Cus14a] **Cusumano:2014:BE** Michael A. Cusumano. The Bitcoin ecosystem. *Communications of the ACM*, 57(10):22–24, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).
- [Cus14b] **Cusumano:2014:TSM** Michael A. Cusumano. Technology strategy and management: The Bitcoin ecosystem. *Communications of the ACM*, 57(10):22–24, October 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2014/10/178782/fulltext>.
- [CV18] **Campbell-Verduyn:2018:BBC** Malcolm Campbell-Verduyn, editor. *Bitcoin and beyond: cryptocurrencies, blockchains and global governance*. RIPE series in global political economy. Routledge & Kegan Paul, London, UK and New York, NY, USA, 2018. ISBN 0-415-79214-2 (hardcover), 1-315-21190-4 (e-book). ??? pp. LCCN HG1710 .B545 2018.
- [CV21] **Canakci:2021:SMB** Burcu Canakci and Robert Van Renesse. Scaling membership of Byzantine consensus. *ACM Transactions on Computer Systems*, 38(3–4):6:1–6:31, November 2021. CODEN AC-SYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3473138>.
- [CVM17] **Conoscenti:2017:PPP** Marco Conoscenti, Antonio Vetrò, and Juan Carlos De Martin. Peer to peer for privacy and decentralization in the Internet of Things. In *Proceedings of the 39th International Conference on Software Engineering Companion, ICSE-C ’17*, pages 288–290. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5386-1589-4.
- [CW20] **Chen:2020:MLP** Huan Chen and Yijie Wang. MiniChain: a lightweight protocol to combat the UTXO growth in public blockchain. *Journal of Parallel and Distributed Computing*, 143(?):67–76, September 2020. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520302732>.
- [CWCC21] **Chen:2021:MLB** Fang Chen, Hong Wan, Hua Cai, and Guang Cheng. Machine learning in/for blockchain: Future and

- challenges. *The Canadian Journal of Statistics = La revue canadienne de statistique*, 49(4):1364–1382, December 2021. CODEN ????? ISSN 0319-5724 (print), 1708-945X (electronic).
- [CWL17] **Cen:2017:IBP** Yuanyuan Cen, Hui Wang, and Xuefeng Li. Improving business process interoperability by shared ledgers. In *Proceedings of the 6th International Conference on Informatics, Environment, Energy and Applications*, IEEA '17, pages 89–93. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5230-8. URL <http://doi.acm.org/10.1145/3070617.3070631>.
- [CXC⁺20] **Chen:2020:BIT** Fei Chen, Zhe Xiao, Laizhong Cui, Qiuzhen Lin, Jianqiang Li, and Shui Yu. Blockchain for Internet of Things applications: a review and open issues. *Journal of Network and Computer Applications*, 172(?):??, December 15, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303076>.
- [CXG⁺18] **Chen:2018:TMI** Lin Chen, Lei Xu, Zhimin Gao, Yang Lu, and Weidong Shi. Tyranny of the majority: On the (Im)possibility of correctness of smart contracts. *IEEE Security & Privacy*, 16(4):30–37, July/August 2018. CODEN ????? ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040030-abs.html>.
- [CXL⁺22] **Chen:2022:DSC** Jiachi Chen, Xin Xia, David Lo, John Grundy, Xiapu Luo, and Ting Chen. Defining smart contract defects on Ethereum. *IEEE Transactions on Software Engineering*, 48(1):327–345, January 2022. CODEN IESEDJ. ISSN 0098-5589 (print), 1939-3520 (electronic).
- [CXLC18] **Chen:2018:EBT** Guang Chen, Bing Xu, Manli Lu, and Nian-Shing Chen. Exploring blockchain technology and its potential applications for education. *Smart Learning Environments*, 5(1), January 2018. CODEN ????? URL <http://link.springer.com/article/10.1186/s40561-017-0050-x>.
- [CXLG22] **Chen:2022:WDS** Jiachi Chen, Xin Xia, David Lo, and John Grundy.

- Why do smart contracts self-destruct? Investigating the selfdestruct function on Ethereum. *ACM Transactions on Software Engineering and Methodology*, 31(2):30:1–30:37, April 2022. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic). URL <https://dl.acm.org/doi/10.1145/3488245>.
Chen:2017:UBB
- [CXS⁺17] Lin Chen, Lei Xu, Nolan Shah, Nour Diallo, Zhimin Gao, Yang Lu, and Weidong Shi. Unraveling blockchain based crypto-currency system supporting oblivious transactions: A formalized approach. In *Proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts*, BCC '17, pages 23–28. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4974-9. URL <http://doi.acm.org/10.1145/3055518.3055528>.
Cui:2021:IVS
- [CXW⁺21] Laizhong Cui, Zhe Xiao, Jiahao Wang, Fei Chen, Yi Pan, Hua Dai, and Jing Qin. Improving vaccine safety using blockchain. *ACM Transactions on Internet Technology (TOIT)*, 21(2):38:1–38:24, June 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3388446>.
Chen:2021:BBP
- [CXWY21] Zeng Chen, Weidong Xu, Bingtao Wang, and Hua Yu. A blockchain-based preserving and sharing system for medical data privacy. *Future Generation Computer Systems*, 124(??):338–350, November 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21001734>.
Chen:2021:MRC
- [CXY21] Jiachi Chen, Xin Xia, and Xiaohu Yang. Maintenance-related concerns for post-deployed Ethereum smart contract development: issues, techniques, and future challenges. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFV. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <https://link.springer.com/article/10.1007/s10664-021-10018-0>.
Cai:2016:FDO
- [CZ16] Yuanfeng Cai and Dan Zhu. Fraud detections for online businesses: a perspective from blockchain technology. *Financial Innovation*, 2(1), December 2016. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1007/s10664-021-10018-0>.

- springer.com/article/
10.1186/s40854-016-0039-
4.
- [CZJ⁺17] Ethan Cecchetti, Fan Zhang,
Yan Ji, Ahmed Kosba,
Ari Juels, and Elaine Shi.
Solidus: Confidential dis-
tributed ledger transactions
via PVORM. In *Proceedings
of the 2017 ACM SIGSAC
Conference on Computer
and Communications Secu-
rity*, CCS '17, pages 701–
717. ACM Press, New York,
NY 10036, USA, 2017. ISBN
1-4503-4946-3. URL <http://doi.acm.org/10.1145/3133956.3134010>.
- [CZQ⁺21] Xusheng Chen, Shixiong
Zhao, Ji Qi, Jianyu Jiang,
Haoze Song, Cheng Wang,
Tsz On Li, T-H. Hubert
Chan, Fengwei Zhang, Xi-
apu Luo, Sen Wang, Gong
Zhang, and Heming Cuih.
Efficient and DoS-resistant
consensus for permissioned
blockchains. *ACM SIG-
METRICS Performance
Evaluation Review*, 49(3):
61–62, December 2021. CO-
DEN ???? ISSN 0163-5999
(print), 1557-9484 (elec-
tronic). URL <https://dl.acm.org/doi/10.1145/3529113.3529134>.
- [CZX⁺21] Zhihao Chen, Haizhen
Zhuo, Quanqing Xu, Xi-
- aodong Qi, Chengyu Zhu,
Zhao Zhang, Cheqing Jin,
Aoying Zhou, Ying Yan,
and Hui Zhang. SChain: a
scalable consortium blockchain
exploiting intra- and inter-
block concurrency. *Pro-
ceedings of the VLDB
Endowment*, 14(12):2799–
2802, July 2021. CO-
DEN ???? ISSN 2150-
8097. URL <https://dl.acm.org/doi/10.14778/3476311.3476348>.
- [DAAY22] Tooska Dargahi, Hos-
sein Ahmadvand, Man-
sour Naser Alraja, and
Chia-Mu Yu. Integration of
blockchain with connected
and autonomous vehicles:
Vision and challenge. *Jour-
nal of Data and Informa-
tion Quality (JDIQ)*, 14(1):
5:1–5:10, March 2022. CO-
DEN ???? ISSN 1936-1955.
URL <https://dl.acm.org/doi/10.1145/3460003>.
- [dAdSM⁺22] Erikson J. de Aguiar,
Alyson J. dos Santos,
Rodolfo I. Meneguette,
Robson E. De Grande, and
Jó Ueyama. A blockchain-
based protocol for tracking
user access to shared med-
ical imaging. *Future Gen-
eration Computer Systems*,
134(?):348–360, Septem-
ber 2022. CODEN FG-
SEVI. ISSN 0167-739X
(print), 1872-7115 (elec-

- tronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22001406>
- Dey:2020:RLB**
- [DAGK20] Asim K. Dey, Cuneyt G. Akcora, Yulia R. Gel, and Murat Kantarcioglu. On the role of local blockchain network features in cryptocurrency price formation. *The Canadian Journal of Statistics = La revue canadienne de statistique*, 48(3): 561–581, September 2020. CODEN ???? ISSN 0319-5724 (print), 1708-945X (electronic).
- Dannen:2017:BBK**
- [Dan17a] Chris Dannen. Bridging the blockchain knowledge gap. In *Introducing Ethereum and Solidity*, pages 1–20. Apress, Berkeley, CA, USA, 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2535-6_1
- Dannen:2017:IES**
- [Dan17b] Chris Dannen. *Introducing Ethereum and Solidity*. Apress, Berkeley, CA, USA, 2017. ISBN 1-4842-2535-X. xxi + 185 pp. URL <http://link.springer.com/book/10.1007/978-1-4842-2535-6>
- Deebak:2021:PPS**
- [DAT21] B. D. Deebak and Fadi AL-Turjman. Privacy-preserving in smart contracts using blockchain and artificial intelligence for cyber risk measurements. *Journal of Information Security and Applications (JISA)*, 58(?):??, May 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000028>
- Dwivedi:2020:BBS**
- [DAV20] Sanjeev Kumar Dwivedi, Ruhul Amin, and Satyanarayana Vollala. Blockchain based secured information sharing protocol in supply chain management system with key distribution mechanism. *Journal of Information Security and Applications (JISA)*, 54(?):??, October 2020. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620301484>
- Donier:2016:WAC**
- J. Donier and J-P Bouchaud. From Walras’ auctioneer to continuous time double auctions: a general dynamic theory of supply and demand. *Journal of Statistical Mechanics: Theory and Experiment*, 2016(12):123406, December 2016. ISSN 1742-5468.
- Dagher:2015:PPP**
- [DBB⁺15] Gaby G. Dagher, Benedikt Bünz, Joseph Bonneau,

- Jeremy Clark, and Dan Boneh. Provisions: Privacy-preserving proofs of solvency for Bitcoin exchanges. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security*, CCS '15, pages 720–731. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1. [dCdCM14]
- [dBHC17] Thibault de Balthasar and Julio Hernandez-Castro. An analysis of Bitcoin laundry services. In *Secure IT Systems*, pages 297–312. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-70290-4. URL http://link.springer.com/chapter/10.1007/978-3-319-70290-2_18.
- [DCB⁺21] Mohammad Dabbagh, Kim-Kwang Raymond Choo, Amin Beheshti, Mohammad Tahir, and Nader Sohrabi Safa. A survey of empirical performance evaluation of permissioned blockchain platforms: Challenges and opportunities. *Computers & Security*, 100(??):Article 102078, January 2021. CODEN CPSEU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL www.sciencedirect.com/science/article/pii/S0167404820303515. [dCdB21]
- deCarnavalet:2014:CIV**
- Xavier de Carné de Carnavalet and Mohammad Mannan. Challenges and implications of verifiable builds for security-critical open-source software. In *Proceedings of the 30th Annual Computer Security Applications Conference*, ACSAC '14, pages 16–25. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-3005-3.
- DiCrescenzo:2017:PPD**
- Giovanni Di Crescenzo, Brian Coan, and Jonathan Kirsch. Privacy-preserving deterministic automata evaluation with encrypted data blocks. In Garcia-Alfaro et al. [GANAHHJ17], pages 275–294. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_16.
- Dey:2021:SDT**
- Prasanjit Dey, Swades Kumar Chaulya, and Sanjay Kumar. Secure decision tree twin support vector machine training and classification process for encrypted IoT data via blockchain [DCK21]
- deBalthasar:2017:ABL**
- Dabbagh:2021:SEP**

platform. *Concurrency and Computation: Practice and Experience*, 33(16):e6264:1–e6264:??, August 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

Ding:2022:NSS

[DCY⁺22]

Kaimeng Ding, Shiping Chen, Jiming Yu, Yanan Liu, and Jie Zhu. A new subject-sensitive hashing algorithm based on MultiRes-RCF for blockchains of HRRS images. *Algorithms (Basel)*, 15(6), June 2022. CODEN ALGOCH. ISSN 1999-4893 (electronic). URL <https://www.mdpi.com/1999-4893/15/6/213>.

Deng:2021:IDC

[DCZ⁺21]

Shuiguang Deng, Guanjie Cheng, Hailiang Zhao, Honghao Gao, and Jianwei Yin. Incentive-driven computation offloading in blockchain-enabled e-commerce. *ACM Transactions on Internet Technology (TOIT)*, 21(1):9:1–9:19, February 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3397160>.

Davidson:2018:BEI

[DdFP18]

Sinclair Davidson, Primavera de Filippi, and Jason Potts. Blockchains and

the economic institutions of capitalism. *Journal of Institutional Economics*, ??(??):1–20, ??? 2018. CODEN ???? ISSN 1744-1374 (print), 1744-1382 (electronic).

Dhall:2022:BBF

Sakshi Dhall, Ashutosh Dhar Dwivedi, Saibal K. Pal, and Gautam Srivastava. Blockchain-based framework for reducing fake or vicious news spread on social media/messaging platforms. *ACM Transactions on Asian and Low-Resource Language Information Processing (TALLIP)*, 21(1):8:1–8:33, January 2022. CODEN ???? ISSN 2375-4699 (print), 2375-4702 (electronic). URL <https://dl.acm.org/doi/10.1145/3467019>.

Dyer:2017:OPE

James Dyer, Martin Dyer, and Jie Xu. Order-preserving encryption using approximate integer common divisors. In Garcia-Alfaro et al. [GANAHHJ17], pages 257–274. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_15.

[DDPS22]

[DDX17]

- [De18] Nikhilesh De. US city mulls 18-month moratorium on Bitcoin mining. Coindesk Web article., March 6, 2018. URL <https://www.coindesk.com/us-city-mulls-18-month-moratorium-bitcoin-mining/>. **De:2018:UCM**
- [Dev14] J. Anish Dev. Bitcoin mining acceleration and performance quantification. In *2014 IEEE 27th Canadian Conference on Electrical and Computer Engineering (CCECE)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2014. CODEN CCCEFV. ISSN 0840-7789. **Dev:2014:BMA**
- [DF17a] Tina Düring and Hagen Fisbeck. Einsatz der blockchain-technologie für eine transparente wertschöpfungskette. In *CSR und Digitalisierung. (German) [CSR and digitalization]*, pages 449–464. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-662-53202-7_33. **During:2017:EBT**
- [DF17b] Tina Düring and Hagen Fisbeck. Einsatz der Blockchain-Technologie für eine transparente Wertschöpfungskette. (German) [Use of blockchain technology for a transparent value chain]. In *CSR und Digitalisierung. (German) [CSR and digitalization]*, pages 449–464. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. **Danezis:2013:PCB**
- [DFKP13] George Danezis, Cedric Fournet, Markulf Kohlweiss, and Bryan Parno. Pinocchio Coin: Building Zerocoin from a succinct pairing-based proof system. In *Proceedings of the First ACM Workshop on Language Support for Privacy-enhancing Technologies, PETShop '13*, pages 27–30. ACM Press, New York, NY 10036, USA, 2013. ISBN 1-4503-2489-4. **DeAguiar:2020:SBB**
- Erikson Júlio De Aguiar, Bruno S. Façal, Bhaskar Krishnamachari, and Jó Ueyama. A survey of blockchain-based strategies for health-care. *ACM Computing Surveys*, 53(2):27:1–27:27, July 2020. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3376915>.

- [DGHK17] **Dickerson:2017:ACS**
 Thomas Dickerson, Paul Gazzillo, Maurice Herlihy, and Eric Koskinen. Adding concurrency to smart contracts. In *Proceedings of the ACM Symposium on Principles of Distributed Computing*, PODC '17, pages 303–312. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4992-7. URL <http://doi.acm.org/10.1145/3087801.3087835>.
- [DGP17] **Durand:2017:DWT**
 Arnaud Durand, Pascal Gremaud, and Jacques Pasquier. Decentralized Web of Trust and authentication for the Internet of Things. In *Proceedings of the Seventh International Conference on the Internet of Things*, IoT '17, pages 27:1–27:2. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5318-5. URL <http://doi.acm.org/10.1145/3131542.3140263>.
- [DGP20] **Durand:2020:DLI**
 Arnaud Durand, Pascal Gremaud, and Jacques Pasquier. Decentralized LP-WAN infrastructure using blockchain and digital signatures. *Concurrency and Computation: Practice and Experience*, 32(12):e5352:1–e5352:??, June 25, 2020.
- [DGSW15] **Decker:2015:MBE**
 Christian Decker, James Guthrie, Jochen Seidel, and Roger Wattenhofer. Making Bitcoin exchanges transparent. In *Computer Security — ESORICS 2015*, pages 561–576. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-24177-X. URL http://link.springer.com/chapter/10.1007/978-3-319-24177-1_7_28.
- [DH76] **Diffie:1976:NDC**
 Whitfield Diffie and Martin E. Hellman. New directions in cryptography. *IEEE Transactions on Information Theory*, IT-22(6):644–654, November 1976. CODEN IETTAW. ISSN 0018-9448 (print), 1557-9654 (electronic).
- [DH17] **Divita:2017:ABM**
 Joseph Divita and Roger A. Hallman. An approach to botnet malware detection using nonparametric Bayesian methods. In *Proceedings of the 12th International Conference on Availability, Reliability and Security*, ARES '17, pages 75:1–75:9. ACM Press, New
- CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

- York, NY 10036, USA, 2017. ISBN 1-4503-5257-X.
- [DHE16] Ayush Dubey, Greg D. Hill, Robert Escriva, and Emin Gün Sirer. Weaver: A high-performance, transactional graph database based on refinable timestamps. *Proceedings of the VLDB Endowment*, 9(11):852–863, July 2016. ISSN 2150-8097.
- [DHH⁺22] Phan The Duy, Hien Do Hoang, Do Thi Thu Hien, Anh Gia-Tuan Nguyen, and Van-Hau Pham. B-DAC: a decentralized access control framework on northbound interface for securing SDN using blockchain. *Journal of Information Security and Applications (JISA)*, 64(??):??, February 2022. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621002611>.
- [Di 17] Massimo Di Pierro. What is the blockchain? *Computing in Science and Engineering*, 19(5):92–95, September/October 2017. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). URL <https://www.computer.org/csdl/mags/cs/2017/05/mcs2017050092-abs.html>.
- [Dim17] Nicola Dimitri. Bitcoin mining as a contest. *Ledger*, 2(??):31–37, ????. 2017. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/96>.
- [Dim19] Nicola Dimitri. Transaction fees, block size limit, and auctions in Bitcoin. *Ledger*, 4(??):??, ????. 2019. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/145>.
- [Dim20] Tassos Dimitriou. Efficient, coercion-free and universally verifiable Blockchain-based voting. *Computer Networks (Amsterdam, Netherlands: 1999)*, 174(??):Article 107234, June 19, 2020. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128619317414>.
- [Dir19] Daniel J. Dieroff. Bitcoin coin selection with leverage. *CoRR*, ??(??):??, ????. 2019. CODEN ????. ISSN ????. URL <http://arxiv.org/abs/1911.01330>; <https://dblp.org>.

org/db/journals/corr/corr1911.html#abs-1911-01330.

Dixon:2017:BMB

[Dix17]

Peter Dixon. Blockchain: Mehr als Bitcoin. (German) [Blockchain: More than Bitcoin]. In *Innovationen und Innovationsmanagement in der Finanzbranche*, pages 215–229. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-658-15648-1. URL http://link.springer.com/chapter/10.1007/978-3-658-15648-0_10.

Dorri:2017:TOB

[DKJ17]

Ali Dorri, Salil S. Kanhere, and Raja Jurdak. Towards an optimized BlockChain for IoT. In *Proceedings of the Second International Conference on Internet-of-Things Design and Implementation*, IoTDI '17, pages 173–178. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4966-8. URL <http://doi.acm.org/10.1145/3054977.3055003>.

Dorri:2019:MBM

[DKJ19]

Ali Dorri, Salil S. Kanhere, and Raja Jurdak. MOF-BC: A memory optimized and flexible blockchain for large scale networks. *Future Generation Computer*

[DKJG19]

Systems, 92(??):357–373, March 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167739X17329552>.

Dorri:2019:LLS

Ali Dorri, Salil S. Kanhere, Raja Jurdak, and Praveen Gauravaram. LSB: a Lightweight Scalable Blockchain for IoT security and anonymity. *Journal of Parallel and Distributed Computing*, 134(??):180–197, December 2019. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731518307688>.

deKruijff:2017:UBU

[dKW17]

Joost de Kruijff and Hans Weigand. Understanding the blockchain using enterprise ontology. In *Advanced Information Systems Engineering*, pages 29–43. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-59536-1_8_3.

Denning:2017:BMB

[DL17]

Peter J. Denning and Ted G. Lewis. Bitcoins maybe; blockchains

likely. *American Scientist*, 105(6):335–??, November/December 2017. CODEN AMSCAC. ISSN 0003-0996 (print), 1545-2786 (electronic). URL <https://www.americanscientist.org/article/bitcoins-maybe-blockchains-likely>■

Dorri:2021:TIR

[DLK⁺21]

Ali Dorri, Fengji Luo, Samuel Karumba, Salil Kanhere, Raja Jurdak, and Zhao Yang Dong. Temporary immutability: a removable blockchain solution for prosumer-side energy trading. *Journal of Network and Computer Applications*, 180(??):??, April 15, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S108480452100045X>■

DePrisco:1997:RPA

[DLL97]

R. De Prisco, B. Lampson, and N. Lynch. Revisiting the Paxos algorithm. *Lecture Notes in Computer Science*, 1320:111–??, 1997. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). [DM20]

DePrisco:2000:RPA

[DLL00]

Roberto De Prisco, Butler Lampson, and Nancy Lynch. Revisiting the PAXOS algorithm. *Theoretical Computer Sci-*

ence, 243(1–2):35–91, July 28, 2000. CODEN TC-SCDI. ISSN 0304-3975 (print), 1879-2294 (electronic). URL <http://www.elsevier.nl/jeing/10/41/16/177/21/22/abstract.html>; <http://www.elsevier.nl/jeing/10/41/16/177/21/22/article.pdf>.

DiSorbo:2022:PGC

Andrea Di Sorbo, Sonia Laudanna, Anna Vacca, Corrado A. Visaggio, and Gerardo Canfora. Profiling gas consumption in Solidity smart contracts. *The Journal of Systems and Software*, 186(??):??, April 2022. CODEN JS-SODM. ISSN 0164-1212 (print), 1873-1228 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0164121221002697>■

DiFrancescoMaesa:2020:BAS

Damiano Di Francesco Maesa and Paolo Mori. Blockchain 3.0 applications survey. *Journal of Parallel and Distributed Computing*, 138(??):99–114, April 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731519308664>■

- [DMH18a] **Dhillon:2018:BD** Vikram Dhillon, David Metcalf, and Max Hooper. Behold the dreamers. In *Blockchain enabled applications: understand the blockchain ecosystem and how to make it work for you* [DMH18b], pages 1–5. ISBN 1-4842-3080-9 (print), 1-4842-3081-7 (e-book). LCCN QA76.9.D32. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_1.
- [DMH18b] **Dhillon:2018:BEA** Vikram Dhillon, David Metcalf, and Max Hooper. *Blockchain enabled applications: understand the blockchain ecosystem and how to make it work for you*. Apress, Berkeley, CA, USA, 2018. ISBN 1-4842-3080-9 (print), 1-4842-3081-7 (e-book). xvii + 218 + 103 pp. LCCN QA76.9.D32. URL <http://link.springer.com/10.1007/978-1-4842-3081-7>.
- [DMH18c] **Dhillon:2018:BHC** Vikram Dhillon, David Metcalf, and Max Hooper. Blockchain in health care. In *Blockchain enabled applications: understand the blockchain ecosystem and how to make it work for you* [DMH18b], pages 125–138. ISBN 1-4842-3080-9 (print), 1-4842-3081-7 (e-book).
- [DMH18d] **Dhillon:2018:BS** Vikram Dhillon, David Metcalf, and Max Hooper. Blockchain in science. In *Blockchain enabled applications: understand the blockchain ecosystem and how to make it work for you* [DMH18b], pages 111–124. ISBN 1-4842-3080-9 (print), 1-4842-3081-7 (e-book). LCCN QA76.9.D32. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_8.
- [DMH18e] **Dhillon:2018:DH** Vikram Dhillon, David Metcalf, and Max Hooper. The DAO hacked. In *Blockchain enabled applications: understand the blockchain ecosystem and how to make it work for you* [DMH18b], pages 67–78. ISBN 1-4842-3080-9 (print), 1-4842-3081-7 (e-book). LCCN QA76.9.D32. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_6.
- [DMH18f] **Dhillon:2018:DO** Vikram Dhillon, David Metcalf, and Max Hooper. Decentralized organizations. In *Blockchain Enabled Applications*, pages 47–66. Apress, Berkeley, CA, USA,
- LCCN QA76.9.D32. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_9.

2018. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_5. [DMH18j]
- [DMH18g] **Dhillon:2018:ETH**
Vikram Dhillon, David Metcalf, and Max Hooper. Ethereum tokens: High-performance computing. In *Blockchain Enabled Applications*, pages 79–109. Apress, Berkeley, CA, USA, 2018. ISBN 1-4842-3081-7. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_7. [DMH18k]
- [DMH18h] **Dhillon:2018:FB**
Vikram Dhillon, David Metcalf, and Max Hooper. Foundations of blockchain. In *Blockchain Enabled Applications*, pages 15–24. Apress, Berkeley, CA, USA, 2018. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_3. [DMH18l]
- [DMH18i] **Dhillon:2018:GRM**
Vikram Dhillon, David Metcalf, and Max Hooper. The gold rush: Mining Bitcoin. In *Blockchain Enabled Applications*, pages 7–14. Apress, Berkeley, CA, USA, 2018. ISBN 1-4842-3081-7. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_2. [DMH18m]
- Dhillon:2018:HP**
Vikram Dhillon, David Metcalf, and Max Hooper. The hyperledger project. In *Blockchain Enabled Applications*, pages 139–149. Apress, Berkeley, CA, USA, 2018. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_10.
- Dhillon:2018:RDB**
Vikram Dhillon, David Metcalf, and Max Hooper. Recent developments in blockchain. In *Blockchain Enabled Applications*, pages 151–181. Apress, Berkeley, CA, USA, 2018. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_11.
- Dhillon:2018:TRF**
Vikram Dhillon, David Metcalf, and Max Hooper. Technological revolutions and financial capital. In *Blockchain Enabled Applications*, pages 183–196. Apress, Berkeley, CA, USA, 2018. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_12.
- Dhillon:2018:UE**
Vikram Dhillon, David Metcalf, and Max Hooper. Unpacking Ethereum. In *Blockchain Enabled Applications*, pages 25–45.

Apress, Berkeley, CA, USA, 2018. ISBN 1-4842-3081-7. URL http://link.springer.com/chapter/10.1007/978-1-4842-3081-7_4.

Drozd:2019:SCC

[DMO⁺19] Stanisław Drozd, Ludovico Minati, Paweł Oświecimka, Marek Stanuszek, and Marcin Watorek. Signatures of the crypto-currency market decoupling from the Forex. *Future Internet*, 11(7):154, July 10, 2019. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/7/154>.

DiFrancescoMaesa:2017:ABU

[DMR17a] Damiano Di Francesco Maesa, Andrea Marino, and Laura Ricci. An analysis of the Bitcoin users graph: inferring unusual behaviours. In *Complex Networks & Their Applications V*, pages 749–760. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-50901-2. URL http://link.springer.com/chapter/10.1007/978-3-319-50901-3_59.

DiFrancescoMaesa:2017:BBA

[DMR17b] Damiano Di Francesco Maesa, Paolo Mori, and Laura Ricci. Blockchain based access control. In

Distributed Applications and Interoperable Systems, pages 206–220. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-59665-5_15.

DiFrancescoMaesa:2018:DDA

[DMR18] Damiano Di Francesco Maesa, Andrea Marino, and Laura Ricci. Data-driven analysis of Bitcoin properties: exploiting the users graph. *International Journal of Data Science and Analytics*, ??(??):215–229, ????. 2018. CODEN ??? ISSN 2364-4168. URL <http://link.springer.com/article/10.1007/s41060-017-0074-x>.

DiFrancescoMaesa:2019:BTS

[DMR19a] Damiano Di Francesco Maesa, Andrea Marino, and Laura Ricci. The bow tie structure of the bitcoin users graph. *Appl. Netw. Sci.*, 4(1):56:1–56:22, ????. 2019. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/ans/ans4.html#MaesaMR19>; <https://www.wikidata.org/entity/Q111688736>.

DiFrancescoMaesa:2019:BBA

[DMR19b] Damiano Di Francesco Maesa, Paolo Mori, and

Laura Ricci. A blockchain based approach for the definition of auditable access control systems. *Computers & Security*, 84(??):93–119, July 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818309398> [DNP17]

Delgado-Mohatar:2020:BBS

[DMSCA20] Oscar Delgado-Mohatar, José María Sierra-Cámara, and Eloy Anguiano. Blockchain-based semi-autonomous ransomware. *Future Generation Computer Systems*, 112(??):589–603, November 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19317406> [DNSY14]

Dwork:1993:PPC

[DN93] Cynthia Dwork and Moni Naor. Pricing via processing or combatting junk mail. *Lecture Notes in Computer Science*, 740:139–147, 1993. CODEN LNCSD9. ISBN 3-540-57340-2 (print), 3-540-48071-4 (online). ISSN 0302-9743 (print), 1611-3349 (electronic). URL <http://link.springer-ny.com/link/service/series/0558/bibs/0740/07400139.htm>; <http://link.springer-ny.com/link/service/series/0558/papers/0740/07400139.pdf>; https://link.springer.com/chapter/10.1007/3-540-48071-4_10.

Daulay:2017:RAA

Raja Sakti Arief Daulay, Surya Michrandi Nasution, and Marisa W. Paryasto. Realization and addressing analysis in blockchain Bitcoin. *IOP Conference Series: Materials Science and Engineering*, 260:012002, November 2017. ISSN 1757-8981 (print), 1757-899X (electronic).

Dmitrienko:2014:OPB

Alexandra Dmitrienko, David Noack, Ahmad-Reza Sadeghi, and Moti Yung. On offline payments with Bitcoin (poster abstract). In Christin and Safavi-Naini [CSN14], pages 159–160. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_11.

Dmitrienko:2017:SWA

Alexandra Dmitrienko, David Noack, and Moti Yung. Secure wallet-assisted offline Bitcoin payments with double-spender revocation. In *Proceedings of the 2017 ACM on Asia Conference on Computer and Communications Security*, ASIA CCS '17, pages 520–531.

ACM Press, New York, NY
10036, USA, 2017. ISBN 1-
4503-4944-7.

Dillenberger:2019:BAA

[DNZ⁺19]

D. N. Dillenberger, P. Novotny. ■

Q. Zhang, P. Jayachandran, H. Gupta, S. Hans, D. Verma, S. Chakraborty, J. J. Thomas, M. M. Walli, R. Vaculin, and K. Sarpatwar. Blockchain analytics and artificial intelligence. *IBM Journal of Research and Development*, 63(2-3): 5:1-5:14, March/May 2019. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic).

[DP18]

deOliveira:2020:BRB

[dORM⁺20]

Marcela T. de Oliveira, Lúcio H. A. Reis, Dianne S. V. Medeiros, Ricardo C. Carrano, Sílvia D. Olabariaga, and Diogo M. F. Matos. Blockchain reputation-based consensus: a scalable and resilient mechanism for distributed mistrusting applications. *Computer Networks (Amsterdam, Netherlands: 1999)*, 179(??):Article 107367, October 9, 2020. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128620300360>. ■

[DPN⁺22]

Dozier:2018:BBG

[Doz18]

Priya D. Dozier. *Banking on Blockchain: a Grounded*

Theory Study of the Innovation Evaluation Process. D.B.A., University of South Florida, Tampa, FL, USA, 2018. 118 pp. URL <http://search.proquest.com/pqdtglobal/docview/2167167651>. ■

Dunphy:2018:FLI

Paul Dunphy and Fabien A. P. Petitcolas. A first look at identity management schemes on the blockchain. *IEEE Security & Privacy*, 16(4):20-29, July/August 2018. CODEN ????. ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040020-abs.html>.

Deepa:2022:SBB

N. Deepa, Quoc-Viet Pham, Dinh C. Nguyen, Sweta Bhattacharya, B. Prabadevi. ■ Thippa Reddy Gadekallu, Praveen Kumar Reddy Maddikunta, Fang Fang, and Pubudu N. Pathirana. A survey on blockchain for big data: Approaches, opportunities, and future directions. *Future Generation Computer Systems*, 131(??): 209-226, June 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000243>. ■

- [DPS⁺21] **Dotan:2021:SBN** Maya Dotan, Yvonne-Anne Pignolet, Stefan Schmid, Saar Tochner, and Aviv Zohar. Survey on blockchain networking: Context, state-of-the-art, challenges. *ACM Computing Surveys*, 54(5):107:1–107:34, June 2021. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3453161>. [Dre17b]
- [DPSHJ14] **DonetDonet:2014:BP** Joan Antoni Donet Donet, Cristina Pérez-Solà, and Jordi Herrera-Joancomartí. The Bitcoin P2P network. In Christin and Safavi-Naini [CSN14], pages 87–102. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_7. [Dre17c]
- [dre14] **dree12:2014:LMB** dree12. List of major Bitcoin heists, thefts, hacks, scams, and losses. Web blog, August 2014. URL <https://bitcointalk.org/index.php?topic=576337>; <https://bitcointalk.org/index.php?topic=83794>. [Dre17d]
- [Dre17a] **Drescher:2017:AT** Daniel Drescher. Authorizing transactions. In *Blockchain Basics* [Dre17b], pages 103–109. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_13. [Dre17b]
- Drescher:2017:BB** Daniel Drescher. *Blockchain Basics*. Apress, Berkeley, CA, USA, 2017. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). xv + 255 pp. LCCN HG1710 .D74 2017. URL <http://link.springer.com/book/10.1007/978-1-4842-2604-9>. [Dre17c]
- Drescher:2017:BPT** Daniel Drescher. Bringing the pieces together. In *Blockchain Basics* [Dre17b], pages 189–202. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_21. [Dre17d]
- Drescher:2017:CTH** Daniel Drescher. Choosing a transaction history. In *Blockchain Basics* [Dre17b], pages 165–181. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_19.

- [Dre17e] **Drescher:2017:DT** Daniel Drescher. Disambiguating the term. In *Blockchain Basics* [Dre17b], pages 33–37. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_5. [Dre17i]
- [Dre17f] **Drescher:2017:DCP** Daniel Drescher. Discovering the core problem. In *Blockchain Basics* [Dre17b], pages 29–32. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_4. [Dre17j]
- [Dre17g] **Drescher:2017:DDS** Daniel Drescher. Distributing the data store among peers. In *Blockchain Basics* [Dre17b], pages 145–152. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_17. [Dre17k]
- [Dre17h] **Drescher:2017:DO** Daniel Drescher. Documenting ownership. In *Blockchain Basics* [Dre17b], pages 63–69. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_9. [Dre17l]
- Drescher:2017:HD** Daniel Drescher. Hashing data. In *Blockchain Basics* [Dre17b], pages 71–79. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_10. [Dre17m]
- Drescher:2017:HRW** Daniel Drescher. Hashing in the real world. In *Blockchain Basics* [Dre17b], pages 81–92. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_11. [Dre17n]
- Drescher:2017:IPU** Daniel Drescher. Identifying and protecting user accounts. In *Blockchain Basics* [Dre17b], pages 93–101. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_12. [Dre17o]

- [Dre17l] Daniel Drescher. Paying for integrity. In *Blockchain Basics* [Dre17b], pages 183–188. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_20. [Dre17p]
- [Dre17m] Daniel Drescher. Planning the blockchain. In *Blockchain Basics* [Dre17b], pages 57–62. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_8. [Dre17q]
- [Dre17n] Daniel Drescher. Protecting the data store. In *Blockchain Basics* [Dre17b], pages 135–143. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_16. [Dre17r]
- [Dre17o] Daniel Drescher. Recognizing the potential. In *Blockchain Basics* [Dre17b], pages 19–25. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_3. [Dre17s]
- [Dre17p] Daniel Drescher. Reinventing the blockchain. In *Blockchain Basics* [Dre17b], pages 213–220. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_23.
- [Dre17q] Daniel Drescher. Seeing the big picture. In *Blockchain Basics* [Dre17b], pages 9–17. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_2.
- [Dre17r] Daniel Drescher. Seeing the limitations. In *Blockchain Basics* [Dre17b], pages 205–211. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_22.
- [Dre17s] Daniel Drescher. Spending money twice. In *Blockchain*

- Basics* [Dre17b], pages 49–54. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_7. [Dre17w]
- [Dre17t] Daniel Drescher. Storing transaction data. In *Blockchain Basics* [Dre17b], pages 111–122. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_14. [Dre17x]
- [Dre17u] Daniel Drescher. Summarizing and going further. In *Blockchain Basics* [Dre17b], pages 235–248. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_25. [Dre17y]
- [Dre17v] Daniel Drescher. Thinking in layers and aspects. In *Blockchain Basics* [Dre17b], pages 3–7. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL [10.1007/978-1-4842-2604-9_1](http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_1). [Dre17z]
- Drescher:2017:UNO**
- Daniel Drescher. Understanding the nature of ownership. In *Blockchain Basics* [Dre17b], pages 39–47. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_6.
- Drescher:2017:UB**
- Daniel Drescher. Using the blockchain. In *Blockchain Basics* [Dre17b], pages 223–233. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_24.
- Drescher:2017:UDS**
- Daniel Drescher. Using the data store. In *Blockchain Basics* [Dre17b], pages 123–134. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_15.
- Drescher:2017:VAT**
- Daniel Drescher. Verifying and adding transac-

- tions. In *Blockchain Basics* [Dre17b], pages 153–164. ISBN 1-4842-2603-8 (print), 1-4842-2604-6 (e-book). LCCN HG1710 .D74 2017. URL http://link.springer.com/chapter/10.1007/978-1-4842-2604-9_18.
- [DRS22] Anju Devi, Geetanjali Rathee, and Hemraj Saini. [dS17a] Secure Blockchain–Internet of Vehicles (B-IoV) mechanism using DPSO and M-ITA algorithms. *Journal of Information Security and Applications (JISA)*, 64(??):??, February 2022. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621002726>.
- [Dru22] Doron Drusinsky. On the high energy consumption of Bitcoin mining. *Computer*, 55(1):88–93, January 2022. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [Dry14] Thaddeus Dryja. Hashimoto: I/O bound proof of work. Web document., 2014. URL <https://mirrorx.com/files/hashimoto.pdf>. [DSBPS⁺18]
- [DS15] Jules DuPont and Anna Cinzia Squicciarini. Toward de-anonymizing Bitcoin by mapping users location. In *Proceedings of the 5th ACM Conference on Data and Application Security and Privacy*, CODASPY ’15, pages 139–141. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3191-2.
- [deSoto:2017:TTC] Hernando de Soto. A tale of two civilizations in the era of Facebook and blockchain. *Small Business Economics*, 49(4):729–739, November 2017. CODEN ????. URL <http://link.springer.com/article/10.1007/s11187-017-9949-4>.
- [Dikshit:2017:EWT] Pratyush Dikshit and Kunwar Singh. Efficient weighted threshold ECDSA for securing Bitcoin wallet. In *2017 ISEA Asia Security and Privacy (ISEASP)*, pages 1–9. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, January 2017. URL <http://ieeexplore.ieee.org/document/7976994/>.
- [Delgado-Segura:2018:TDB] Sergi Delgado-Segura, Surya Bakshi, Cristina Pérez-Solà, James Litton, Andrew Pachulski, Andrew Miller,

- and Bobby Bhattacharjee. TxProbe: Discovering bitcoin's network topology using orphan transactions. *CoRR*, ??(??):??, ??? 2018. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1812.00942>; <https://dblp.org/db/journals/corr/corr1812.html#abs-1812-00942>. [DSN17]
- [DSC21] Mallikarjun Reddy Dorsala, V. N. Sastry, and Sudhakar Chapram. Blockchain-based solutions for cloud computing: a survey. *Journal of Network and Computer Applications*, 196(??): ??, December 15, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521002447>. [Dorsala:2021:BBS]
- [DSM⁺17] Fangfang Dai, Yue Shi, Nan Meng, Liang Wei, and Zhiguo Ye. From Bitcoin to cybersecurity: A comparative study of blockchain application and security issues. In IEEE, editor, *2017 4th International Conference on Systems and Informatics (ICSAI)*, 11–13 November 2017, Hangzhou, China, pages 975–979. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, November 2017. [Dai:2017:BCC]
- [Dlamini:2017:DSS] N. P. Dlamini, M. S. Scott, and K. K. Nair. Development of an SMS system used to access Bitcoin wallets. In *2017 IST-Africa Week Conference (IST-Africa)*, pages 1–10. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2017. ISBN 1-5386-3837-1. URL <http://ieeexplore.ieee.org/document/8102316/>. [Dlamini:2017:DSS]
- [DSPSHJNA18] Sergi Delgado-Segura, Cristina Pérez-Solà, Jordi Herrera-Joancomartí, and Guillermo Navarro-Arribas. Bitcoin private key locked transactions. *Information Processing Letters*, 140(??):34–36, December 2018. CODEN IFPLAT. ISSN 0020-0190 (print), 1872-6119 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0020019018301698>. [Delgado-Segura:2018:BPK]
- [DSPSNAHJ20] Sergi Delgado-Segura, Cristina Pérez-Solà, Guillermo Navarro-Arribas, and Jordi Herrera-Joancomartí. A fair protocol for data trading based on Bitcoin transactions. *Future Generation Computer Systems*, 107(??):832–840, [Delgado-Segura:2020:FPD]

- June 2020. CODEN FG-SEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17318344> ■
- [dSR21] Carlo Kleber da Silva Rodrigues. Analyzing blockchain integrated architectures for effective handling of IoT-ecosystem transactions. *Computer Networks (Amsterdam, Netherlands: 1999)*, 201(??):??, December 24, 2021. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621005089>. ■
- [DSW14] Christian Decker, Jochen Seidel, and Roger Wattenhofer. Bitcoin meets strong consistency. *CoRR*, abs/1412.7935(??):??, ???? 2014. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1412.7935>; <https://dblp.org/db/journals/corr/corr1412.html#DeckerSW14>. ■
- [DSW16] Christian Decker, Jochen Seidel, and Roger Wattenhofer. Bitcoin meets strong consistency. In *Proceedings of the 17th International Conference on Distributed Computing and Networking*, ICDCN '16, pages 13:1–13:10. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4032-6. URL <http://doi.acm.org/10.1145/2833312.2833321>. ■
- [DT18] Carlo Kleber da Silva Rodrigues. Analyzing blockchain integrated architectures for effective handling of IoT-ecosystem transactions. *Computer Networks (Amsterdam, Netherlands: 1999)*, 201(??):??, December 24, 2021. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621005089>. ■
- [DTK20] Le Vu Trung Duong, Nguyen Thi Thanh Thuy, and Lam Duc Khai. A fast approach for bitcoin blockchain cryptocurrency mining system. *Integr.*, 74(??):107–114, ???? 2020. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/integration/integration74.html#DuongTK20>. ■
- [DTM20] M. Demir, O. Turetken, and A. Mashatan. An enterprise transformation guide for the inevitable blockchain disruption. *Computer*, 53(6):34–43, June 2020. CODEN CPTRB4. ISSN 0018-

- 9162 (print), 1558-0814 (electronic).
- [Du21] Yao Du. Blockchain-enabled edge intelligence for IoT: Background, emerging trends and open issues. *Future Internet*, 13(2):48, February 17, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/2/48>.
- [Duc13] Paul Ducklin. Android random number flaw implicated in Bitcoin thefts. Web news story., August 12, 2013. URL <http://nakedsecurity.sophos.com/2013/08/12/android-random-number-flaw-implicated-in-bitcoin-thefts/>. From the story: “It looks as though, at least on occasion, the Java-based PRNG on Android will repeat its pseudorandom sequences, thanks to a flaw in Android’s so-called SecureRandom Java class.”.
- [Dus14] Valerie Duskin, editor. *Virtual currency and the Bitcoin revolution: perspectives and considerations from Congressional Hearings*, Economic issues, problems and perspectives. Nova Publishers, New York, NY, USA, 2014. ISBN 1-63117-280-8. LCCN HG1710 .V57 2014.
- [DVRM16] Rafael Delfin-Vidal and Guillermo Romero-Meléndez. The fractal nature of Bitcoin: Evidence from wavelet power spectra. In *Trends in Mathematical Economics*, pages 73–98. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-32543-4. URL http://link.springer.com/chapter/10.1007/978-3-319-32543-4_5.
- [DW13] C. Decker and R. Wattenhofer. Information propagation in the Bitcoin network. In *IEEE P2P 2013 Proceedings*, pages 1–10. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2013. ISSN 2161-3559 (print), 2161-3567 (electronic).
- [DW14] Christian Decker and Roger Wattenhofer. Bitcoin transaction malleability and Mt-Gox. In *Computer Security — ESORICS 2014*, pages 313–326. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014.

2014. ISBN 3-319-11212-0. URL http://link.springer.com/chapter/10.1007/978-3-319-11212-1_18.
- [DW15] Christian Decker and Roger Wattenhofer. A fast and scalable payment network with Bitcoin duplex micro-payment channels. In *Stabilization, Safety, and Security of Distributed Systems*, volume 9212 of *Lecture Notes in Computer Science*, pages 3–18. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-21741-0. URL http://link.springer.com/chapter/10.1007/978-3-319-21741-3_1.
- [DW18] Primavera De Filippi and Aaron Wright. *Blockchain and the law: the rule of code*. Harvard University Press, Cambridge, MA, USA, 2018. ISBN 0-674-97642-8 (hardcover). ??? pp. LCCN QA76.9.D32 D44 2018.
- [DWC⁺17] Tien Tuan Anh Dinh, Ji Wang, Gang Chen, Rui Liu, Beng Chin Ooi, and Kian-Lee Tan. BLOCK-BENCH: A framework for analyzing private blockchains. In *Proceedings of the 2017 ACM International Conference on Management of Data*, SIGMOD '17, pages 1085–1100. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4197-7. URL <http://doi.acm.org/10.1145/3035918.3064033>.
- [DWS21] Siddhartha Dalal, Zihe Wang, and Siddhanth Sabharwal. Identifying ransomware actors in the bitcoin network. *CoRR*, abs/2108.13807(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2108.13807>; <https://dblp.org/db/journals/corr/corr2108.html#abs-2108-13807>.
- [DXR⁺17] Alevtina Dubovitskaya, Zhigang Xu, Samuel Ryu, Michael Schumacher, and Fusheng Wang. How blockchain could empower eHealth: An application for radiation oncology. In *Data Management and Analytics for Medicine and Healthcare*, pages 3–6. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL <http://link.springer.com/chapter/>

- 10.1007/978-3-319-67186-4_1.
- [DXW21] Yulin Deng, Hongfeng Xu, and Jie Wu. Optimization of blockchain investment portfolio under artificial bee colony algorithm. *Journal of Computational and Applied Mathematics*, 385(??):Article 113199, March 15, 2021. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0377042720304908>.
- [Dzi15] Stefan Dziembowski. Introduction to cryptocurrencies. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security, CCS '15*, pages 1700–1701. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1.
- [EAvM20] Paul Ezhilchelvan, Amjad Aldweesh, and Aad van Moorsel. Non-blocking two-phase commit using blockchain. *Concurrency and Computation: Practice and Experience*, 32(12):e5276:1–e5276:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [EBD⁺20] S. Eisele, C. Barreto, A. Dubey, X. Koutsoukos, T. Eghtesad, A. Laszka, and A. Mavridou. Blockchains for transactive energy systems: Opportunities, challenges, and approaches. *Computer*, 53(9):66–76, 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [EBHBL16] A. Ekblaw, C. Barabas, J. Harvey-Buschel, and A. Lippman. Bitcoin and the myth of decentralization: Socio-technical proposals for restoring network integrity. In *2016 IEEE 1st International Workshops on Foundations and Applications of Self* Systems (FAS*W)*, pages 18–23. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2016.
- [EBSC15] Shayan Eskandari, David Barrera, Elizabeth Stobert, and Jeremy Clark. A first look at the usability of Bitcoin key management. In ????, editor, *Proceedings of the Workshop on Usable Security (USEC 15)*, 8 February 2015, San Diego, CA, USA, page ?? Internet Society, Reston,

- VA, USA, 2015. ISBN 1-891562-40-1. URL https://users.encs.concordia.ca/~clark/papers/2015_usec.pdf.
- Erdin:2020:BPN**
- [ECA⁺20] Enes Erdin, Mumin Cebe, Kemal Akkaya, Senay Solak, Eyuphan Bulut, and Selcuk Uluagac. A Bitcoin payment network with reduced transaction fees and confirmation times. *Computer Networks (Amsterdam, Netherlands: 1999)*, 172(??):Article 107098, May 8, 2020. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128619308850>. [ECHL16]
- Erdin:2021:SPB**
- [ECA⁺21] Enes Erdin, Mumin Cebe, Kemal Akkaya, Eyuphan Bulut, and Selcuk Uluagac. A scalable private Bitcoin payment channel network with privacy guarantees. *Journal of Network and Computer Applications*, 180(??):??, April 15, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521000485>.
- Eskandari:2017:DDA** [Ede14]
- [ECdO17] Mojtaba Eskandari, Bruno Crispo, and Anderson Sana de Oliveira. DLoc: Distributed auditing for data location compliance in cloud. In Garcia-Alfaro et al. [GANAHJ17], pages 202–218. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_12.
- Eskandari:2016:BYC**
- S. Eskandari, J. Clark, and A. Hamou-Lhadj. Buy your coffee with Bitcoin: Real-world deployment of a Bitcoin point of sale terminal. In *2016 International IEEE Conferences on Ubiquitous Intelligence Computing, Advanced and Trusted Computing, Scalable Computing and Communications, Cloud and Big Data Computing, Internet of People, and Smart World Congress (UIC/ ATC/ ScalCom/ CBDCom/ IoP/ SmartWorld)*, pages 382–389. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, July 2016.
- Edelman:2014:CPM**
- Benjamin Edelman. Consumers pay more when they pay with Bitcoin. Web blog., May 2014. URL

- <https://www.pymnts.com/in-depth/2014/consumers-pay-more-when-they-pay-with-bitcoin/>.
- Easwaran:2015:BDI**
- [EDS15] Soumya Easwaran, Manu Dixit, and Sitabhra Sinha. Bitcoin dynamics: The *Inverse Square Law* of price fluctuations and other stylized facts. In *Econophysics and Data Driven Modelling of Market Dynamics*, New Econ. Windows, pages 121–128. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-08473-9. URL http://link.springer.com/chapter/10.1007/978-3-319-08473-2_4.
- Edwards:2015:FBP**
- [Edw15] C. Edwards. Finance — Bitcoin price crash finds new victims. *Engineering Technology*, 10(2):19, March 2015. ISSN 1750-9637 (print), 1750-9645 (electronic).
- Eddine:2021:EEA**
- [EFFM21] Merzougui Salah Eddine, Mohamed Amine Ferrag, Othmane Friha, and Leandros Maglaras. EASBF: an efficient authentication scheme over blockchain for fog computing-enabled Internet of Vehicles. *Journal of Information Security* and Applications (JISA), 59(??):??, June 2021. CODEN ????? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000442>.
- Evans-Greenwood:2017:DLL**
- [EG17] Peter Evans-Greenwood. Distributed ledgers & linked data. In *Proceedings of the 26th International Conference on World Wide Web Companion*, WWW '17 Companion, page 1451. International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva, Switzerland, 2017. ISBN 1-4503-4914-5.
- ElBansarkhani:2018:PSD**
- [EGB18] Rachid El Bansarkhani, Matthias Geihs, and Johannes Buchmann. PQChain: Strategic design decisions for distributed ledger technologies against future threats. *IEEE Security & Privacy*, 16(4):57–65, July/August 2018. CODEN ????? ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040057-abs.html>.
- Eyal:2015:BNS**
- [EGSvR15] Ittay Eyal, Adem Efe Gencer, Emin Gün Sirer,

and Robbert van Renesse. Bitcoin-NG: a scalable blockchain protocol. *CoRR*, ??(??):??, ??? 2015. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1510.02037>; <https://dblp.org/db/journals/corr/corr1510.html#EyalGSR15>. [EHBA⁺19]

Ebrahimpour:2024:BFS

[EH24] Ghader Ebrahimpour and Mohammad Sayad Haghighi. Is bitcoin future as secure as we think? Analysis of bitcoin vulnerability to bribery attacks launched through large transactions. *ACM Transactions on Privacy and Security (TOPS)*, 27(2):14:1–14:??, May 2024. CODEN ??? ISSN 2471-2566 (print), 2471-2574 (electronic). URL <https://dl.acm.org/doi/10.1145/3641546>. [EKK⁺17]

Ebrahimpour:2022:CBT

[EHA22] Ghader Ebrahimpour, Mohammad Sayad Haghighi, and Mamoun Alazab. Can blockchain be trusted in Industry 4.0? Study of a novel misleading attack on bitcoin. *IEEE Trans. Ind. Informatics*, 18(11):8307–8315, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/tii/tii18.html#EbrahimpourHA22>. [EL14]

El-Hindi:2019:BSD

Muhammad El-Hindi, Carsten Binnig, Arvind Arasu, Donald Kossmann, and Ravi Ramamurthy. BlockchainDB: a shared database on blockchains. *Proceedings of the VLDB Endowment*, 12(11):1597–1609, July 2019. CODEN ??? ISSN 2150-8097.

Engelmann:2017:TEA

Felix Engelmann, Henning Kopp, Frank Kargl, Florian Glaser, and Christof Weinhardt. Towards an economic analysis of routing in payment channel networks. In *Proceedings of the 1st Workshop on Scalable and Resilient Infrastructures for Distributed Ledgers*, SERIAL '17, pages 2:1–2:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5173-5. URL <http://doi.acm.org/10.1145/3152824.3152826>.

ElDefrawy:2014:FDC

Karim El Defrawy and Joshua Lampkins. Founding digital currency on secure computation. In *Proceedings of the 2014 ACM SIGSAC Conference on Computer and Communications Security*, CCS '14, pages 1–14. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-2957-8.

Ebert:2020:BTP

- [ELFCFL20] C. Ebert, P. Louridas, T. M. Fernández-Caramés, and P. Fraga-Lamas. Blockchain technologies in practice. *IEEE Software*, 37(4):17–25, July/August 2020. CODEN IESOE. ISSN 0740-7459 (print), 1937-4194 (electronic).

Egelund-Muller:2017:AEF

- [EMEHR17] Benjamin Egelund-Müller, Martin Elsman, Fritz Henglein, and Omri Ross. Automated execution of financial contracts on blockchains. *Business & Information Systems Engineering*, 59(6):457–467, November 2017. CODEN ???? ISSN 1867-0202 (print), 2363-7005 (electronic). URL <http://link.springer.com/article/10.1007/s12599-017-0507-z>.

Emmadi:2017:RIP

- [EN17] Nitesh Emmadi and Harika Narumanchi. Reinforcing immutability of permissioned blockchains with keyless signatures’ infrastructure. In *Proceedings of the 18th International Conference on Distributed Computing and Networking*, ICDCN ’17, pages 46:1–46:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4839-4. URL <http://doi.acm.org/10.1145/3007748.3018280>.

[//doi.acm.org/10.1145/3007748.3018280](http://doi.acm.org/10.1145/3007748.3018280).

Ezuma-Ngwu:2019:EII

- Chidi Ezuma-Ngwu. *Exploring Individual Intent towards Blockchain Technology in Response to Threats to Personal Data and Privacy*. Ph.D., North-central University, San Diego, CA, USA, 2019. 185 pp. URL <http://search.proquest.com/pqdtglobal/docview/2287507846>.

Ermilov:2017:ABA

- Dmitry Ermilov, Maxim Panov, and Yuri Yanovich. Automatic Bitcoin address clustering. In IEEE, editor, *2017 16th IEEE International Conference on Machine Learning and Applications (ICMLA)*, 18–21 December 2017, Cancun, Mexico, pages 461–466. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2017. URL <http://ieeexplore.ieee.org/document/8260674/>.

Eyal:2014:HDL

- Ittay Eyal and Emin Gün Sirer. How to disincen- tivize large Bitcoin mining pools. Web blog, June 18, 2014. URL <http://hackingdistributed.com/2014/06/18/how-to->

- disincentivize-large-bitcoin-mining-pools/. [Esc18]
- [ES14b] Ittay Eyal and Emin Gün Sirer. Majority is not enough: Bitcoin mining is vulnerable. In Christin and Safavi-Naini [CSN14], pages 436–454. ISBN 3-662-45472-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-45472-5_28. [ESLB20]
- [ES16] Rachid El Bansarkhani and Jan Sturm. An efficient lattice-based multisignature scheme with applications to Bitcoins. In *Cryptology and network security*, volume 10052 of *Lecture Notes in Computer Science*, pages 140–155. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. [ESP22]
- [ES18] Ittay Eyal and Emin Gün Sirer. Majority is not enough: Bitcoin mining is vulnerable. *Communications of the ACM*, 61(7): 95–102, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2018/7/229033/fulltext>. [ET17]
- Escalante:2018:ORT**
- Marty Escalante. Onion Router TOR, blockchain technology and cybercriminals. M.S., Utica College, Utica, NY, USA, 2018. 49 pp. URL <http://search.proquest.com/pqdtglobal/docview/2154847289>.
- Elagin:2020:BBT**
- Vasiliy Elagin, Anastasia Spirikina, Andrei Levakov, and Ilya Belozertsev. Blockchain behavioral traffic model as a tool to influence service IT security. *Future Internet*, 12(4):68, April 15, 2020. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/4/68>.
- ElAzzaoui:2022:BBB**
- Abir El Azzaoui, Pradip Kumar Sharma, and Jong Hyuk Park. Blockchain-based delegated Quantum Cloud architecture for medical big data security. *Journal of Network and Computer Applications*, 198(?): ??, February 2022. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521002952>.
- Eberhardt:2017:BIC**
- Jacob Eberhardt and Stefan Tai. On or off the blockchain? Insights on

- off-chaining computation and data. In *Service-Oriented and Cloud Computing*, pages 3–15. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-67262-5_1. [Eya15]
- [Eti19] Spandana Etikala. Blockchain based distributed key provisioning system. M.S., The University of North Carolina at Charlotte, Charlotte, NC, USA, 2019. 63 pp. URL <http://search.proquest.com/pqdtglobal/docview/2301551377>. [Eya17]
- [Eva14] David S. Evans. Economic aspects of Bitcoin and other decentralized public-ledger currency platforms. Working Paper 685, Coase-Sandor Institute for Law and Economics, ????, April 2014.
- [Ext15] Andy Extance. The future of cryptocurrencies: Bitcoin and beyond. *Nat.*, 526 (7571):21–23, ????, 2015. CODEN ????, ISSN ????. URL <https://dblp.org/db/journals/nature/nature526.html#Extance15>; <https://www.wikidata.org/entity/Q45871501>. [EZ17]
- Etikala:2019:BBD**
- Evans:2014:EAB**
- Extance:2015:FCB**
- Eyal:2015:MD**
- Ittay Eyal. The miner’s dilemma. In IEEE, editor, *2015 IEEE Symposium on Security and Privacy: Proceedings. 18–20 May, 2015, San Jose, California, USA*, pages 89–103. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015. ISBN 1-4673-6949-7. ISSN 1081-6011.
- Eyal:2017:BT**
- Ittay Eyal. Blockchain technology: Transforming libertarian cryptocurrency dreams to finance and banking realities. *Computer*, 50 (9):38–49, September 2017. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://www.computer.org/csdl/mags/co/2017/09/mco2017090038-abs.html>.
- Epishkina:2017:DCH**
- Anna Epishkina and Sergey Zapechnikov. Discovering and clustering hidden time patterns in blockchain ledger. In *Advances in Intelligent Systems and Computing*, pages 245–250. Springer International Publishing, ????, July 2017.

- [EZ18] **Epishkina:2018:DCH**
 Anna Epishkina and Sergey Zapechnikov. Discovering and clustering hidden time patterns in blockchain ledger. In *Biologically Inspired Cognitive Architectures (BICA) for Young Scientists*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-63940-6_35. [FAC22]
- [EZR⁺22] **Erfanian:2022:PBB**
 Sahar Erfanian, Yewang Zhou, Amar Razzaq, Azhar Abbas, Asif Ali Safeer, and Teng Li. Predicting bitcoin (BTC) price in the context of economic theories: a machine learning approach. *Entropy*, 24(10):1487, 2022. CODEN ENTRFG. ISSN 2073-8994. URL <https://dblp.org/db/journals/entropy/entropy24.html#ErfanianZRASL22>. [Fai17]
- [FA21] **Fotohi:2021:SCB**
 Reza Fotohi and Fereidoon Shams Aliee. Securing communication between things using blockchain technology based on authentication and SHA-256 to improving scalability in large-scale IoT. *Computer Networks (Amsterdam, Netherlands: 1999)*, 197(??):??, October 9, 2021. CODEN 2022-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621003303>. [Fai19]
- [FA22] **Florea:2022:RBT**
 Alexandru-Ioan Florea, Ionut Anghel, and Tudor Cioara. A review of blockchain technology applications in ambient assisted living. *Future Internet*, 14(5):150, May 12, 2022. CODEN 2022-1286 (print), 1872-7069 (electronic). URL <https://www.mdpi.com/1999-5903/14/5/150>. [Fan22]
- [Fair17] **Fairley:2017:BWF**
 P. Fairley. Blockchain world — feeding the blockchain beast: if Bitcoin ever does go mainstream, the electricity needed to sustain it will be enormous. *IEEE Spectrum*, 54(10):36–59, October 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Fair19] **Fairley:2019:EWC**
 P. Fairley. Ethereum will cut back its absurd energy use. *IEEE Spectrum*, 56(1):29–32, January 2019. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Fan22] **Fan:2022:DAV**
 Huiling Fan. The digital

- asset value and currency supervision under deep learning and blockchain technology. *Journal of Computational and Applied Mathematics*, 407(??): ??, June 2022. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S037704272100621X>. [FB17a]
- [Far18a] Cyrus Farivar. Bitcoin thirst spurs Icelandic heist — “Grand theft on a scale unseen before”. “Everything points to this being a highly organized crime,” Iceland police say. ArsTechnica Web site., March 2, 2018. URL <https://arstechnica.com/tech-policy/2018/03/bitcoin-thirst-spurs-icelandic-heist-grand-theft-on-a-scale-unseen-before/>. [FB17b]
- [Far18b] Cyrus Farivar. Coinbase: We will send data on 13,000 users to IRS: Bitcoin startup says if concerned, “seek legal advice from an attorney promptly”. Web article., February 26, 2018. URL <https://arstechnica.com/tech-policy/2018/02/coinbase-we-will-send-data-on-13000-users-to-irs/>; <https://support.coinbase.com/customer/portal/articles/2924446>. [FBGMPS23]
- Fraser:2017:SFS**
J. G. Fraser and A. Bouridane. Have the security flaws surrounding Bitcoin affected the currency’s value? In *2017 Seventh International Conference on Emerging Security Technologies (EST)*, pages 50–55. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2017. ISSN 2472-7601. URL <http://ieeexplore.ieee.org/document/8090398/>.
- Frowis:2017:CWT**
Michael Fröwis and Rainer Böhme. In code we trust? In Garcia-Alfaro et al. [GANAHHJ17], pages 357–372. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_20.
- Febrero-Bande:2023:FCB**
Manuel Febrero-Bande, Wenceslao González-Manteiga, Brenda Prallon, and Yuri F. Saporito. Functional classification of bitcoin addresses. *Computational Statistics & Data Analysis*, 181(??):??,

- May 2023. CODEN CS-DADW. ISSN 0167-9473 (print), 1872-7352 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167947322002675> **Florian:2019:EDB**
- [FBHS19] Martin Florian, Sophie Beaucamp, Sebastian Henningsen, and Björn Scheuermann. Erasing data from blockchain nodes. *arXiv.org*, ??(??):??, April 18, 2019. URL <https://arxiv.org/abs/1904.08901>. **Fan:2020:DDR**
- [FBL⁺20] Kuan Fan, Zijian Bao, Mingxi Liu, Athanasios V. Vasilakos, and Wenbo Shi. Dredas: Decentralized, reliable and efficient remote outsourced data auditing scheme with blockchain smart contract for industrial IoT. *Future Generation Computer Systems*, 110(??):665–674, September 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19315560> **Ferdous:2021:SCA**
- [FCH21] Md Sadek Ferdous, Mohammad Javed Morshed Chowdhury, and Mohammad A. Hoque. A survey of consensus algorithms in public blockchain systems for crypto-currencies. *Journal of Network and Computer Applications*, 182(??):??, May 15, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521000618> **Ferretti:2020:FSI**
- [FD20a] Stefano Ferretti and Gabriele D’Angelo. Foreword to the special issue on cryptocurrencies and blockchains for distributed systems. *Concurrency and Computation: Practice and Experience*, 32(12):e5539:1–e5539:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). **Ferretti:2020:EBS**
- [FD20b] Stefano Ferretti and Gabriele D’Angelo. On the Ethereum blockchain structure: a complex networks theory perspective. *Concurrency and Computation: Practice and Experience*, 32(12):e5493:1–e5493:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). **Fezeu:2017:SID**
- [FDT17] H. Kamdem Fezeu, T. Djotio, and R. Oulad Haj Thami. Safe and irrefutable decentralized communi-

- cation: Bringing non-repudiation to mesh networks. In *Proceedings of the 2Nd International Conference on Big Data, Cloud and Applications*, BDCA'17, pages 37:1–37:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4852-1. URL <http://doi.acm.org/10.1145/3090354.3090392>. [FGHM17]
- [FF17] Sebastian Friebe and Martin Florian. DPS-discuss: Demonstrating decentralized, pseudonymous, Sybil-resistant communication. In *Proceedings of the SIGCOMM Posters and Demos*, SIGCOMM Posters and Demos '17, pages 74–75. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5057-7.
- [FFL21] Bahar Farahani, Farshad Firouzi, and Markus Luecking. The convergence of IoT and distributed ledger technologies (DLT): Opportunities, challenges, and solutions. *Journal of Network and Computer Applications*, 177(??):??, March 1, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303945>. [FHZ⁺19]
- Friebe:2017:DDD**
- Amir Feder, Neil Gandal, J. T. Hamrick, and Tyler Moore. The impact of DDoS and other security shocks on bitcoin currency exchanges: evidence from Mt. Gox. *J. Cybersecur.*, 3(2):137–144, 2017. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <https://dblp.org/db/journals/cybersecurity/cybersecurity3.html#FederGHM17>; <https://www.wikidata.org/entity/Q111689208>. **Feder:2017:IDO**
- Remo Manuel Frey, Thomas Hardjono, Christian Smith, Keeley Erhardt, and Alex ‘Sandy’ Pentland. Secure sharing of geospatial wildlife data. In *Proceedings of the Fourth International ACM Workshop on Managing and Mining Enriched Geo-Spatial Data*, GeoRich '17, pages 5:1–5:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5047-X. URL <http://doi.acm.org/10.1145/3080546.3080550>. **Frey:2017:SSG**
- Qi Feng, Debiao He, Sherali Zeadally, Muhammad Khurram Khan, and Neeraj Kumar. A survey on privacy protection in blockchain system. *Journal of Network and Computer*
- Farahani:2021:CID**
- Feng:2019:SPP**

- Applications*, 126(??):45–58, January 15, 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804518303485>■
- [Fin17a] Ed Finn. *Counting Bitcoin*, pages 272–. MIT Press, Cambridge, MA, USA, 2017. ISBN 0-262-33883-1. URL <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7904154>.
- [Fin17b] Ed Finn. *What algorithms want: imagination in the age of computing*. MIT Press, Cambridge, MA, USA, 2017. ISBN 0-262-03592-8 (hardcover). viii + 257 pp. LCCN HM851.F5565 2017.
- [Fir18] Alexey Firsh. Zero-day vulnerability in Telegram: Cybercriminals exploited Telegram flaw to launch multipurpose attacks. Web story., February 13, 2018. URL <https://securelist.com/zero-day-vulnerability-in-telegram/83800/>.
- [Fit22] Joshua Brian Fitzgerald. Elliptic curve pairings. *Computer*, 55(4):74–77, April 2022. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [FLL⁺22] Yongkai Fan, Xiaodong Lin, Wei Liang, Jinghan Wang, Gang Tan, Xia Lei, and Lei Jing. TraceChain: a blockchain-based scheme to protect data confidentiality and traceability. *Software—Practice and Experience*, 52(1):115–129, January 2022. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- [FMR⁺16] Davide Frey, Marc X. Makkes, Pierre-Louis Roman, François Taïani, and Spyros Voulgaris. Bringing secure Bitcoin transactions to your smartphone. In *Proceedings of the 15th International Workshop on Adaptive and Reflective Middleware*, ARM 2016, pages 3:1–3:6. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4662-6. URL <http://doi.acm.org/10.1145/3008167.3008170>.
- [FMR⁺19] Davide Frey, Marc X. Makkes, Pierre-Louis Roman, François Taïani, and Spyros Voulgaris. Dietcoin:

hardening Bitcoin transaction verification process for mobile devices. *Proceedings of the VLDB Endowment*, 12(12):1946–1949, August 2019. CODEN ???? ISSN 2150-8097. [FOA17]

Fauzi:2017:IAU

[FNP17] Muhammad Reza Rizky Fauzi, Surya Michrandi Nasution, and Marisa W. Paryasto. Implementation and analysis of the use of the blockchain transactions on the workings of the Bitcoin. *IOP Conference Series: Materials Science and Engineering*, 260:012003, November 2017. ISSN 1757-8981 (print), 1757-899X (electronic).

Fadhil:2016:BME

[FOA16] M. Fadhil, G. Owenson, and M. Adda. A Bitcoin model for evaluation of clustering to improve propagation delay in Bitcoin network. In *2016 IEEE Intl Conference on Computational Science and Engineering (CSE) and IEEE Intl Conference on Embedded and Ubiquitous Computing (EUC) and 15th Intl Symposium on Distributed Computing and Applications for Business Engineering (DCABES)*, pages 468–475. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver

Spring, MD 20910, USA, August 2016.

Fadhil:2017:LBA

Muntadher Fadhil, Gareth Owenson, and Mo Adda. Locality based approach to improve propagation delay on the Bitcoin peer-to-peer network. In *2017 IFIP/IEEE Symposium on Integrated Network and Service Management (IM)*, pages 556–559. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2017. URL <http://ieeexplore.ieee.org/document/7987328/>.

Foth:2017:PBT

Marcus Foth. The promise of blockchain technology for interaction design. In *Proceedings of the 29th Australian Conference on Computer-Human Interaction*, OZCHI '17, pages 513–517. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5379-7. URL <http://doi.acm.org/10.1145/3152771.3156168>.

Fox:2017:B

Dirk Fox. Bitcoin. *Datenschutz und Datensicherheit — DuD*, 41(8):507, August 2017. CODEN ???? ISSN 1614-0702 (print), 1862-2607 (electronic). URL

- <http://link.springer.com/article/10.1007/s11623-017-0821-0>.
Fischer:2021:CCS
- [FPD⁺21] Jan Alexander Fischer, Andres Palechor, Daniele Dell’Aglio, Abraham Bernstein, and Claudio J. Tesone. The complex community structure of the bitcoin address correspondence network. *CoRR*, ??(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2105.09078>; <https://dblp.org/db/journals/corr/corr2105.html#abs-2105-09078>.
- [FPKH17] Erwin Filtz, Axel Polleres, Roman Karl, and Bernhard Haslhofer. Evolution of the Bitcoin address graph. In *Data Science Analytics and Applications*, pages 77–82. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-658-19287-9. URL http://link.springer.com/chapter/10.1007/978-3-658-19287-7_11.
- [FR16] José G. Fa’isca and José Q. Rogado. Decentralized semantic identity. In *Proceedings of the 12th International Conference on Semantic Systems*, SEMANTiCS 2016, pages 177–180. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4752-5. URL <http://doi.acm.org/10.1145/2993318.2993348>.
- Franco:2014:UBC**
- [Fra14] Pedro Franco. *Understanding Bitcoin: Cryptography, Engineering and Economics*, volume 1 of *Wiley Finance Series*. John Wiley, New York, NY, USA, 2014. ISBN 1-119-01916-8 (hardcover), 1-119-01915-X (e-book), 1-119-01914-1 (e-book), 1-119-01913-3 (e-book). xx + 268 pp. LCCN TK5105.59. URL <http://onlinelibrary.wiley.com/book/10.1002/9781119019138>.
- Firdaus:2019:RBB**
- [FRF⁺19] Ahmad Firdaus, Mohd Faizal Ab Razak, Ali Feizollah, Ibrahim Abaker Targio Hashem, Mohamad Hazim, and Nor Badrul Anuar. The rise of “blockchain”: bibliometric analysis of blockchain study. *Scientometrics*, 120(3):1289–1331, September 2019. CODEN SCNTDX. ISSN 0138-9130 (print), 1588-2861 (electronic). URL <http://link.springer.com/article/10.1007/s11192-019-03170-4>.
- Frisby:2014:BFM**
- [Fri14] Dominic Frisby. *Bitcoin: The End of Money as We Know It*. No Starch Press, 2014. ISBN 1-78217-063-9. URL http://www.independent.org/publications/default.asp?article_id=11077.

the future of money. Unbound, London, UK, 2014. ISBN 1-78352-077-9 (paperback). xxv + 269 pp. LCCN HG1710F742014.

Fridgen:2017:EDI

[FRSU17]

Prof.Dr.Gilbert Fridgen, Sven Radszuwill, André Schweizer, and Prof.Dr.Nils Urbach. Entwicklung disruptiver Innovationen mit Blockchain: Der Weg zum richtigen Anwendungsfall. (German) [Developing disruptive innovations with blockchain: The road to the right use case]. *Wirtschaftsinformatik & Management*, 9(5):52–59, October 2017. CODEN ??? ISSN 1867-5905 (print), 1867-5913 (electronic). URL <http://link.springer.com/article/10.1007/s35764-017-0108-0>.

[FSW14]

Fuenfroeken:2016:HAS

[FS16]

M. Fuenfroeken and W. H. Schulz. How automotive software architectures could benefit from Bitcoin. In *2016 Workshop on Automotive Systems/Software Architectures (WASA)*, pages 14–17. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2016.

Fry:2020:QSB

[FS20]

John Fry and Jean-Philippe

Serbera. Quantifying the sustainability of bitcoin and blockchain. *J. Enterp. Inf. Manag.*, 33(6):1379–1394, ??? 2020. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/jeim/jeim33.html#FryS20>.

Feld:2014:ADB

Sebastian Feld, Mirco Schönfeld, and Martin Werner. Analyzing the deployment of Bitcoin’s P2P network under an AS-level perspective. *Procedia Computer Science*, 32(??):1121–1126, 2014. CODEN ??? ISSN 1877-0509. URL <http://www.sciencedirect.com/science/article/pii/S187705091400742X>.

Fan:2019:BBC

Kai Fan, Shili Sun, Zheng Yan, Qiang Pan, Hui Li, and Yintang Yang. A blockchain-based clock synchronization scheme in IoT. *Future Generation Computer Systems*, 101(??):524–533, December 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18326657>.

Fan:2020:SHB

Chun-I Fan, Yi-Fan Tseng, Hui-Po Su, Ruei-Hau Hsu, and Hiroaki Kikuchi. Se-

[FTS⁺20]

- cure hierarchical Bitcoin wallet scheme against privilege escalation attacks. *International Journal of Information Security*, 19(3):245–255, June 2020. CODEN ????? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-019-00476-5>.
Fugelsang:2019:BTC [FY19]
 [Fug19] Joseph J. Fugelsang. Blockchain technology for cybersecurity and data integrity: a case for mainstream adoption. M.S., Utica College, Utica, NY, USA, 2019. 43 pp. URL <http://search.proquest.com/pqdtglobal/docview/2314065461>.
Florian:2015:SRP
 [FWB15] Martin Florian, Johannes Walter, and Ingmar Baumgart. Sybil-resistant pseudonymization and pseudonym change without trusted third parties. In *Proceedings of the 14th ACM Workshop on Privacy in the Electronic Society*, WPES '15, pages 65–74. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3820-8.
Fan:2021:DBC
 [FWP21] Yuqi Fan, Huanyu Wu, and Hye-Young Paik. DR-BFT: a consensus algorithm for blockchain-based multi-layer data integrity framework in dynamic edge computing system. *Future Generation Computer Systems*, 124(??):33–48, November 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21001412>.
Feng:2019:MCD
 Wei Feng and Zheng Yan. MCS-Chain: Decentralized and trustworthy mobile crowdsourcing based on blockchain. *Future Generation Computer Systems*, 95(??):649–666, June 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18326967>.
Furuta:2017:TES
 Yuuji Furuta, Naoto Yanai, Masashi Karasaki, Katsuhiko Eguchi, Yasunori Ishihara, and Toru Fujiwara. Towards efficient and secure encrypted databases: Extending message-locked encryption in three-party model. In Garcia-Alfaro et al. [GANAHJ17], pages 55–69. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL <http://>

- link.springer.com/chapter/10.1007/978-3-319-67816-0_4.
- [FYZ⁺21] Jun Feng, Laurence T. Yang, Yuxiang Zhu, Nicholas J. Gati, and Yijun Mo. Blockchain-enabled tensor-based conditional deep convolutional GAN for cyber-physical-social systems. *ACM Transactions on Internet Technology (TOIT)*, 21(2):41:1–41:17, June 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3404890>.
- [FZC⁺20] Jingyu Feng, Xinyu Zhao, Kexuan Chen, Feng Zhao, and Guanghua Zhang. Towards random-honest miners selection and multi-blocks creation: Proof-of-negotiation consensus mechanism in blockchain networks. *Future Generation Computer Systems*, 105(??):248–258, April 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19313044>.
- [FZG⁺22] Lei Feng, Yiqi Zhao, Shaoyong Guo, Xuesong Qiu, [GADO17] Wenjing Li, and Peng Yu. BAFL: A blockchain-based asynchronous federated learning framework. *IEEE Transactions on Computers*, 71(5):1092–1103, May 2022. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).
- [G.17] B. G. Bitcoin is fiat money, too: What Charles Kindleberger has to say about cryptocurrencies. *The Economist*, ??(??):??, September 22, 2017. CODEN EONOEH. ISSN 0013-0613 (print), 1476-8860 (electronic). URL <https://www.economist.com/blogs/freeexchange/2017/09/not-so-novel>.
- [GAdFGMA21] Mar Gimenez-Aguilar, Jose Maria de Fuentes, Lorena Gonzalez-Manzano, and David Arroyo. Achieving cybersecurity in blockchain-based systems: a survey. *Future Generation Computer Systems*, 124(??):91–118, November 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21001576>.
- [Gadriwala:2017:APC] Umme Salma Gadriwala,

- Christopher Kumar Anand, Curtis D’Alves, and Bill O’Farrell. Accelerating Poly1305 cryptographic message authentication on the Z14. In *Proceedings of the 27th Annual International Conference on Computer Science and Software Engineering, CASCON ’17*, pages 48–54. IBM Corporation, San Jose, CA, USA, 2017. URL <http://dl.acm.org/citation.cfm?id=3172795.3172802>. [Gal18]
- Guo:2018:PST**
- [GAF18] Tian Guo and Nino Antulov-Fantulin. Predicting short-term bitcoin price fluctuations from buy and sell orders. *CoRR*, abs/1802.04065 (??):??, 2018. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1802.04065>; <https://dblp.org/db/journals/corr/corr1802.html#abs-1802-04065>. [GANAHJ17]
- Gkaniatsou:2017:LLA**
- [GAK17] Andriana Gkaniatsou, Myrto Arapinis, and Aggelos Kiayias. Low-level attacks in Bitcoin wallets. In *Information Security*, pages 233–253. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-69659-9. URL <http://link.springer.com/chapter/>
- 10.1007/978-3-319-69659-1_13.
- Gallagher:2018:IHR**
- Sean Gallagher. Info-highway robbery — two new cryptocurrency heists make off with over \$400M worth of blockchange. Coincheck sincerely apologizes for the inconvenience. Web story, January 26, 2018. URL <https://arstechnica.com/information-technology/2018/01/two-new-cryptocurrency-heists-make-off-with-over-400m-worth-of-blockchange/>.
- Garcia-Alfaro:2017:DPM**
- Joaquin Garcia-Alfaro, Guillermo Navarro-Arribas, Hannes Hartenstein, and Jordi Herrera-Joancomartí, editors. *Data Privacy Management, Cryptocurrencies and Blockchain Technology ESORICS 2017 International Workshops, DPM 2017 and CBT 2017, Oslo, Norway, September 14–15, 2017, Proceedings*, volume 10436 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). xiii + 446 pp. LCCN QA76.9.A25. URL

- <http://link.springer.com/10.1007/978-3-319-67816-0>.
- Goodell:2021:DCA**
- [GANT21] Geoffrey Goodell, Hazem Danny Al-Nakib, and Paolo Tasca. A digital currency architecture for privacy and owner-custodianship. *Future Internet*, 13(5):130, May 14, 2021. CODEN [GB22] ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/5/130>.
- Gao:2017:PAB**
- [Gao17] Zhimin Gao. *Performance Analysis of Blockchain and Smart Contracts*. Ph.D., University of Houston, Houston, TX, USA, 2017. 167 pp. URL <http://search.proquest.com/pqdtglobal/docview/2189769532-18>.
- Garay:2017:BPB**
- [Gar17] Juan A. Garay. Basic properties of the blockchain: (invited talk). In *Proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts*, BCC '17, page 1. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4974-9. URL <http://doi.acm.org/10.1145/3055518.3055519>.
- Gonzalez-Barahona:2021:FDM**
- [GB21] Jesús M. González-Barahona, [GBPDW17] Factors determining maximum energy consumption of bitcoin miners. *CoRR*, ??(?):??, ??? 2021. CODEN ISSN ISSN ??? URL <https://arxiv.org/abs/2107.10634>; <https://dblp.org/db/journals/corr/corr2107.html#abs-2107-10634>.
- Ghosh:2022:BCF**
- Bikramaditya Ghosh and Elie Bouri. Is bitcoin's carbon footprint persistent? Multifractal evidence and policy implications. *Entropy*, 24(5):647, ??? 2022. CODEN ENTRFG. ISSN ISSN ??? URL <https://dblp.org/db/journals/entropy/entropy24.html#GhoshB22>.
- Gencer:2018:DBE**
- Adem Efe Gencer, Soumya Basu, Ittay Eyal, Robert van Renesse, and Emin Gün Sirer. Decentralization in bitcoin and Ethereum networks. *CoRR*, abs/1801.03998(??):??, ??? 2018. CODEN ISSN ISSN ??? URL <http://arxiv.org/abs/1801.03998>; <https://dblp.org/db/journals/corr/corr1801.html#abs-1801-03998>.
- Garcia-Banuelos:2017:OEB**
- Luciano García-Bañuelos, Alexander Ponomarev, Marlon Dumas, and Ingo

- Weber. Optimized execution of business processes on blockchain. In *Business Process Management*, Lecture Notes in Computer Science, pages 130–146. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-65000-5_8. [GCD16]
- Garcia-Barriocanal:2017:DMB**
- [GBSAS17] Elena García-Barriocanal, Salvador Sánchez-Alonso, and Miguel-Angel Sicilia. Deploying metadata on blockchain technologies. In *Metadata and Semantic Research*, pages 38–49. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-70863-8_4. [GCH⁺22]
- Guo:2008:VMS**
- [GC08] Jingzhi Guo and Angelina Chow. Virtual money systems: a phenomenal analysis. In IEEE, editor, *Proceedings of the 10th IEEE Conference on E-Commerce Technology and the Fifth IEEE Conference on Enterprise Computing, E-Commerce and E-Services, CEC 2008 and EEE 2008, 21–24 July, 2008, Washington, DC, USA*, pages 267–272. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008. ISBN 0-7695-3340-X. LCCN HF5548.32 .I343 2008.
- Gjermundrod:2016:GBC**
- Harald Gjermundrød, Konstantinos Chalkias, and Ioanna Dionysiou. Going beyond the Coinbase transaction fee: Alternative reward schemes for miners in blockchain systems. In *Proceedings of the 20th Pan-Hellenic Conference on Informatics, PCI '16*, pages 35:1–35:4. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4789-4. URL <http://doi.acm.org/10.1145/3003733.3003773>.
- Gong:2022:ATP**
- Bei Gong, Chi Cui, Mingsheng Hu, Chong Guo, Xiaochong Li, and Yuheng Ren. Anonymous traceability protocol based on group signature for blockchain. *Future Generation Computer Systems*, 127(??):160–167, February 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21003666>.
- Gervais:2014:PPB**
- Arthur Gervais, Srdjan

- Čapkun, Ghassan O. Karame, and Damian Gruber. On the privacy provisions of Bloom filters in lightweight Bitcoin clients. In *Proceedings of the 30th Annual Computer Security Applications Conference, ACSAC '14*, pages 326–335. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-3005-3. [GCR18]
- [GCL16] Xianyi Gao, Gradeigh D. Clark, and Janne Lindqvist. Of two minds, multiple addresses, and one ledger: Characterizing opinions, knowledge, and perceptions of Bitcoin across users and non-users. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, CHI '16*, pages 1656–1668. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-3362-1.
- [GCR16] Ilias Giechaskiel, Cas Cremers, and Kasper B. Rasmussen. On Bitcoin security in the presence of broken cryptographic primitives. In *Computer Security ESORICS 2016*, pages 201–222. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-45741-1. URL http://link.springer.com/chapter/10.1007/978-3-319-45741-3_11.
- [GDKJ22] Ilias Giechaskiel, Cas Cremers, and Kasper B. Rasmussen. When the crypto in cryptocurrencies breaks: Bitcoin security under broken primitives. *IEEE Security & Privacy*, 16(4): 46–56, July/August 2018. CODEN ????. ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040046-abs.html>.
- [GDA⁺21] Martin Garriga, Stefano Dalla Palma, Maxmiliano Arias, Alan De Renzis, Remo Pareschi, and Damian Andrew Tamburri. Blockchain and cryptocurrencies: a classification and comparison of architecture drivers. *Concurrency and Computation: Practice and Experience*, 33(8):e5992:1–e5992:??, April 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [GDKJ22] Pooja Gupta, Volkan Dedeoglu, Salil S. Kanhere, and Raja Jurdak. TrailChain: Traceability of data own-

- ership across blockchain-enabled multiple marketplaces. *Journal of Network and Computer Applications*, 203(??):??, July 2022. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804522000509> [Gei16]
- Ghosh:2017:ACO**
- [GDP⁺17] Shalini Ghosh, Ariyam Das, Phil Porras, Vinod Yegneswaran, and Ashish Gehani. Automated categorization of onion sites for analyzing the Darkweb ecosystem. In *Proceedings of the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, KDD '17, pages 1793–1802. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4887-4. [Gen17]
- Grcan:2017:BLD**
- [GDTP17] Önder Gürcan, Antonella Del Pozzo, and Sara Tucci-Piergiovanni. On the Bitcoin limitations to deliver fairness to users. In *On the Move to Meaningful Internet Systems. OTM 2017 Conferences*, pages 589–606. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-69462-6. URL http://link.springer.com/chapter/10.1007/978-3-319-69462-7_37. **Geissinger:2016:VBG**
- Eric Geissinger. *Virtual billions: the genius, the drug lord, and the Ivy League twins behind the rise of Bitcoin*. Prometheus Books, Amherst, NY, USA, 2016. ISBN 1-63388-144-X (hardcover), 1-63388-145-8. 319 pp. LCCN HG1710 .G45 2016. **Gencer:2017:SBT**
- Adem Efe Gencer. *On Scalability of Blockchain Technologies*. Ph.D., Cornell University, Ithaca, NY, USA, 2017. 140 pp. URL <http://search.proquest.com/pqdtglobal/docview/1964277559>. **Gerstl:2016:LBB**
- David S. Gerstl. Leveraging Bitcoin blockchain technology to modernize security perfection under the Uniform Commercial Code. In *Software Business*, Lecture Notes in Business Information Processing, pages 109–123. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-40515-2. URL http://link.springer.com/chapter/10.1007/978-3-319-40515-5_8.

- [Gev16] Benjamin Geva. Mobile payments and Bitcoin: Concluding reflections on the digital upheaval in payments. In *Bitcoin and Mobile Payments*, pages 271–287. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 1-137-57512-3. URL http://link.springer.com/chapter/10.1057/978-1-137-57512-8_12. **Geva:2016:MPB**
- [GGDK20] Arunima Ghosh, Shashank Gupta, Amit Dua, and Neeraj Kumar. Security of cryptocurrencies in blockchain technology: State-of-art, challenges and future prospects. *Journal of Network and Computer Applications*, 163(??):??, August 1, 2020. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520301090>. **Ghosh:2020:SCB**
- [GFLS21] Lan Gao, Yingying Fan, Jinchi Lv, and Qi-Man Shao. Asymptotic distributions of high-dimensional distance correlation inference. *Annals of Statistics*, 49(4):1999–2020, August 2021. CODEN ASTSC7. ISSN 0090-5364 (print), 2168-8966 (electronic). URL <https://projecteuclid.org/journals/annals-of-statistics/volume-49/issue-4/Asymptotic-distributions-of-high-dimensional-distance-correlation-inference/10.1214/20-AOS2024.full>. **Gao:2021:ADH**
- [GGJ22] Amal Ghorbel, Mahmoud Ghorbel, and Mohamed Jmaiel. Accountable privacy preserving attribute-based access control for cloud services enforced using blockchain. *International Journal of Information Security*, 21(3):489–508, June 2022. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <https://link.springer.com/article/10.1007/s10207-021-00565-4>. **Ghorbel:2022:APP**
- [GG17] Rishab Goyal and Vipul Goyal. Overcoming cryptographic impossibility results using blockchains. In *Theory of Cryptogra-*

- [GGK⁺14] **Goldfeder:2014:SBW** Steven Goldfeder, Rosario Gennaro, Harry Kalodner, Joseph Bonneau, Edward W. Felten, Joshua A. Kroll, and Arvind Narayanan. Securing Bitcoin wallets via a new DSA/ECDSA threshold signature scheme. Technical report, Princeton University, Princeton, NJ, USA, 2014. 23 pp. URL https://www.cs.princeton.edu/~stevenag/threshold_sigs.pdf. [GGS19]
- [GGKR21] **Gundlach:2021:PCT** Rowel Gündlach, Martijn Gijsbers, David T. Koops, and Jacques Resing. Predicting confirmation times of bitcoin transactions. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):16–19, May 2021. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dblp.org/db/journals/sigmetrics/sigmetrics48.html#GundlachGKR21>; <https://dl.acm.org/doi/10.1145/3466826.3466833>. [GGS20]
- [GGN16] **Gennaro:2016:TOD** Rosario Gennaro, Steven Goldfeder, and Arvind Narayanan. Threshold-optimal DSA/ECDSA signatures and an application to Bitcoin wallet security. In [GH05] *Applied Cryptography and Network Security*, volume 9696 of *Lecture Notes in Computer Science*, pages 156–174. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-39554-8 (paperback), 3-319-39555-6 (e-book). URL http://link.springer.com/chapter/10.1007/978-3-319-39555-5_9.
- Goldsmith:2019:AHS** Daniel Goldsmith, Kim Grauer, and Yonah Shmalo. Analyzing hack subnetworks in the bitcoin transaction graph. *CoRR*, abs/1910.13415(??):??, ??? 2019. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1910.13415>; <https://dblp.org/db/journals/corr/corr1910.html#abs-1910-13415>.
- Goldsmith:2020:AHS** Daniel Goldsmith, Kim Grauer, and Yonah Shmalo. Analyzing hack subnetworks in the bitcoin transaction graph. *Appl. Netw. Sci.*, 5(1):22, ??? 2020. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/ans/ans5.html#GoldsmithGS20>.
- Garcia:2005:LKD** Flavio S. Garcia and Jaap-

Henk Hoepman. Off-line Karma: A decentralized currency for peer-to-peer and grid applications. In Ioannidis et al. [IKY05], pages 364–377. ISBN 3-540-26223-7 (paperback), 3-540-31542-X (e-book). ISSN 0302-9743. LCCN TK5102.85 .A26 2005. URL www.hashcash.org/papers/offline-karma.pdf. [GHJ21]

Grimm:2017:ARB

[GH17] Rüdiger Grimm and Andreas Heinemann. Alle reden über Blockchain. (German) [Everyone is talking about blockchain]. *Datenschutz und Datensicherheit — DuD*, 41(8):469, August 2017. CODEN ??? ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0813-0>. [GHJ22]

Guo:2021:BAV

[GHG⁺21] Yi-Ming Guo, Zhen-Ling Huang, Ji Guo, Xing-Rong Guo, Hua Li, Meng-Yu Liu, Safa Ezzeddine, and Mpeoane Judith Nkeli. A bibliometric analysis and visualization of blockchain. *Future Generation Computer Systems*, 116(??):316–332, March 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X20330004>. [GHMO17]

www.sciencedirect.com/science/article/pii/S0167739X20330004

Gebraselase:2021:ATH

Befekadu Gezaheng Gebraselase, Bjarne E. Helvik, and Yuming Jiang. An analysis of transaction handling in bitcoin. *CoRR*, abs/2106.10083(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2106.10083>; <https://dblp.org/db/journals/corr/corr2106.html#abs-2106-10083>.

Gebraselase:2022:BPN

Befekadu Gezaheng Gebraselase, Bjarne E. Helvik, and Yuming Jiang. Bitcoin P2P network measurements: a testbed study of the effect of peer selection on transaction propagation and confirmation times. *CoRR*, ??(??):??, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/corr/corr2205.html#abs-2205-00745>.

Gandal:2017:PMB

Neil Gandal, J. T. Hamrick, Tyler Moore, and Tali Oberman. Price manipulation in the Bitcoin ecosystem. Report, Tel Aviv University and The University of Tulsa, Tel Aviv, Israel and Tulsa, OK, USA, May

22, 2017. URL http://weis2017.econinfosec.org/wp-content/uploads/sites/3/2017/05/WEIS_2017_paper_21.pdf.

Giaglis:2015:MIB

[Gia15]

G. Giaglis. Money-over-IP from Bitcoin to smart contracts and M2M money. In *2015 International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE)*, pages IS-5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2015.

Gimigliano:2016:BMP

[Gim16]

Gabriella Gimigliano, editor. *Bitcoin and mobile payments: constructing a European Union framework*. Palgrave studies in financial services technology. Palgrave Macmillan, London, UK, 2016. ISBN 1-137-57511-5, 1-137-57512-3 (electronic). xxix + 314 pp. LCCN ????. URL <http://link.springer.com/book/10.1057/978-1-137-57512-8>.

Girase:2018:PDV

[Gir18]

Rohan Girase. Personal data vault management system and secured data access to service provider using blockchain technology. M.S., University

[GK14]

of Massachusetts Lowell, Lowell, MA, USA, 2018. 37 pp. URL <http://search.proquest.com/pqdtglobal/docview/2050554654>.

Giaglis:2014:TAI

George M. Giaglis and Kalliopi N. Kypriotaki. Towards an agenda for information systems research on digital currencies and Bitcoin. In *Business Information Systems Workshops*, pages 3–13. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-11460-3. URL http://link.springer.com/chapter/10.1007/978-3-319-11460-6_1.

Gobel:2017:IBS

[GK17]

J. Göbel and A. E. Krzesinski. Increased block size and Bitcoin blockchain dynamics. In IEEE, editor, *2017 27th International Telecommunication Networks and Applications Conference (ITNAC), 22–24 November 2017, Melbourne, VIC, Australia*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, November 2017. ISBN 1-5090-6796-5.

Goyat:2021:SLS

[GKA⁺21]

Rekha Goyat, Gulshan

- Kumar, Mamoun Alazab, Rahul Saha, Reji Thomas, and Mritunjay Kumar Rai. A secure localization scheme based on trust assessment for WSNs using blockchain technology. *Future Generation Computer Systems*, 125(??):221–231, December 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X2100234X>. [GKJ⁺20]
- Neville Grech, Michael Kong, Anton Jurisevic, Lexi Brent, Bernhard Scholz, and Yannis Smaragdakis. MadMax: analyzing the out-of-gas world of smart contracts. *Communications of the ACM*, 63(10):87–95, September 2020. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/10.1145/3416262>. Grech:2020:MAG
- Arthur Gervais, Ghassan O. Karame, Vedran Čapkun, and Srdjan Čapkun. Is Bitcoin a decentralized currency? *IEEE Security & Privacy*, 12(3):54–60, May/June 2014. CODEN ???? ISSN 1540-7993 (print), 1558-4046 (electronic). [GKČČ14]
- Johannes Göbel, Holger Paul Keeler, Anthony E. Krzesinski, and Peter G. Taylor. Bitcoin blockchain dynamics: The selfish-mine strategy in the presence of propagation delay. *Perform. Evaluation*, 104(??): 23–41, 2016. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/pe/pe104.html#GobelKKT16>; <https://www.wikidata.org/entity/Q58645393>. [GKKT16]
- Neville Grech, Michael Kong, Anton Jurisevic, Lexi Brent, Bernhard Scholz, and Yannis Smaragdakis. MadMax: surviving out-of-gas conditions in Ethereum smart contracts. *Proceedings of the ACM on Programming Languages (PACMPL)*, 2(OOPSLA): 116:1–116:27, October 2018. URL <https://dl.acm.org/doi/abs/10.1145/3276486>. Grech:2018:MSG
- Juan Garay, Aggelos Kiayias, and Nikos Leonardos. The Bitcoin backbone protocol: analysis and applications. In Oswald and Fischlin [OF15], pages 281–310. ISBN 3-662-46802-6 (print), 3-662-46803-4 (e-book). LCCN [GKL15]
- Johannes Göbel, Holger Paul Keeler, Anthony E. Krzesinski, and Peter G. Taylor. Bitcoin blockchain dynamics: The selfish-mine strategy in the presence of propagation delay. *Perform. Evaluation*, 104(??): 23–41, 2016. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/pe/pe104.html#GobelKKT16>; <https://www.wikidata.org/entity/Q58645393>. Gobel:2016:BBD
- Juan Garay, Aggelos Kiayias, and Nikos Leonardos. The Bitcoin backbone protocol: analysis and applications. In Oswald and Fischlin [OF15], pages 281–310. ISBN 3-662-46802-6 (print), 3-662-46803-4 (e-book). LCCN Garay:2015:BBP

- QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-46803-6_10; <https://eprint.iacr.org/2014/765.pdf>. [GL00]
- [GKL17] Juan Garay, Aggelos Kiayias, and Nikos Leonardos. The Bitcoin backbone protocol with chains of variable difficulty. In *Advances in Cryptology CRYPTO 2017*, pages 291–323. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-63687-1 (paperback), 3-319-63688-X (e-book). URL http://link.springer.com/chapter/10.1007/978-3-319-63688-7_10. [GL16]
- [GKW⁺16] Arthur Gervais, Ghasan O. Karame, Karl Wüst, Vasileios Glykantzis, Hubert Ritzdorf, and Srdjan Čapkun. On the security and performance of proof of work blockchains. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS '16*, pages 3–16. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2978341>. [GLC⁺22]
- Gafni:2000:DP**
E. Gafni and L. Lamport. Disk Paxos. *Lecture Notes in Computer Science*, 1914:330–??, 2000. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL <http://link.springer-ny.com/link/service/series/0558/bibs/1914/19140330.htm>; <http://link.springer-ny.com/link/service/series/0558/papers/1914/19140330.pdf>.
- Guo:2016:BAO**
Ye Guo and Chen Liang. Blockchain application and outlook in the banking industry. *Financial Innovation*, 2(1), December 2016. CODEN ????. ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-016-0034-9>.
- Gao:2022:FBB**
Liang Gao, Li Li, Yingwen Chen, ChengZhong Xu, and Ming Xu. FGFL: a blockchain-based fair incentive governor for federated learning. *Journal of Parallel and Distributed Computing*, 163(??):283–299, May 2022. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731522000259>.
- Garay:2017:BBP**
- Gervais:2016:SPP**

- [GLD⁺18] **Gatteschi:2018:BSC** Valentina Gatteschi, Fabrizio Lamberti, Claudio Demartini, Chiara Pranteda, and Víctor Santamaría. Blockchain and smart contracts for insurance: Is the technology mature enough? *Future Internet*, 10(2):20, February 20, 2018. CODEN ????? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/10/2/20>.
- [GLF20] **Ge:2020:BBD** Chunpeng Ge, Zhe Liu, and Liming Fang. A blockchain based decentralized data security mechanism for the Internet of Things. *Journal of Parallel and Distributed Computing*, 141(??):1–9, July 2020. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S074373151930810X>.
- [GLG19] **Guo:2019:MPF** Lijuan Guo, Xuelian Li, and Juntao Gao. Multi-party fair exchange protocol with smart contract on bitcoin. *Int. J. Netw. Secur.*, 21(1):71–82, 2019. CODEN ????? ISSN ????? URL <http://ijns.jalaxy.com.tw/contents/ijns-v21-n1/ijns-2019-v21-n1-p71-82.pdf>; <https://dblp.org/db/journals/ijnsec/ijnsec21.html#GuoLG19>.
- [GLO⁺22] **Ge:2022:HBD** Zerui Ge, Dumitrel Loghin, Beng Chin Ooi, Pingcheng Ruan, and Tianwen Wang. Hybrid blockchain database systems: design and performance. *Proceedings of the VLDB Endowment*, 15(5):1092–1104, January 2022. CODEN ????? ISSN 2150-8097. URL <https://dl.acm.org/doi/10.14778/3510397.3510406>.
- [GLTS22] **Grech:2022:EAD** Neville Grech, Sifis Lagouvardos, Ilias Tsatiris, and Yannis Smaragdakis. Elipmoc: advanced decompilation of Ethereum smart contracts. *Proceedings of the ACM on Programming Languages (PACMPL)*, 6(OOPSLA1):77:1–77:27, April 2022. CODEN ????? ISSN 2475-1421 (electronic). URL <https://dl.acm.org/doi/10.1145/3527321>.
- [GLW⁺20] **Guan:2020:TSE** Zhitao Guan, Xin Lu, Naiyu Wang, Jun Wu, Xiaojiang Du, and Mohsen Guizani. Towards secure and efficient energy trading in IIoT-enabled energy Internet: a blockchain approach. *Future Generation Computer Systems*, 110(??):686–695, September

- ber 2020. CODEN FG-SEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19315018> █
- Guan:2021:AEP**
- [GLY⁺21] Zhitao Guan, Xin Lu, Wenti Yang, Longfei Wu, Naiyu Wang, and Zijian Zhang. Achieving efficient and privacy-preserving energy trading based on blockchain and ABE in smart grid. *Journal of Parallel and Distributed Computing*, 147(??):34–45, January 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520303609> █
- Green:2017:BAP**
- [GM17] Matthew Green and Ian Miers. Bolt: Anonymous payment channels for decentralized currencies. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security*, CCS '17, pages 473–489. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3. URL <http://doi.acm.org/10.1145/3133956.3134093>.
- Garcia-Medina:2021:WDB**
- [GMH21] Andrés García-Medina and Toan Luu Duc Huynh. [Gof19] What drives bitcoin? An approach from continuous local transfer entropy and deep learning classification models. *Entropy*, 23(12):1582, 2021. CODEN ENTRFG. ISSN 1099-4318. URL <https://dblp.org/db/journals/entropy/entropy23.html#Garcia-MedinaH21>; <https://www.wikidata.org/entity/Q111518067>.
- Gentilal:2017:TBB**
- Miraje Gentilal, Paulo Martins, and Leonel Sousa. TrustZone-backed Bitcoin wallet. In *Proceedings of the Fourth Workshop on Cryptography and Security in Computing Systems*, CS2 '17, pages 25–28. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4869-6.
- Godsiff:2015:BBB**
- Philip Godsiff. Bitcoin: Bubble or blockchain? In *Agent and Multi-Agent Systems: Technologies and Applications*, pages 191–203. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-19728-2. URL http://link.springer.com/chapter/10.1007/978-3-319-19728-1_9_16.
- Goffard:2019:FRA**
- Pierre-O. Goffard. Fraud

- risk assessment within blockchain transactions. *Advances in Applied Probability*, 51(2):443–467, June 2019. CODEN AAPBBD. ISSN 0001-8678 (print), 1475-6064 (electronic). URL <https://www.cambridge.org/core/journals/advances-in-applied-probability/article/fraud-risk-assessment-within-blockchain-transactions/DC96574C5098794A8345167F69149A44>.
Gomzin:2016:BNE
- [Gom16] Slava Gomzin. *Bitcoin for nonmathematicians: exploring the foundations of Crypto Payments*. Universal Publishers, Boca Raton, Florida, 2016. ISBN 1-62734-071-8 paperback. xv + 137 pp. LCCN ????
- Gonzalez:2017:ASP** [Gou19]
- [Gon17] Pablo R. Velasco Gonzalez. *"the authority of the steam": power dynamics of digital production in the bitcoin blockchain*. Ph.D., University of Warwick, Warwick, Warwickshire, UK, 2017. URL <http://search.proquest.com/pqdtglobal/docview/2204708100>.
- Goodin:2018:NBI**
- [Goo18] Dan Goodin. New botnet infects cryptocurrency mining computers, replaces wallet address: Attacker has generated about \$2,000 in digital coin so far in a scam that remains active. ArsTechnica Web site., January 17, 2018. URL <https://arstechnica.com/information-technology/2018/01/in-the-wild-malware-preys-on-computers-dedicated-to-mining-cryptocurrency/>.
Goswami:2017:SAB
- Sneha Goswami. Scalability analysis of blockchains through blockchain simulation. M.S.C.S., University of Nevada, Las Vegas, Las Vegas, NV, USA, 2017. 66 pp. URL <http://search.proquest.com/pqdtglobal/docview/1978154763>.
- Gourisetti:2019:CFA**
- Sri Nikhil Gupta Gourisetti. *Cybersecurity Framework and Algorithms for Prioritized Vulnerability Mitigation (Cyfer): an Adoption to Blockchain Systems*. Ph.D., University of Arkansas at Little Rock, Little Rock, AR, USA, 2019. 366 pp. URL <http://search.proquest.com/pqdtglobal/docview/2299815958>.
- Goldwasser:2017:PAV**
- [GP17a] Shafi Goldwasser and Sunoo Park. Public accountability vs. secret laws: Can they coexist?: A cryptographic proposal. In *Proceedings of the 2017*

- on *Workshop on Privacy in the Electronic Society*, WPES '17, pages 99–110. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5175-1. URL <http://doi.acm.org/10.1145/3139550.3139565>. [GPP18]
- [GP17b] Jens Grossklags and Bart Preneel, editors. *Financial cryptography and data security: 20th International Conference, FC 2016, Christ Church, Barbados, February 22–26, 2016, Revised selected papers*, volume 9603 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-662-54969-7 (print), 3-662-54970-0 (e-book). ISSN 0302-9743. LCCN QA76.9.A25. URL <http://link.springer.com/10.1007/978-3-662-54970-4>. [GPPB⁺21]
- [GPM18] C. Grunspan and R. Perez-Marco. On profitability of block withholding strategies. *ACM SIGMETRICS Performance Evaluation Review*, 46(3):126, December 2018. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). [GR17]
- [Grossklags:2017:FCD] Grossklags:2017:FCD
- [Genkin:2018:PDC] Genkin:2018:PDC
Daniel Genkin, Dimitrios Papadopoulos, and Charalampos Papamanthou. Privacy in decentralized cryptocurrencies. *Communications of the ACM*, 61(6):78–88, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2018/6/228028/fulltext>.
- [Gangwani:2021:SEI] Gangwani:2021:SEI
Pranav Gangwani, Alexander Perez-Pons, Tushar Bhardwaj, Himanshu Upadhyay, Santosh Joshi, and Leonel Lagos. Securing environmental IoT data using masked authentication messaging protocol in a DAG-based blockchain: IOTA tangle. *Future Internet*, 13(12):312, December 06, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/12/312>.
- [Gimpel:2017:DTB] Gimpel:2017:DTB
Henner Gimpel and Maximilian Röglinger. Disruptive technologien — blockchain, deep learning & co. *Wirtschaftsinformatik & Management*, 9(5):8–15, October 2017. CODEN ???? ISSN 1867-5905 (print), 1867-
- [Grunspan:2018:PBW] Grunspan:2018:PBW

- 5913 (electronic). URL <http://link.springer.com/article/10.1007/s35764-017-0103-5>.
- Gramoli:2020:BCB**
- [Gra20] Vincent Gramoli. From blockchain consensus back to Byzantine consensus. *Future Generation Computer Systems*, 107(??):760–769, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17320095>.
- Greenberg:2013:FSS**
- [Gre13] Andy Greenberg. FBI says it’s seized \$28.5 million in Bitcoins from Ross Ulbricht, alleged owner of Silk Road. *Forbes*, ??(??): ??, October 25, 2013. CODEN FORBA5. ISSN 0015-6914.
- Greenberg:2022:TD**
- [Gre22] Andy Greenberg. *Tracers in the Dark: the Global Hunt for the Crime Lords of Cryptocurrency*. Doubleday, New York, NY, USA, 2022. ISBN 0-385-54809-5 (hardcover), 0-593-31561-8 (paperback), 0-385-54810-9 (e-book). xi + 367 pp. LCCN HV6773 .G7424 2022.
- Gupta:2020:RGS**
- [GRHS20] Suyash Gupta, Sajjad Rahnama, Jelle Hellings, and Mohammad Sadoghi. ResilientDB: global scale resilient blockchain fabric. *Proceedings of the VLDB Endowment*, 13(6):868–883, February 2020. CODEN ????. ISSN 2150-8097. URL <https://dl.acm.org/doi/abs/10.14778/3380750.3380757>.
- Grinberg:2011:BIA**
- Rueben Grinberg. Bitcoin: An innovative alternative digital currency. *Hastings Science & Technology Law Journal*, 4:159–207, April 23, 2011. CODEN ????. ISSN 1947-4156 (print), 2331-835X (electronic). URL <http://hstlj.org/wp-content/uploads/2011/12/8-grinberg-159-208.pdf>; https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1817857.
- Gervais:2015:TDB**
- Arthur Gervais, Hubert Ritzdorf, Ghassan O. Karame, and Srdjan Čapkun. Tampering with the delivery of blocks and transactions in Bitcoin. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security*, CCS ’15, pages 692–705. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1.
- [GRKČ15]

- [GRM22] **Ghosh:2022:BED**
 Timam Ghosh, Arijit Roy, and Sudip Misra. B2H: Enabling delay-tolerant blockchain network in health-care for Society 5.0. *Computer Networks (Amsterdam, Netherlands: 1999)*, 210(??):??, June 19, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128622000706>. [GS20a]
- [GRU22] **Garcia:2022:ESC**
 Rodrigo D. Garcia, Gowri Ramachandran, and Jó Ueyama. Exploiting smart contracts in PBFT-based blockchains: a case study in medical prescription system. *Computer Networks (Amsterdam, Netherlands: 1999)*, 211(??):??, July 5, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128622001669>. [GS20b]
- [GS15a] **Garcia:2015:SSA**
 David Garcia and Frank Schweitzer. Social signals and algorithmic trading of Bitcoin. *Royal Society Open Science*, 2:150288, September 2015. ISSN 2054-5703.
- [GS15b] **Gutoski:2015:HDB**
 Gus Gutoski and Douglas Stebila. Hierarchical deterministic Bit-coin wallets that tolerate key leakage. In Brenner et al. [BCJR15], pages 497–504. ISBN 3-662-47854-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-47854-7_31. **Gao:2020:AEF**
 Wenyao Gao and Chang Su. Analysis of earnings forecast of blockchain financial products based on particle swarm optimization. *Journal of Computational and Applied Mathematics*, 372(??):Article 112724, July 2020. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0377042720300157>. **Gao:2020:ABC**
 Wenyao Gao and Chang Su. Analysis on block chain financial transaction under artificial neural network of deep learning. *Journal of Computational and Applied Mathematics*, 380(??):Article 112991, December 15, 2020. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S037704272030282X>. **Garrocho:2020:RTS**
 C. T. B. Garrocho, M. C.
- [GSF⁺20]

- Silva, C. M. S. Ferreira, C. F. M. d. C. Cavalcanti, and R. A. Rabelo Oliveira. [GvRS17] Real-time systems implications in the blockchain-based vertical integration of Industry 4.0. *Computer*, 53(9):46–55, 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [GSWV20] Aditya Gopalan, Abishek Sankararaman, Anwar Walid, and Sriram Vishwanath. Stability and scalability of blockchain systems. *Proceedings of the ACM on Measurement and Analysis of Computing Systems (POMACS)*, 4(2):35:1–35:35, June 2020. CODEN ???? ISSN 2476-1249. URL <https://dl.acm.org/doi/10.1145/3392153>.
- [GTMP14] David García, Claudio Juan Tessone, Pavlin Mavrodiev, and Nicolas Perony. The digital traces of bubbles: feedback cycles between socio-economic signals in the bitcoin economy. *CoRR*, ??(??):??, ???? 2014. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1408.1494>; <https://dblp.org/db/journals/corr/corr1408.html#GarciaTMP14>.
- [GWF⁺21] Zhitao Guan, Naiyu Wang, Xunfeng Fan, Xueyan Liu, Longfei Wu, and Shaohua Wan. Achieving secure search over encrypted data for e-commerce: a blockchain approach. *ACM Transactions on Internet Technology (TOIT)*, 21(1):12:1–12:17, February 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3408309>.
- [GWL20] Juntao Gao, Tong Wu, and Xuelian Li. Secure, fair and instant data trading scheme based on bitcoin. *Journal of Information Security and Applications (JISA)*, 53(??):??, August 2020. CODEN ???? ISSN
- Gencer:2017:SPS**
- Adem Efe Gencer, Robert van Renesse, and Emin Gün Sirer. Short paper: Service-oriented sharding for blockchains. In *Financial Cryptography and Data Security*, pages 393–401. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-70972-7_22.
- Guan:2021:ASS**
- Garcia:2014:DTB**
- Gao:2020:SFI**

- 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212619309688>. ■
- Gao:2021:TCC**
- [GWX⁺21] Bingyu Gao, Haoyu Wang, Pengcheng Xia, Siwei Wu, Yajin Zhou, Xiapu Luo, and Gareth Tyson. Tracking counterfeit cryptocurrency end-to-end. *ACM SIGMETRICS Performance Evaluation Review*, 49(1): 33–34, June 2021. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3543516>. ■ 3456282.
- Gyamerah:2021:TSH**
- [Gya21] Samuel Asante Gyamerah. Two-stage hybrid machine learning model for high-frequency intraday bitcoin price prediction based on technical indicators, variational mode decomposition, and support vector regression. *Complex.*, 2021 (??):1767708:1–1767708:15, ???? 2021. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/complexity/complexity2021.html#Gyamerah21>. ■
- Georgiadis:2018:CPA**
- [GZ18] Evangelos Georgiadis and Doron Zeilberger. A combinatorial-probabilistic analysis of bitcoin attacks. *CoRR*, ??(??):??, ???? 2018. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1808.05255>; <https://dblp.org/db/journals/corr/corr1808.html#abs-1808-05255>.
- Glaser:2014:BAC**
- [GZH⁺14] Florian Glaser, Kai Zimmermann, Martin Hafnerkorn, Moritz Christian Weber, and Michael Siering. Bitcoin — asset or currency? Revealing users’ hidden intentions. In ???? , editor, *Proceedings of the 22nd European Conference on Information Systems, Tel Aviv, June 2014*, page ?? ???? , ???? , 2014.
- HenriquezHerrera:2015:CNP**
- [HA15] Ian Henríquez Herrera and Cristián Aedo. *La compraventa: nuevas perspectivas doctrinarias. (Spanish) [The sale: new doctrinal perspectives]*. Thomson Reuters La Ley. Monografías. Thomson Reuters, Santiago, Chile, 2015. ISBN 956-346-734-5. ii + 229 pp. LCCN KHF868 .C66 2015.
- Halpin:2017:NDI**
- [Hal17] Harry Halpin. NEXTLEAP: Decentralizing identity with privacy for secure messaging. In *Proceedings of the 12th International Conference on Availability, Reliability and Security*, ARES ’17, pages 92:1–92:10. ACM

Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5257-X. URL <http://doi.acm.org/10.1145/3098954.3104056>.

Halaburda:2018:EBD

[Hal18]

Hanna Halaburda. Economic and business dimensions: Blockchain revolution without the blockchain? *Communications of the ACM*, 61(7):27–29, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2018/7/229049/fulltext>.

Halgamuge:2021:OFB

[Hal21]

Malka N. Halgamuge. Optimization framework for best approver selection method (BASM) and best tip selection method (BTSM) for IOTA tangle network: Blockchain-enabled next generation industrial IoT. *Computer Networks (Amsterdam, Netherlands: 1999)*, 199(??):??, November 9, 2021. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621003868>.

Hanley:2013:FPP

[Han13]

Brian P. Hanley. The false premises and promises of bitcoin. *CoRR*, ??(??):??, ????. 2013. CODEN ????

[Har17]

ISSN ????. URL <http://arxiv.org/abs/1312.2048>; <https://dblp.org/db/journals/corr/corr1312.html#Hanley13>.

Hart:2017:MHE

Keith Hart, editor. *Money in a human economy*, volume 5 of *The human economy*. Berghahn Books, New York, NY, USA, 2017. ISBN 1-78533-559-6 (hardcover), 1-78533-560-X. vi + 308 pp. LCCN HG231.M5864 2017.

Hu:2021:BBP

Qinwen Hu, Muhammad Rizwan Asghar, and Sherali Zeadally. Blockchain-based public ecosystem for auditing security of software applications. *Computing*, 103(11):2643–2665, November 2021. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic). URL <https://link.springer.com/article/10.1007/s00607-021-00954-6>.

Hurlburt:2014:BBC

G. F. Hurlburt and I. Bojanova. Bitcoin: Benefit or curse? *IT Professional*, 16(3):10–15, May 2014. CODEN IPMAFM. ISSN 1520-9202 (print), 1941-045x (electronic).

Heilman:2016:BSC

Ethan Heilman, Foteini Baldimtsi, and Sharon

[HBG16]

- Goldberg. Blindly signed contracts: Anonymous on-blockchain and off-blockchain Bitcoin transactions. In Clark et al. [CMR⁺16], pages 43–60. ISBN 3-662-53357-X. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-53357-4_4.
- [HBJB14] Ivan Hernandez, Masooda Bashir, Gahyun Jeon, and Jeremiah Bohr. Are Bitcoin users less sociable? An analysis of users language and social connections on Twitter. In *HCI International 2014 — Posters Extended Abstracts*, pages 26–31. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-07854-2. URL http://link.springer.com/chapter/10.1007/978-3-319-07854-0_5.
- [HC12] Mike Hearn and Matt Corallo. Bitcoin improvement proposal 0037. Web document, October 2012. URL https://en.bitcoin.it/wiki/BIP_0037.
- [HCB⁺22] Khalid Hasan, Mohammad Javed Morshed Chowdhury, Kamanashis Biswas, Khondakar Ahmed, Md. Saiful Islam, and Muhammad Usman. A blockchain-based secure data-sharing framework for Software Defined Wireless Body Area Networks. *Computer Networks (Amsterdam, Netherlands: 1999)*, 211(??):??, July 5, 2022. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128622001670>.
- [HCW⁺18] Hui Huang, Xiaofeng Chen, Qianhong Wu, Xinyi Huang, and Jian Shen. Bitcoin-based fair payments for outsourcing computations of fog devices. *Future Generation Computer Systems*, 78 (part 2)(?):850–858, January 2018. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X16307579>.
- [HDM⁺14] Danny Yuxing Huang, Hitesh Dharmdasani, Sarah Meiklejohn, Vacha Dave, Chris Grier, Damon McCoy, Stefan Savage, Nicholas Weaver, Alex C. Snoeren, and Kirill Levchenko. Bitcoin: monetizing stolen cycles. In ????, editor, *Pro-*

ceedings of the 2014 Network and Distributed System Security (NDSS'14) Symposium, 23–26 February 2014, San Diego, CA, USA, page ?? Internet Society, Reston, VA, USA, 2014. ISBN 1-891562-35-5. URL <http://www.sysnet.ucsd.edu/~dhuang/static/ndss14-cr.pdf>. [HFP⁺22]

Hearn:2013:MAN

[Hea13] Mike Hearn. Merge-avoidance: a note on privacy-enhancing techniques in the Bitcoin protocol. Web blog, 2013. URL <https://www.coindesk.com/merge-avoidance-privacy-bitcoin/>.

Herlihy:2017:BFD

[Her17] Maurice Herlihy. Blockchains and the future of distributed computing. In *Proceedings of the ACM Symposium on Principles of Distributed Computing*, PODC '17, page 155. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4992-7. URL <http://doi.acm.org/10.1145/3087801.3087873>. [HG15]

Herlihy:2019:BDC

[Her19] Maurice Herlihy. Blockchains from a distributed computing perspective. *Communications of the ACM*, 62(2):78–85, February 2019. CODEN CACMA2. ISSN

0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2019/2/234355/fulltext>.

He:2022:BBA

Songlin He, Eric Ficke, Mir Mehedi Ahsan Pritom, Huashan Chen, Qiang Tang, Qian Chen, Marcus Pendleton, Laurent Njilla, and Shouhuai Xu. Blockchain-based automated and robust cyber security management. *Journal of Parallel and Distributed Computing*, 163(??):62–82, May 2022. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731522000089>.

Hencic:2015:NAM

Andrew Hencic and Christian Gouriéroux. Noncausal autoregressive model in application to Bitcoin/USD exchange rates. In *Econometrics of Risk*, volume 583 of *Stud. Comput. Intell.*, pages 17–40. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-13449-3. URL http://link.springer.com/chapter/10.1007/978-3-319-13449-9_2.

- [HGDD20] **Herskind:2020:BER** Lasse Herskind, Alberto Giarretta, Michele De Donno, and Nicola Dragoni. Bit-Flow: Enabling real-time cash-flow evaluations through blockchain. *Concurrency and Computation: Practice and Experience*, 32(12):e5333:1–e5333:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [HH22] **How:2022:BES** Haw-Bin How and Swee-Huay Heng. Blockchain-enabled searchable encryption in clouds: a review. *Journal of Information Security and Applications (JISA)*, 67(??):??, June 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622000655>.
- [HHBS18] **Hammi:2018:BTB** Mohamed Tahar Hammi, Badis Hammi, Patrick Belot, and Ahmed Serhrouchni. Bubbles of trust: a decentralized blockchain-based authentication system for IoT. *Computers & Security*, 78(??):126–142, September 2018. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818300890>.
- [HHK18] **Henry:2018:BAP** Ryan Henry, Amir Herzberg, and Aniket Kate. Blockchain access privacy: Challenges and directions. *IEEE Security & Privacy*, 16(4):38–45, July/August 2018. CODEN ???? ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040038-abs.html>.
- [HHO⁺21] **Huang:2021:ABT** Jun Huang, Debiao He, Mohammad S. Obaidat, Pandi Vijayakumar, Min Luo, and Kim-Kwang Raymond Choo. The application of the blockchain technology in voting systems: a review. *ACM Computing Surveys*, 54(3):60:1–60:28, June 2021. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3439725>.
- [Hil14] **Hileman:2014:BBP** Garrick Hileman. From Bitcoin to the Brixton pound: History and prospects for alternative currencies (poster abstract). In Christin and Safavi-Naini [CSN14], pages 163–165. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL <http://link.springer.com/chapter/>

- 10.1007/978-3-662-44774-1_13.
- [Hil15] Garrick Hileman. The Bitcoin market potential index. In Brenner et al. [BCJR15], pages 92–93. ISBN 3-662-48051-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_7.
- [HJHBG22] Hileman:2015:BMP
- [Hir17] Yoichi Hirai. Defining the Ethereum virtual machine for interactive theorem provers. In *Financial Cryptography and Data Security*, pages 520–535. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-70278-5. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_33.
- [HJPS16] Herrera-Joancomarti:2016:PBT
- [HJ15] Jordi Herrera-Joancomartí. Research and challenges on Bitcoin anonymity. In *Data Privacy Management, Autonomous Spontaneous Security, and Security Assurance*, pages 3–16. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-17016-3. URL http://link.springer.com/chapter/10.1007/978-3-319-17016-9_1.
- [HJ16] Hatemi-J:2022:BDB
- [HJ16] Abdunnasser Hatemi-J, Mohamed A. Hajji, Elie Bouri, and Rangan Gupta. The benefits of diversification between bitcoin, bonds, equities and the US dollar: a matter of portfolio construction. *Asia Pac. J. Oper. Res.*, 39(4): 2040024:1–2040024:11, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/apjor/apjor39.html#Hatemi-JHBG22>.
- [HL16] Hari:2016:IBD
- [HL16] Adishesu Hari and T. V. Lakshman. The Internet blockchain: A distributed,

- tamper-resistant transaction framework for the Internet. In *Proceedings of the 15th ACM Workshop on Hot Topics in Networks*, HotNets '16, pages 204–210. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4661-8. URL <http://doi.acm.org/10.1145/3005745.3005771>. [HLC17c]
- [HLC⁺17a] Yunhua He, Hong Li, Xuzhen Cheng, Yan Liu, and Limin Sun. A Bitcoin based incentive mechanism for distributed P2P applications. In *Wireless Algorithms, Systems, and Applications*, pages 457–468. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-60033-8. URL http://link.springer.com/chapter/10.1007/978-3-319-60033-8_40. [HLC19]
- [HLC⁺17b] Butian Huang, Zhenguang Liu, Jianhai Chen, Anan Liu, Qi Liu, and Qinming He. Behavior pattern clustering in blockchain networks. *Multimedia Tools and Applications*, 76(19):20099–20110, January 2017. CODEN MTAPFB. ISSN 1380-7501 (print), 1573-7721 (electronic). URL <http://link.springer.com/article/10.1007/s11042-017-4396-4>. [Huang:2017:FTP]
- [Huang:2019:BBF] Hui Huang, Kuan-Ching Li, and Xiaofeng Chen. A fair three-party contract signing protocol based on blockchain. In *Cyberspace Safety and Security*, pages 72–85. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-69471-9_6. [Huang:2021:MMA]
- [Hei:2021:MMA] Yiming Hei, Jianwei Liu, Hanwen Feng, Dawei Li, Yizhong Liu, and Qianhong Wu. Making MA-ABE fully accountable: a blockchain-based approach for secure digital right management. *Computer Networks (Amsterdam, Netherlands: 1999)*, 191(??):??, 2021. CODEN COMNET. ISSN 1389-4373 (print), 1872-7063 (electronic). URL <https://doi.org/10.1016/j.comnet.2021.109444>. [Hei:2021:MMA]

- May 22, 2021. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621001389> [HLP⁺21]
- Donghui Hu, Yifan Li, Lixuan Pan, Meng Li, and Shuli Zheng. A blockchain-based trading system for big data. *Computer Networks (Amsterdam, Netherlands: 1999)*, 191(??):??, May 22, 2021. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S138912862100116X> [HM19]
- Hu:2021:BBT**
- Maurice Herlihy and Mark Moir. Blockchains and the logic of accountability: Keynote address. In *Proceedings of the 31st Annual ACM/IEEE Symposium on Logic in Computer Science, LICS '16*, pages 27–30. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4391-0. URL <http://doi.acm.org/10.1145/2933575.2934579>. [HM16]
- Herlihy:2016:BLA**
- Richard Holden and Anup Malani. Why the I.R.S. fears Bitcoin. *New York Times*, ??(??):??, January 22, 2018. CODEN NY-TIAO. ISSN 0362-4331 [HM18]
- Holden:2018:WRF**
- (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/22/opinion/irs-bitcoin-fear.html>. [Hwang:2019:BBR]
- S. O. Hwang and A. Mehmood. Blockchain-based resource syndicate. *Computer*, 52(5): 58–66, May 2019. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). [HMS17]
- Hwang:2019:BBR**
- Shihab Shahriar Hazari and Qusay H. Mahmoud. Improving transaction speed and scalability of blockchain systems via parallel proof of work. *Future Internet*, 12(8):125, July 27, 2020. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/8/125>. [Hob13]
- Hazari:2020:ITS**
- Heidi Howard, Dahlia Malkhi, and Sasha Spiegelman. Revisiting the Paxos Foundations: a look at summer internship work at VMware Research. *Operating Systems Review*, 51(1): 67–71, August 2017. CODEN OSRED8. ISSN 0163-5980 (print), 1943-586X (electronic). [Hobson:2013:WB]
- Howard:2017:RPF**
- Dominic Hobson. What is Bitcoin? *ACM Cross-*

roads, 20(1):40–44, September 2013. ISSN 1528-4972 (print), 1528-4980 (electronic). [Hou14b]

Hollander:2015:BNO

[Hol15] Barbara Gottfried Hollander. *Bitcoins: navigating open source currency*. Digital and information literacy. Rosen Publishing, New York, NY, USA, 2015. ISBN 1-4777-7930-2 (library bound), 1-4777-7931-0 (paperback), 1-4777-7932-9 (6pack). 48 pp. LCCN HG221.5 .H65 2015. [Hou16]

Hollister:2018:TSP

[Hol18] Sean Hollister. Thieves steal 600 powerful bitcoin-mining computers in huge heist. In Iceland, police are hoping a power surge will lead them to the criminals' stash. Web story., March 2, 2018. URL <https://www.cnet.com/news/iceland-big-bitcoin-heist-cryptocurrency-mining-computers/>. [How20]

Houy:2014:BMG

[Hou14a] Nicolas Houy. The Bitcoin mining game. Technical report, Groupe d'Analyse et de Théorie Economique (GATE), Université de Lyon, Lyon, France, 2014. URL <http://ssrn.com/abstract=2407834>. [HP17]

Houy:2014:EBT

Nicolas Houy. The economics of Bitcoin transaction fees. Working Paper 1407, Groupe d'Analyse et de Théorie Economique (GATE), Université de Lyon, Lyon, France, 2014. URL <http://ssrn.com/abstract=2400519>.

Houy:2016:BMG

Nicolas Houy. The Bitcoin mining game. *Ledger*, 1(??): 53–68, 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/13>.

Howson:2020:BTE

Peter Howson. Building trust and equity in marine conservation and fisheries supply chain management with blockchain. *Marine Policy*, 115(??):Article 103873, May 2020. CODEN 2020-0000 ISSN 0308-597X (print), 1872-9460 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0308597X19307067>.

Hopf:2017:RBT

Stefan Hopf and Arnold Picot. Revolutioniert Blockchain-Technologie das Management von Eigentumsrechten und Transaktionskosten?. (German) [Is blockchain technology revolutionizing ownership and

- transaction management?]. In *Interdisziplinäre Perspektiven zur Zukunft der Wertschöpfung*, pages 109–119. Springer Fachmedien Wiesbaden, December 2017.
- [HP18] **Hopf:2018:RBT**
Stefan Hopf and Arnold Picot. Revolutioniert blockchain-technologie das management von eigentumsrechten und transaktionskosten? In *Interdisziplinäre Perspektiven zur Zukunft der Wertschöpfung*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-658-20265-1_9.
- [HP19] **Hyla:2019:EIM**
Tomasz Hyla and Jerzy Pejaś. eHealth integrity model based on permissioned blockchain. *Future Internet*, 11(3):76, March 24, 2019. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/3/76>.
- [HQ15] **Haferkorn:2015:SIW**
Martin Haferkorn and Josué Manuel Quintana Diaz. Seasonality and interconnectivity within cryptocurrencies — an analysis on the basis of Bitcoin, Litecoin and Namecoin. In *Enterprise Applications and Services in the Finance Industry*, pages 106–120. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-28151-8. URL http://link.springer.com/chapter/10.1007/978-3-319-28151-3_8.
- [HRE17] **Hentges:2017:FPS**
Mitchell Hentges, Sheldon Roddick, and Haytham Elmiligi. Fambit: A promising solution to support open educational resources initiatives. In *Proceedings of the 22Nd Western Canadian Conference on Computing Education*, WCCCE '17, pages 4:1–4:4. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5066-6.
- [HRF17] **Hyvarinen:2017:BBA**
Hissu Hyvärinen, Marten Risius, and Gustav Friis. A blockchain-based approach towards overcoming financial fraud in public sector services. *Business & Information Systems Engineering*, 59(6):441–456, November 2017. CODEN ????. ISSN 1867-0202 (print), 2363-7005 (electronic). URL <http://link.springer.com/article/10.1007/s12599-017-0502-4>.

- [HS91] **Haber:1991:HTS**
 Stuart Haber and W. Scott Stornetta. How to time-stamp a digital document. *Journal of Cryptology: the journal of the International Association for Cryptologic Research*, 3(2):99–111, 1991. CODEN JOCREQ. ISSN 0933-2790 (print), 1432-1378 (electronic).
- [HS97] **Haber:1997:SNB**
 S. Haber and W. S. Stornetta. Secure names for bit-strings. In ACM, editor, *Proceedings of the 4th ACM Conference on Computer and Communications Security, April 1997*, pages 28–35. ACM Press, New York, NY 10036, USA, 1997. URL <http://dl.acm.org/citation.cfm?id=266430>.
- [HS16a] **Halaburda:2016:BBE**
 Hanna Halaburda and M. (Miklos) Sarvary. *Beyond Bitcoin: the economics of digital currencies*. Palgrave Macmillan, New York City, NY, USA, 2016. ISBN 1-137-50641-5 (hardcover). viii + 186 pp. LCCN HG1710 .H275 2016.
- [HS16b] **Halaburda:2016:BB**
 Hanna Halaburda and Miklos Sarvary. *Beyond Bitcoin*. Palgrave Macmillan, New York City, NY, 2016. ISBN 1-349-55435-9 (paperback), 1-137-50642-3 (e-book), 1-137-50641-5. viii + 186 pp. LCCN HB172.5. URL <http://link.springer.com/book/10.1057/9781137506429>.
- [HS16c] **Hardjono:2016:CBC**
 Thomas Hardjono and Ned Smith. Cloud-based commissioning of constrained devices using permissioned blockchains. In *Proceedings of the 2Nd ACM International Workshop on IoT Privacy, Trust, and Security, IoTPTS '16*, pages 29–36. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4283-3. URL <http://doi.acm.org/10.1145/2899007.2899012>.
- [HS16d] **Heitzenrater:2016:CES**
 Chad Heitzenrater and Andrew Simpson. A case for the economics of secure software development. In *Proceedings of the 2016 New Security Paradigms Workshop, NSPW '16*, pages 92–105. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4813-0.
- [HS19a] **Haghighat:2019:BWG**
 Alireza Toroghi Haghighat and Mehdi Shajari. Block withholding game among Bitcoin mining pools. *Future Generation Computer Systems*, 97(??):482–491, August 2019. CODEN FGSEVI. ISSN 0167-739X

- (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17330686>
- [HS19b] Jun-Ho Huh and Kyungryong Seo. Blockchain-based mobile fingerprint verification and automatic log-in platform for future computing. *The Journal of Supercomputing*, 75(6):3123–3139, June 2019. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic).
- [HS20] Alireza Toroghi Haghighat and Mehdi Shajari. Computation integrity assurance for emerging distributed computation outsourcing environments, the case of block withholding attack on bitcoin pools. *IET Inf. Secur.*, 14(5):553–561, 2020. CODEN IETIFS. ISSN 1744-7544. URL <https://dblp.org/db/journals/iet-ifs/iet-ifs14.html#HaghighatS20>.
- [HSB17a] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Concept — where are the opportunities of blockchain-driven supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages 51–75. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL <http://link.springer.com/book/10.1007/978-3-319-62371-9>.
- [HSB17b] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Conclusion — what can we learn from blockchain-driven supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages 89–91. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL <http://link.springer.com/book/10.1007/978-3-319-62371-9>.
- [HSB17c] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Discussion — how does the full potential of blockchain technology in supply chain finance look like? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages 77–87. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL <http://link.springer.com/book/10.1007/978-3-319-62371-9>.

2018. URL <http://link.springer.com/book/10.1007/978-3-319-62371-9>.
- [HSB17d] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Introduction — why to pay attention on blockchain-driven supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages 1–6. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL <http://link.springer.com/book/10.1007/978-3-319-62371-9>.
- [HSB18a] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Background I — what is buyer-led supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages 7–23. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL <http://link.springer.com/book/10.1007/978-3-319-62371-9>.
- [HSB18b] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Background I — what is buyer-led supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages viii + 91. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62371-9_2.
- [HSB18c] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Background II — what is reverse securitisation? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages 25–34. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62371-9_3.
- [HSB18d] Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Background III — what is blockchain technology? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages 35–49. ISBN 3-319-62370-2

(paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62371-9_4. [HSB18g]

Hofmann:2018:CWO

[HSB18e]

Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Concept — where are the opportunities of blockchain-driven supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages viii + 91. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62371-9_5. [HSB18h]

Hofmann:2018:CWC

[HSB18f]

Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Conclusion — what can we learn from blockchain-driven supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages viii + 91. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62371-9_7. [HSB18g]

[springer.com/chapter/10.1007/978-3-319-62371-9_7](http://link.springer.com/chapter/10.1007/978-3-319-62371-9_7). [HSB18g]

Hofmann:2018:DHD

Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Discussion — how does the full potential of blockchain technology in supply chain finance look like? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages viii + 91. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62371-9_6. [HSB18h]

Hofmann:2018:IWP

Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. Introduction — why to pay attention on blockchain-driven supply chain finance? In *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation* [HSB18i], pages viii + 91. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. LCCN HD38.5 .H632 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62371-9_1. [HSB18i]

- [HSB18i] **Hofmann:2018:SCF**
Erik Hofmann, Urs Magnus Strewe, and Nicola Bosia. *Supply Chain Finance and Blockchain Technology: the Case of Reverse Securitisation*. SpringerBriefs in finance. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. ISBN 3-319-62370-2 (paperback), 3-319-62371-0 (e-book). ISSN 2913-1720. viii + 91 pp. LCCN HD38.5 .H632 2018. URL <http://link.springer.com/book/10.1007/978-3-319-62371-9>.
- [HSC21] **Hassija:2021:MDO**
Vikas Hassija, Vikas Saxena, and Vinay Chamola. A mobile data offloading framework based on a combination of blockchain and virtual voting. *Software—Practice and Experience*, 51 (12):2428–2445, December 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- [HSGY20] **He:2020:TRT**
Guobiao He, Wei Su, Shuai Gao, and Jiarui Yue. TD-Root: a trustworthy decentralized DNS root management architecture based on permissioned blockchain. *Future Generation Computer Systems*, 102(??):912–924, January 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19312762>.
- [HSJ+21] **Hasan:2021:CCT**
Haya R. Hasan, Khaled Salah, Raja Jayaraman, Ibrar Yaqoob, Mohammed Omar, and Samer Ellahham. COVID-19 contact tracing using blockchain. *IEEE Access*, 9:62956–62971, 2021. ISSN 2169-3536.
- [HSS+20] **Hanaoka:2020:SFT**
Goichiro Hanaoka, Yusuke Sakai, Toshiya Shimizu, Takeshi Shimoyama, and SeongHan Shin. A setup-free threshold encryption scheme for the bitcoin protocol and its applications. *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.*, 103-A(1):150–164, 2020. CODEN 103-150. ISSN 103-150. URL http://search.ieice.org/bin/summary.php?id=e103-a_1_150; <https://dblp.org/db/journals/ieiceta/ieiceta103.html#HanaokaSSSS20>.
- [HSX+21] **Huang:2021:BBE**
Haiping Huang, Xiang Sun, Fu Xiao, Peng Zhu, and Wenming Wang. Blockchain-based eHealth system for auditable EHRs manipulation in cloud environments. *Journal of Parallel and Distributed Comput-*

- ing*, 148(??):46–57, February 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520303853>. ■
- He:2021:UEB**
- [HSY⁺21] Ningyu He, Weihang Su, Zhou Yu, Xinyu Liu, Fengyi Zhao, Haoyu Wang, Xipapu Luo, Gareth Tyson, Lei Wu, and Yao Guo. Understanding the evolution of blockchain ecosystems: a longitudinal measurement study of bitcoin, Ethereum, and EOSIO. *CoRR*, abs/2110.07534(??):??, ????. 2021. CODEN ????. ISSN ????. URL <https://arxiv.org/abs/2110.07534>; <https://dblp.org/db/journals/corr/corr2110.html#abs-2110-07534>. ■
- Hsiao:2017:DVS**
- [HTCW17] Jen-Ho Hsiao, Raylin Tso, Chien-Ming Chen, and Mu-En Wu. Decentralized e-voting systems based on the blockchain technology. In *Advances in Computer Science and Ubiquitous Computing*, pages 305–309. Springer Singapore, December 2017. ■
- Hsiao:2018:DVS**
- [HTCW18] Jen-Ho Hsiao, Raylin Tso, Chien-Ming Chen, and Mu-En Wu. Decentralized e-voting systems based on the blockchain technology. In *Advances in Computer Science and Ubiquitous Computing*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-981-10-7605-3_50. ■
- Huang:2021:REB**
- [HTLY21] Junjie Huang, Liang Tan, Wenjuan Li, and Keping Yu. RON-enhanced blockchain propagation mechanism for edge-enabled smart cities. *Journal of Information Security and Applications (JISA)*, 61(??):??, September 2021. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621001538>. ■
- Hull:2017:BDE**
- [Hul17] Richard Hull. Blockchain: Distributed event-based processing in a data-centric world: Extended abstract. In *Proceedings of the 11th ACM International Conference on Distributed and Event-based Systems, DEBS '17*, pages 2–4. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5065-8. URL <http://doi.acm.org/10.1145/3093742.3097982>. ■

- [Hur16] **Hurlburt:2016:MBO**
G. Hurlburt. Might the blockchain outlive Bitcoin? *IT Professional*, 18(2):12–16, March 2016. CODEN IPMAFM. ISSN 1520-9202 (print), 1941-045x (electronic).
- [Hut17] **Hutchison:2017:AEM**
Michael Hutchison. *Acceptance of Electronic Monetary Exchanges, Specifically Bitcoin, by Information Security Professionals: a Quantitative Study Using the Unified Theory of Acceptance and Use of Technology (UTAUT) Model*. D.C.S., Colorado Technical University, Colorado Springs, CO, USA, 2017. 106 pp. URL <http://search.proquest.com/pqdtglobal/docview/1937568128>. [HWCL17]
- [HV20] **Howard:2020:BCF**
J. P. Howard and M. E. Vachino. Blockchain compliance with federal cryptographic information-processing standards. *IEEE Security & Privacy*, 18(1):65–70, January 2020. ISSN 1540-7993 (print), 1558-4046 (electronic).
- [HVM⁺18] **Hellemans:2018:MCM**
Tim Hellemans, Benny Van Houdt, Daniel S. Menasche, Mandar Datar, Swapnil Dhamal, and Corinne
- Touati. Mining competition in a multi-cryptocurrency ecosystem at the network edge: a congestion game approach. *ACM SIGMETRICS Performance Evaluation Review*, 46(3):114–117, December 2018. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic).
- Huckle:2016:SB**
Steve Huckle and Martin White. Socialism and the blockchain. *Future Internet*, 8(4):49, October 18, 2016. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/8/4/49>.
- Hong:2017:BEF**
Zhen Hong, Zehua Wang, Wei Cai, and Victor C. M. Leung. Blockchain-empowered fair computational resource sharing system in the D2D network. *Future Internet*, 9(4):85, November 17, 2017. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/9/4/85>.
- Hariya:2017:BPB**
Meet Hariya, Yash Wagle, Achintya Desai, and Sachin Deshpande. Buyer’s protection in Bitcoin. In IEEE, editor, *2017 International conference of Electronics, Communica-*

tion and Aerospace Technology (ICECA), 20–22 April 2017, Coimbatore, India, volume 1, pages 713–715. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2017.

Hyland-Wood:2022:GEB

[HWJ22]

David Hyland-Wood and Sandra Johnson. Guest editorial: Blockchain consensus protocols. *Computer Networks (Amsterdam, Netherlands: 1999)*, 207(??):??, April 22, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128622000718>.

Huang:2020:UMB

[HWW⁺20]

Yuheng Huang, Haoyu Wang, Lei Wu, Gareth Tyson, Xiapu Luo, Run Zhang, Xuanzhe Liu, Gang Huang, and Xuxian Jiang. Understanding (mis)Behavior on the EOSIO blockchain. *Proceedings of the ACM on Measurement and Analysis of Computing Systems (POMACS)*, 4(2): 37:1–37:28, June 2020. CODEN ???? ISSN 2476-1249. URL <https://dl.acm.org/doi/10.1145/3392155>.

Hewa:2021:SBB

[HYL21]

Tharaka Hewa, Mika Yliantila, and Madhusanka

Liyanage. Survey on blockchain based smart contracts: Applications, opportunities and challenges. *Journal of Network and Computer Applications*, 177(??):??, March 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303234>.

Hu:2019:AMP

[HYLY19]

Jen-Wei Hu, Lo-Yao Yeh, Shih-Wei Liao, and Chu-Sing Yang. Autonomous and malware-proof blockchain-based firmware update platform with efficient batch verification for Internet of Things devices. *Computers & Security*, 86(??):238–252, September 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S016740481831438X>.

Huang:2022:ERA

[HYP⁺22]

Huawei Huang, Zhengyu Yue, Xiaowen Peng, Liuding He, Wuhui Chen, Hong-Ning Dai, Zibin Zheng, and Song Guo. Elastic resource allocation against imbalanced transaction assignments in sharding-based permissioned blockchains. *IEEE Transactions on Parallel and Distributed Systems*, 33(10):2372–2385,

October 2022. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).

He:2022:TTN

[HYWY22]

Xin He, Haochen Yang, Guanghui Wang, and Junyang Yu. Towards trusted node selection using blockchain for crowdsourced abnormal data detection. *Future Generation Computer Systems*, 133(??):320–330, August 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22001017>

Huang:2024:WBNb

[HYZ⁺24]

Ken Huang, Youwei Yang, Fan Zhang, Xi Chen, and Feng Zhu. *Web3: Blockchain, the New Economy, and the Self-Sovereign Internet*. Cambridge University Press, Cambridge, UK, 2024. ISBN 1-009-37566-0 (e-book), 1-009-37567-9 (hardcover). ??? pp. LCCN HG1710 .H836 2024.

Huang:2020:IUP

[HZ20]

Xinyi Huang and Yuexin Zhang. Indistinguishability and unextractability of password-based authentication in blockchain. *Future Generation Computer Systems*, 112(??):561–566, [HZLH19]

November 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X20300327>

Hang:2021:TQV

Jianqin Hang and Xu Zhang. Time- and quantile-varying causality between investor attention and bitcoin returns: a rolling-window causality-in-quantiles approach. *Complex.*, 2021(??):5543995:1–5543995:12, ??? 2021. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/complexity/complexity2021.html#HangZ21>.

Huang:2020:BRE

Bobo Huang, Rui Zhang, Zhihui Lu, Yiming Zhang, Jie Wu, Lu Zhan, and Patrick C. K. Hung. BPS: a reliable and efficient pub/sub communication model with blockchain-enhanced paradigm in multi-tenant edge cloud. *Journal of Parallel and Distributed Computing*, 143(??):167–178, September 2020. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520302847>

Huang:2019:OSA

Xiaohong Huang, Yong

Zhang, Dandan Li, and Lu Han. An optimal scheduling algorithm for hybrid EV charging scenario using consortium blockchains. *Future Generation Computer Systems*, 91(??):555–562, February 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167739X18313578> [HZY+19]

Hu:2022:IET

[HZZ+22]

Xiaoyan Hu, Cheng Zhu, Zhongqi Tong, Wenjie Gao, Guang Cheng, Ruidong Li, Hua Wu, and Jian Gong. Identifying Ethereum traffic based on an active node library and DEVP2P features. *Future Generation Computer Systems*, 132(??):162–177, July 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000565> [Ibr17]

Huang:2020:BBS

[HZX+20]

Haiping Huang, Peng Zhu, Fu Xiao, Xiang Sun, and Qinglong Huang. A blockchain-based scheme for privacy-preserving and secure sharing of medical data. *Computers & Security*, 99(??):Article 102010, December 2020. CODEN CPSEU. ISSN 0167-4048 [ICGB21]

(print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820302832>

Huang:2019:SSC

Longxia Huang, Gongxuan Zhang, Shui Yu, Anmin Fu, and John Yearwood. SeShare: Secure cloud data sharing based on blockchain and public auditing. *Concurrency and Computation: Practice and Experience*, 31(22):e4359:1–e4359:??, November 25, 2019. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

Ibrahim:2017:SRS

Maged Hamada Ibrahim. SecureCoin: a robust secure and efficient protocol for anonymous bitcoin ecosystem. *Int. J. Netw. Secur.*, 19(2):295–312, ??? 2017. CODEN ??? ISSN ??? URL <http://ijns.galaxy.com.tw/contents/ijns-v19-n2/ijns-2017-v19-n2-p295-312.pdf>; <https://dblp.org/db/journals/ijnsec/ijnsec19.html#Ibrahim17>

Irshad:2021:SBO

Azeem Irshad, Shehzad Ashraf Chaudhry, Anwar Ghani, and Muhammad Bilal. A secure blockchain-oriented data delivery and collec-

- tion scheme for 5g-enabled IoD environment. *Computer Networks (Amsterdam, Netherlands: 1999)*, 195(??):??, August 4, 2021. CODEN ????? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621002668> [IK17]
- [IFD⁺19] Naveed Islam, Yasir Faheem, Ikram Ud Din, Muhammad Talha, Mohsen Guizani, and Mudassir Khalil. A blockchain-based fog computing framework for activity recognition as an application to e-healthcare services. *Future Generation Computer Systems*, 100(??):569–578, November 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19309860> [IK19]
- [IGRS16] Florian Idelberger, Guido Governatori, Régis Riveret, and Giovanni Sartor. Evaluation of logic-based smart contracts for blockchain systems. In *Rule Technologies. Research, Tools, and Applications*, pages 167–183. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-42019-6_11 [Isler:2017:TSP]
- Devriş İşler and Alptekin Küpçü. Threshold single password authentication. In Garcia-Alfaro et al. [GANAHHJ17], pages 143–162. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_9 [Islam:2019:EIT]
- Md Nazmul Islam and Sandip Kundu. Enabling IC traceability via blockchain pegged to embedded PUF. *ACM Transactions on Design Automation of Electronic Systems*, 24(3):36:1–36:23, June 2019. CODEN ATASFO. ISSN 1084-4309 (print), 1557-7309 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3315669> [Ibrahim:2021:PMM]
- Ahmed F. Ibrahim, Rasha Kashef, and Liam Corrigan. Predicting market movement direction for bitcoin: a comparison of time series modeling methods. *Computers and Electrical Engineering*, 89(??):

106905, 2021. CODEN CPEEBQ. ISSN 2202-2162
URL <https://dblp.org/db/journals/cee/cee89.html#IbrahimKC21>.

Ikeda:2017:Q

[Ike17]

Kazuki Ikeda. qBitcoin. *CoRR*, 2017. CODEN 2202-2162
ISSN 2202-2162 URL <http://arxiv.org/abs/1708.04955>; <https://dblp.org/db/journals/corr/corr1708.html#abs-1708-04955>.

[IM21]

Ioannidis:2005:ACN

[IKY05]

John Ioannidis, Angelos Keromytis, and Moti Yung, editors. *Applied cryptography and network security: third international conference, ACNS 2005, New York, NY, USA, June 7–10, 2005: proceedings*, volume 3531 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 3-540-26223-7 (paperback), 3-540-31542-X (e-book). ISSN 0302-9743. LCCN TK5102.85 .A26 2005. URL <http://link.springer.com/10.1007/b137093>.

[Int14]

Ingram:2016:AMB

[IM16]

C. Ingram and M. Morisse. Almost an MNC: Bitcoin entrepreneurs’ use of collective resources and decou-

pling to build legitimacy. In *2016 49th Hawaii International Conference on System Sciences (HICSS)*, pages 4083–4092. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, January 2016. ISSN 1530-1605.

Inzirillo:2021:DRP

Hugo Inzirillo and Benjamin Mat. Dimensionality reduction for prediction: Application to bitcoin and Ethereum. *CoRR*, 2021. CODEN 2202-2162 ISSN 2202-2162 URL <https://arxiv.org/abs/2112.15036>; <https://dblp.org/db/journals/corr/corr2112.html#abs-2112-15036>.

IRS:2014:IVC

Internal Revenue Service. IRS virtual currency guidance: Virtual currency is treated as property for U.S. Federal tax purposes; general rules for property transactions apply. News release about new U.S. Federal regulation., March 25, 2014. URL <https://www.irs.gov/newsroom/irs-virtual-currency-guidance>.

Ibba:2018:ICO

[IPL⁺18]

Simona Ibba, Andrea Pinna, Maria Ilaria Lunesu, Michele

- Marchesi, and Roberto Tonelli. Initial coin offerings and agile practices. *Future Internet*, 10(11):103, October 23, 2018. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/10/11/103>. [IST19]
- [IPSP17] Simona Ibba, Andrea Pinna, Matteo Seu, and Filippo Eros Pani. CitySense: Blockchain-oriented smart cities. In *Proceedings of the XP2017 Scientific Workshops*, XP '17, pages 12:1–12:5. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5264-2. URL <http://doi.acm.org/10.1145/3120459.3120472>. [Ito18]
- [ISM17] Thaís Bardini Idalino, Dayana Spagnuolo, and Jean Everson Martina. Private verification of access on medical data: An initial study. In Garcia-Alfaro et al. [GANAHHJ17], pages 86–103. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_6. [JAK19]
- Imtiaz:2019:COT** Muhammad Anas Imtiaz, David Starobinski, and Ari Trachtenberg. Characterizing orphan transactions in the bitcoin network. *CoRR*, ??(??):??, ???? 2019. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1912.11541>; <https://dblp.org/db/journals/corr/corr1912.html#abs-1912-11541>.
- Ito:2018:BIS** Joi Ito. The big ICO swindle: Many cryptocurrency speculators are banking on the theory that someone dumber than them will buy their tokens for more than they paid. that’s a pretty good bet ... until it isn’t. *Wired*, ??(??):??, January 2, 2018. CODEN WREDEM. ISSN 1059-1028 (print), 1078-3148 (electronic). URL <https://www.wired.com/story/ico-cryptocurrency-irresponsibility/>.
- Jindal:2019:SBB** Anish Jindal, Gagangeet Singh Aujla, and Neeraj Kumar. SURVIVOR: a blockchain based edge-as-a-service framework for secure energy trading in SDN-enabled vehicle-to-grid environment. *Computer Networks (Amsterdam, Nether-*

- lands: 1999), 153(??):36–48, April 22, 2019. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S138912861831106X>■
- [Jas18] Nafisa Amir Ali Jassani. Blockchain application for education. M.S., University of Houston, Houston, TX, USA, 2018. 71 pp. URL <http://search.proquest.com/pqdtglobal/docview/2186631083>■
- [JB17a] Christian Jaag and Christian Bach. Blockchain technology and cryptocurrencies: Opportunities for postal financial services. In *The Changing Postal and Delivery Sector*, pages 205–221. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-46046-8_13■
- [JB17b] Karim Jabbar and Pernille Bjørn. Growing the blockchain information infrastructure. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, CHI '17, pages 6487–6498. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4655-3. URL <http://doi.acm.org/10.1145/3025453.3025959>■
- [JB18a] Nafisa Amir Ali Jassani. Blockchain application for education. M.S., University of Houston, Houston, TX, USA, 2018. 71 pp. URL <http://search.proquest.com/pqdtglobal/docview/2186631083>■
- [JB18b] Christian Jaag and Christian Bach. Blockchain technology and cryptocurrencies: Opportunities for postal financial services. In *The Changing Postal and Delivery Sector*, pages 205–221. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-46046-8_13■
- [JB21] Karim Jabbar and Pernille Bjørn. Infrastructure grind: Introducing blockchain technology in the shipping domain. In *Proceedings of the 2018 ACM Conference on Supporting Groupwork, GROUP '18*, pages 297–308. ACM Press, New York, NY 10036, USA, 2018. ISBN 1-4503-5562-5. URL <http://doi.acm.org/10.1145/3148330.3148345>■
- [Jabbar:2018:IGI] Karim Jabbar and Pernille Bjørn. Infrastructure grind: Introducing blockchain technology in the shipping domain. In *Proceedings of the 2018 ACM Conference on Supporting Groupwork, GROUP '18*, pages 297–308. ACM Press, New York, NY 10036, USA, 2018. ISBN 1-4503-5562-5. URL <http://doi.acm.org/10.1145/3148330.3148345>■
- [Jabbar:2018:PIV] Karim Jabbar and Pernille Bjørn. Permeability, interoperability, and velocity: Entangled dimensions of infrastructure grind at the intersection of blockchain and shipping. *ACM Transactions on Social Computing (TSC)*, 1(3):10:1–10:??, December 2018. CODEN ???? ISSN 2469-7818 (print), 2469-7826 (electronic). URL <https://dl.acm.org/citation.cfm?id=3288800>■
- [Jabbar:2017:GBI] Karim Jabbar and Pernille Bjørn. Growing the blockchain information infrastructure. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, CHI '17, pages 6487–6498. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4655-3. URL <http://doi.acm.org/10.1145/3025453.3025959>■
- [Jayabal:2021:PAD] Chandra Priya Jayabal and Ponsy R. K. Sathia Bham. Performance analysis on Diversity Mining-based Proof

of Work in bifolded consortium blockchain for Internet of Things consensus. *Concurrency and Computation: Practice and Experience*, 33 (16):e6285:1–e6285:??, August 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [JCG17]

Jiang:2022:RDD

[JBH⁺22] Nianqi Jiang, Fenhua Bai, Lin Huang, Zhengyuan An, and Tao Shen. Reputation-driven dynamic node consensus and reliability sharding model in IoT blockchain. *Algorithms (Basel)*, 15(2), February 2022. CODEN ALGOCH. ISSN 1999-4893 (electronic). URL <https://www.mdpi.com/1999-4893/15/2/28>. [JCG⁺21]

Jefferson:2019:WWD

[JBK⁺19] David Jefferson, Duncan Buell, Joe Kiniry, Kevin Skoglund, and Joshua Greenbaum. What we don't know about the Voatz "Blockchain" Internet voting system. Report, Lawrence Livermore National Laboratory [and other institutions], Livermore, CA, USA, May 1, 2019. 10 pp. URL http://cse.sc.edu/~buell/blockchain-papers/documents/WhatWeDontKnowAbouttheVoatzBlockchain_.pdf. [JCG⁺22]

Joy:2017:PTA

Joshua Joy, Greg Cusack, and Mario Gerla. Poster: Time analysis of the feasibility of vehicular block-trees. In *Proceedings of the 3rd Workshop on Experiences with the Design and Implementation of Smart Objects*, SMARTO-BJECTS '17, pages 25–26. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5141-7. URL <http://doi.acm.org/10.1145/3127502.3127516>.

Jan:2021:SBC

Mian Ahmad Jan, Jin-jin Cai, Xiang-Chuan Gao, Fazlullah Khan, Spyridon Mastorakis, Muhammad Usman, Mamoun Alazab, and Paul Watters. Security and blockchain convergence with Internet of Multimedia Things: Current trends, research challenges and future directions. *Journal of Network and Computer Applications*, 175(??):??, February 1, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303775>.

Jerbi:2022:BBS

Wassim Jerbi, Omar Cheikhrouhou, Abderrahmen Guermazi, Mehdi Baz, and Hafedh Trabelsi. BSI: Blockchain

to secure routing protocol in Internet of Things. *Concurrency and Computation: Practice and Experience*, 34 (10):e6794:1–e6794:??, May 1, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

Jacynycz:2016:BDB

[JCHSR16]

Viktor Jacynycz, Adrian Calvo, Samer Hassan, and Antonio A. Sánchez-Ruiz. Betfunding: A distributed bounty-based crowdfunding platform over Ethereum. In [JJ21] *Distributed Computing and Artificial Intelligence, 13th International Conference*, pages 403–411. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-40162-9. URL http://link.springer.com/chapter/10.1007/978-3-319-40162-1_44. [JJ22]

Jain:2018:DOT

[JFG18]

Samvit Jain, Edward W. Felten, and Steven Goldfeder. Determining an optimal threshold on the online reserves of a bitcoin exchange. *J. Cybersecur.*, 4(1):tyy003, ??? 2018. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/cybersecurity/cybersecurity4.html#JainFG18>.

Jiang:2020:SBB

[JGL⁺20]

Peng Jiang, Fuchun Guo, [JJFC22]

Kaitai Liang, Jianchang Lai, and Qiaoyan Wen. Searchain: Blockchain-based private keyword search in decentralized storage. *Future Generation Computer Systems*, 107(?): 781–792, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17318630>.

Jung:2021:BIM

Hyunjun Jung and Dongwon Jeong. Blockchain implementation method for interoperability between CB-DCs. *Future Internet*, 13 (5):133, May 18, 2021. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/5/133>.

Jayabalan:2022:SBM

Jayapriya Jayabalan and N. Jeyanthi. Scalable blockchain model using off-chain IPFS storage for healthcare data security and privacy. *Journal of Parallel and Distributed Computing*, 164(?):152–167, June 2022. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731522000648>.

Jatoth:2022:ICB

Chandrashekar Jatoth, Rishabh

- Jain, Ugo Fiore, and Subrahmanyam Chatharasupalli. Improved classification of blockchain transactions using feature engineering and ensemble learning. *Future Internet*, 14(1):16, December 28, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/1/16>. [JLG⁺14]
- [JKKX16] S. Jarecki, A. Kiayias, H. Krawczyk, and J. Xu. Highly-efficient and composable password-protected secret sharing (or: How to protect your Bitcoin wallet online). In *2016 IEEE European Symposium on Security and Privacy (EuroSP)*, pages 276–291. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, March 2016. [JLLK23]
- [JKS16] Ari Juels, Ahmed Kosba, and Elaine Shi. The ring of Gyges: Investigating the future of criminal smart contracts. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS '16*, pages 283–295. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. [JLX⁺19]
- [JL17] H. Jang and J. Lee. An empirical study on modeling and prediction of Bitcoin prices with Bayesian neural networks based on blockchain information. *IEEE Access*, ??(??):??, 2017. ISSN 2169-3536.
- Johnson:2014:GTA**
- Benjamin Johnson, Aron Laszka, Jens Grossklags, Marie Vasek, and Tyler Moore. Game-theoretic analysis of DDoS attacks against Bitcoin mining pools. In Christin and Safavi-Naini [CSN14], pages 72–86. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_6.
- Jung:2023:PBT**
- Hae Sun Jung, Seon Hong Lee, Haein Lee, and Jang Hyun Kim. Predicting bitcoin trends through machine learning using sentiment analysis with technical indicators. *Computer Systems Science and Engineering*, 46(2):2231–2246, ???? 2023. CODEN CSSEI. ISSN ???? URL <https://dblp.org/db/journals/csse/csse46.html#JungLLK23>.
- Jiang:2019:PPP**
- Wenbo Jiang, Hongwei Li, Guowen Xu, Mi Wen, Guishan Dong, and Xiaodong

- Lin. PTAS: Privacy-preserving thin-client authentication scheme in blockchain-based PKI. *Future Generation Computer Systems*, 96(??):185–195, July 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18315097>. [JMM14]
- [JLX21] Nan Jiang, Xing Liu, and Ming Xu. Evaluating blockchain technology and related policies in China and the USA. *Science and Public Policy*, 48(4):562–575, August 2021. CODEN ????? ISSN 0302-3427 (print), 1471-5430 (electronic). URL <http://academic.oup.com/spp/article/48/4/562/6291644>. [JO13]
- [JMK17] Caroline Jaffe, Cristina Mata, and Sepandar Kamvar. Motivating urban cycling through a blockchain-based financial incentives system. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers*, UbiComp '17, pages 81–84. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5190-5. URL <http://doi.acm.org/10.1145/3123024.3123141>. [Joh18]
- [Joh19] Jackie Johnson. Bitcoin and Venezuela’s unofficial exchange rate. *Ledger*, 4 1-4503-5190-5. URL <http://doi.acm.org/10.1145/3123024.3123141>. [JMM14]
- Jayasinghe:2014:OFE**
- D. Jayasinghe, K. Markantonakis, and K. Mayes. Optimistic fair-exchange with anonymity for Bitcoin users. In *2014 IEEE 11th International Conference on e-Business Engineering*, pages 44–51. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, November 2014. [Joh19]
- Juels:2013:NAS**
- Ari Juels and Alina Oprea. New approaches to security and availability for cloud data. *Communications of the ACM*, 56(2):64–73, February 2013. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). [Joh19]
- Johnson:2018:BTS**
- Josalyn Johnson. Blockchain technology securing health-care information and technology. M.S., Utica College, Utica, NY, USA, 2018. 61 pp. URL <http://search.proquest.com/pqdtglobal/docview/2163264294>. [Joh19]
- Johnson:2019:BVU**
- Jackie Johnson. Bitcoin and Venezuela’s unofficial exchange rate. *Ledger*, 4

- (?):??, ???? 2019. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/170>. [JSK⁺17]
- Jakobsson:2017:FCD**
- [JRB⁺17] Markus Jakobsson, Kurt Rohloff, Joseph Bonneau, Andrew Miller, Peter Y. A. Ryan, Vanessa Teague, Andrea Bracciali, Massimiliano Sala, and Federico Pintore, editors. *Financial Cryptography and Data Security: FC 2017 International Workshops, WAHC, BITCOIN, VOTING, WTSC, and TA, Sliema, Malta, April 7, 2017, Revised Selected Papers*, volume 10323 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-70277-7 (print), 3-319-70278-5 (e-book). LCCN QA76.9.A25. [JSKV16]
- Jumnongsaksub:2020:RSC**
- [JS20] Siwapol Jumnongsaksub and Kunwadee Sripanidkulchai. Reducing smart contract runtime errors on Ethereum. *IEEE Software*, 37(5):55–59, September/October 2020. CODEN IESOEG. ISSN 0740-7459 (print), 1937-4194 (electronic). [Jue04]
- Judmayer:2017:BCI**
- Aljosha Judmayer, Nicholas Stifter, Katharina Krombholz, Edgar Weippl, Elisa Bertino, and Ravi Sandhu. Blocks and chains: Introduction to Bitcoin, cryptocurrencies, and their consensus mechanisms. *Synthesis Lectures on Information Security, Privacy, and Trust*, 9(1):1–123, June 2017. ISBN 1-62705-713-7. ISSN 1945-9742 (print), 1945-9750 (electronic). URL <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7987472>.
- Juhász:2016:BAI**
- Péter L. Juhász, József Stéger, Dániel Kondor, and Gábor Vattay. A Bayesian approach to identify bitcoin users. *CoRR*, ??(?):??, ???? 2016. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1612.06747>; <https://dblp.org/db/journals/corr/corr1612.html#JuhaszSKV16>■
- Juels:2004:FCI**
- Ari Juels, editor. *Financial cryptography: 8th international conference, FC 2004, Key West, FL, USA, February 9–12, 2004: revised papers*, volume 3110. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK /

etc., 2004. ISBN 3-540-27809-5, 3-540-27809-5 (e-book). LCCN HG1710.F35 2004. URL <http://link.springer.com/10.1007/b98935>.

Judmayer:2016:CCCa

[JW16a]

Aljosha Judmayer and Edgar Weippl. Condensed cryptographic currencies crash course (C5). In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS '16*, pages 1857–1858. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X.

Judmayer:2016:CCCb

[JW16b]

Aljosha Judmayer and Edgar Weippl. Cryptographic currencies crash course (C4): Tutorial. In *Proceedings of the 25th International Conference Companion on World Wide Web, WWW '16 Companion*, pages 1021–1024. International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva, Switzerland, 2016. ISBN 1-4503-4144-6.

Javarone:2018:MDS

[JW18]

Marco Alberto Javarone and Craig Steven Wright. Modeling a double-spending detection system for the bitcoin network. *CoRR*, abs/1809.07678(??):??, 2018.

2018. CODEN ????. ISSN ????. URL <http://arxiv.org/abs/1809.07678>; <https://dblp.org/db/journals/corr/corr1809.html#abs-1809-07678>.

Jiao:2019:AMC

[JWNS19]

Y. Jiao, P. Wang, D. Niyato, and K. Suankeawmanee. Auction mechanisms in cloud/fog computing resource allocation for public blockchain networks. *IEEE Transactions on Parallel and Distributed Systems*, 30(9):1975–1989, September 2019. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).

Jang:2019:IFB

[JYKA19]

Sung Min Jang, Eojin Yi, Woo Chang Kim, and Kwangwon Ahn. Information flow between bitcoin and other investment assets. *Entropy*, 21(11):1116, 2019. CODEN ENTRFG. ISSN ????. URL <https://dblp.org/db/journals/entropy/entropy21.html#JangYKA19>.

Jan:2021:BEE

[JYTW21]

Mian Ahmad Jan, Kuo-Hui Yeh, Zhiyuan Tan, and Yulei Wu. Blockchain for edge-enabled smart cities applications. *Journal of Information Security and*

- Applications (JISA)*, 61 (??):??, September 2021. CODEN ???? ISSN [K.13] 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S221421262100154X> **K:2013:BCC**
- [JZLL17] T. Jin, X. Zhang, Y. Liu, and K. Lei. BlockNDN: A Bitcoin blockchain decentralized system over named data networking. In *2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN)*, pages 75–80. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, July 2017. ISSN 2165-8528 (print), 2165-8536 (electronic). URL <http://ieeexplore.ieee.org/document/7993751/> **Jin:2017:BBB**
- [JZS⁺17] Aljosha Judmayer, Alexei Zamyatin, Nicholas Stifter, Artemios G. Voyiatzis, and Edgar Weippl. Merged mining: Curse or cure? In Garcia-Alfaro et al. [GANAHHJ17], pages 316–333. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_18 **Judmayer:2017:MMC** [Kab17]
- D. K. Bitcoin’s collapse: China blues: The Bitcoin price plunges after China bans financial firms from dealing with Bitcoin exchanges. *The Economist*, ?? (??):??, December 18, 2013. CODEN EONOEH. ISSN 0013-0613 (print), 1476-8860 (electronic). URL <https://www.economist.com/blogs/schumpeter/2013/12/bitcoins-collapse> **Karame:2016:BBS**
- Ghassan Karame and Elli Androulaki. *Bitcoin and blockchain security*. Artech House information security and privacy series. Artech House Inc., Norwood, MA, USA, 2016. ISBN 1-63081-013-4. xiii + 218 pp. LCCN HG1710 .K37 2016. **Kabashkin:2017:RMB**
- Igor Kabashkin. Risk modelling of blockchain ecosystem. In *Network and System Security*, pages 59–70. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-64701-2_5 **Karame:2012:DSF**
- Ghassan O. Karame, Elli Androulaki, and Srdjan Čapkun. Double-spending

fast payments in Bitcoin. In *Proceedings of the 2012 ACM Conference on Computer and Communications Security*, CCS '12, pages 906–917. ACM Press, New York, NY 10036, USA, 2012. ISBN 1-4503-1651-4.

Kadariya:2018:CBB

[Kad18]

Laxmi Kadariya. Concurrency in blockchain based smartpool with transactional memory. M.S.C.S., University of Nevada, Las Vegas, Las Vegas, NV, USA, 2018. 75 pp. URL <http://search.proquest.com/pqdtglobal/docview/2124203495>.

Khan:2020:IPC

[KAK20]

Kashif Mehboob Khan, Junaid Arshad, and Muhammad Mubashir Khan. Investigating performance constraints for blockchain based secure e-voting system. *Future Generation Computer Systems*, 105(?): 13–26, April 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19310805>.

Khan:2021:EAT

[KAK21]

Kashif Mehboob Khan, Junaid Arshad, and Muhammad Mubashir Khan. Empirical analysis of transaction malleability within blockchain-based e-voting. [Kan18]

Computers & Security, 100(?):Article 102081, January 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820303540>.

Kolb:2020:CCC

[KAKC20]

John Kolb, Moustafa AbdelBaky, Randy H. Katz, and David E. Culler. Core concepts, challenges, and future directions in blockchain: a centralized tutorial. *ACM Computing Surveys*, 53(1):9:1–9:39, May 2020. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3366370>.

Kammuller:2017:PCA

[Kam17]

Florian Kammüller. A proof calculus for attack trees in Isabelle. In *Data Privacy Management, Cryptocurrencies and Blockchain Technology*, Lecture Notes in Computer Science, pages 3–18. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_1.

Kanaracus:2018:CMM

Christopher Kanaracus.

Crypto miners may be the ‘new payload of choice’ for attackers. Web article., February 1, 2018. URL <http://blog.talosintelligence.com/2018/01/malicious-xmr-mining.html>.

Kanza:2020:TPR

[Kan20]

Yaron Kanza. Technical perspective: Revealing every story of data in blockchain systems. *SIGMOD Record (ACM Special Interest Group on Management of Data)*, 49(1):69, September 2020. CODEN SRECD8. ISSN 0163-5808 (print), 1943-5835 (electronic). URL <https://dl.acm.org/doi/10.1145/3422648.3422664>. [Kar16]

Khan:2020:BEC

[KAP20]

Zaheer Khan, Abdul Ghafoor Abbasi, and Zeeshan Pervez. Blockchain and edge computing-based architecture for participatory smart city applications. *Concurrency and Computation: Practice and Experience*, 32(12):e5566:1–e5566:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [KAS⁺22]

Karame:2015:MBS

[KAR⁺15]

Ghassan O. Karame, Elli Androulaki, Marc Roeschlin, Arthur Gervais, and Srdjan Čapkun. Misbehavior in Bitcoin: a study

of double-spending and accountability. *ACM Transactions on Information and System Security*, 18(1):2:1–2:32, June 2015. CODEN ATISBQ. ISSN 1094-9224 (print), 1557-7406 (electronic).

Karame:2016:SSB

Ghassan Karame. On the security and scalability of Bitcoin’s blockchain. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS ’16*, pages 1861–1862. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2976756>.

Khanal:2022:UBI

Yurika Pant Khanal, Abeer Alsadoon, Khurram Shahzad, Ahmad B. Al-Khalil, Penatiyana W. C. Prasad, Sabih Ur Rehman, and Rafiqul Islam. Utilizing blockchain for IoT privacy through enhanced ECIES with secure hash function. *Future Internet*, 14(3):77, February 28, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/3/77>.

Kate:2016:ICN

Aniket Kate. Introduction to credit networks: Security, privacy, and applica-

- tions. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, CCS '16, pages 1859–1860. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2976755>. [KB16]
- Katsiampa:2017:VEB**
- [Kat17] Paraskevi Katsiampa. Volatility estimation for Bitcoin: a comparison of GARCH models. *Economics Letters*, 158:3–6, 2017. CODEN ECLDS. ISSN 0165-1765 (print), 1873-7374 (electronic). [KBS17]
- Kayser:2017:BJW**
- [Kay17] Zach Kayser. Bitcoin: just what the heck is it? Brainerd Dispatch Web site., December 3, 2017. URL <http://www.brainerddispatch.com/business/technology/4368345-bitcoin-just-what-heck-it>.
- Kumaresan:2014:HUB** [KBS⁺21]
- [KB14] Ranjit Kumaresan and Iddo Bentov. How to use Bitcoin to incentivize correct computations. In *Proceedings of the 2014 ACM SIGSAC Conference on Computer and Communications Security*, CCS '14, pages 30–41. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-2957-8.
- Kumaresan:2016:ASC**
- Ranjit Kumaresan and Iddo Bentov. Amortizing secure computation with penalties. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, CCS '16, pages 418–429. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X.
- Kaushal:2017:EBS**
- P. K. Kaushal, A. Bagga, and R. Sobti. Evolution of Bitcoin and security risk in Bitcoin wallets. In *2017 International Conference on Computer, Communications and Electronics (Comptelix)*, pages 172–177. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, July 2017. URL <http://ieeexplore.ieee.org/document/8003959/>.
- Kudva:2021:SBB**
- Sowmya Kudva, Shahriar Badsha, Shamik Sengupta, Hung La, Ibrahim Khalil, and Mohammed Atiquzzaman. A scalable blockchain based trust management in VANET routing protocol. *Journal of Parallel and Distributed Computing*, 152(??):144–156, June 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (elec-

- tronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000459> ■
- Kabra:2020:MBB**
- [KBTT20] Naman Kabra, Pronaya Bhattacharya, Sudeep Tanwar, and Sudhanshu Tyagi. *MudraChain*: Blockchain-based framework for automated cheque clearance in financial institutions. *Future Generation Computer Systems*, 102(??):574–587, January 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19311896> ■
- Karame:2018:BSP**
- [KC18] Ghassan Karame and Srdjan Capkun. Blockchain security and privacy. *IEEE Security & Privacy*, 16(4):11–12, July/August 2018. CODEN ???? ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040011.html>.
- Kethineni:2017:UBD**
- [KCD17] Sessa Kethineni, Ying Cao, and Cassandra Dodge. Use of Bitcoin in Darknet markets: Examining facilitative factors on Bitcoin-related crimes. *American Journal of Criminal Justice*, ??(??):265–275, ???? ■
- Kondor:2014:IIB**
- [KCS⁺14] Dániel Kondor, István Csabai, János Szüle, Márton Pósfai, and Gábor Vattay. Inferring the interplay between network structure and market effects in Bitcoin. *New Journal of Physics*, 16(12):125003, December 2014. CODEN NJOPFM. ISSN 1367-2630.
- Kow:2016:HKW**
- Yong Ming Kow and Xi-anhua Ding. “Hey, I know what this is!”: Cultural affinities and early stage appropriation of the emerging Bitcoin technology. In *Proceedings of the 19th International Conference on Supporting Group Work*, GROUP ’16, pages 213–221. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4276-0.
- Kshetri:2020:EBF**
- [KD20] N. Kshetri and J. DeFranco. The economics behind food supply blockchains. *Computer*, 53(12):106–110, 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

- [KDF13] **Kroll:2013:EBM** Joshua A. Kroll, Ian C. Davey, and Edward W. Felten. The economics of Bitcoin mining, or Bitcoin in the presence of adversaries. In *The Twelfth Workshop on the Economics of Information Security (WEIS 2013)*, Georgetown University, Washington, DC, June 11–12, 2013, page ?? ???? , 2013. URL <http://weis2013.econinfosec.org/papers/KrollDaveyFeltenWEIS2013.pdf>. [Kel15]
- [KDS⁺20] **Kabbinala:2020:BES** Aniruddh Rao Kabbinala, Emmanouil Dimogerontakis, Mennan Selimi, Anwaar Ali, Leandro Navarro, Arjuna Sathiaselam, and Jon Crowcroft. Blockchain for economically sustainable wireless mesh networks. *Concurrency and Computation: Practice and Experience*, 32(12):e5349:1–e5349:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [Ker12]
- [Ker14] **Keenan:2016:WFK** Thomas P. Keenan. Have we found the key to the smart community? In *ACM SIGGRAPH 2016 Talks*, SIGGRAPH '16, page 89:1. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4282-5. URL <http://doi.acm.org/10.1145/2897839.2956558>. [Kelly:2015:BBB]
- Brian Kelly. *The Bitcoin big bang: how alternative currencies are about to change the world*. John Wiley, New York, NY, USA, 2015. ISBN 1-118-96366-0 (hardcover), 1-118-96364-4 (ePDF), 1-118-96365-2 (ePub). xv + 224 pp. LCCN HF5548.32 .K447 2015. [Keromytis:2012:FCD]
- Angelos D. Keromytis, editor. *Financial Cryptography and Data Security: 16th International Conference, FC 2012, Kralendijk, Bonaire, February 27–March 2, 2012, Revised Selected Papers*, volume 7397 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2012. CODEN LNCSD9. ISBN 3-642-32945-4 (print), 3-642-32946-2 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25 F3 2012. URL <http://www.springerlink.com/content/978-3-642-32946-3>. [Kersch:2014:BFR]
- Daniel Kersch. *Bitcoin: Funktionsweise, Risiken*

und Chancen der digitalen Währung. (German) [Bitcoin: Functioning, risks and opportunities of digital currency]. Kemacon, Dingolfing, Germany, second edition, 2014. ISBN 3-9816017-1-8. 156 pp. LCCN ????

Kerner:2018:CRE

[Ker18a]

Sean Michael Kerner. Cisco reveals the economics of crypto-currency mining attacks. Web article., January 31, 2018. URL <http://www.eweek.com/security/cisco-reveals-the-economics-of-crypto-currency-mining-attacks>. [KF19]

Kerner:2018:WUE

[Ker18b]

Sean Michael Kerner. Water utility in Europe hit by cryptocurrency malware mining attack: Unauthorized cryptocurrency mining attacks come to industrial control systems for the first time, as cryptojacking attacks continue to grow. Web article, February 7, 2018. URL <http://www.eweek.com/security/water-utility-in-europe-hit-by-cryptocurrency-malware-mining-attack>. [KFBI22]

Klems:2017:TIB

[KET⁺17]

Markus Klems, Jacob Eberhardt, Stefan Tai, Stefan Härtlein, Simon Buchholz, and Ahmed Tid- [KFN⁺17]

jani. Trustless intermediation in blockchain-based decentralized service marketplaces. In *Service-Oriented Computing*, pages 731–739. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-69035-3_53.

Kfir:2019:DCL

Shaul Kfir and Camille Fournier. DAML: the contract language of distributed ledgers. *Communications of the ACM*, 62(9):48–54, September 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2019/9/238966/fulltext>.

Kinkeldey:2022:BEV

Christoph Kinkeldey, Jean-Daniel Fekete, Tanja Blascheck, and Petra Isenberg. Bit-Conduite: Exploratory visual analysis of entity activity on the Bitcoin network. *IEEE Computer Graphics and Applications*, 42(1):84–94, January/February 2022. CODEN ICGADZ. ISSN 0272-1716 (print), 1558-1756 (electronic).

Kaga:2017:SPS

Yosuke Kaga, Masakazu

- Fujio, Ken Naganuma, Kenta Takahashi, Takao Murakami, Tetsushi Ohki, and Masakatsu Nishigaki. A secure and practical signature scheme for blockchain based on biometrics. In *Information Security Practice and Experience*, pages 877–891. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-658-18890-0_13. [KFTS17]
- Korschinowski:2017:BTW**
- [KFR17] Sven Korschinowski, Maximilian Forster, and Luca Reulecke. Blockchain — wie Banken die Technologie aus Prozess- und Produkt-Sicht nutzen können. (German) [Blockchain — how banks can use the technology from a process and product perspective]. In *Praxishandbuch Digital Banking*, pages 277–290. Springer Fachmedien Wiesbaden, December 2017. [KG17]
- Korschinowski:2018:BWB**
- [KFR18] Sven Korschinowski, Maximilian Forster, and Luca Reulecke. Blockchain — wie banken die technologie aus prozess- und produkt-sicht nutzen können. In *Praxis-handbuch Digital Banking*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-658-18890-0_13. [KGA⁺22]
- Kumar:2017:TAM**
- Amrit Kumar, Clément Fischer, Shruti Tople, and Praateek Saxena. A traceability analysis of Monero’s blockchain. In *Computer Security — ESORICS 2017*, pages 153–173. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-66399-9_9.
- Khalil:2017:RRB**
- Rami Khalil and Arthur Gervais. Revive: Rebalancing off-blockchain payment networks. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security, CCS ’17*, pages 439–453. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3. URL <http://doi.acm.org/10.1145/3133956.3134033>.
- Kakkar:2022:BBS**
- Riya Kakkar, Rajesh Gupta, Smita Agrawal, Sudeep Tanwar, and Ravi Sharma. Blockchain-based secure and trusted data sharing scheme for autonomous ve-

- hicle underlying 5G. *Journal of Information Security and Applications (JISA)*, 67 (??):??, June 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622000618> [KH16]
- Kochovski:2019:TMB**
- [KGS⁺19] Petar Kochovski, Sandi Gec, Vlado Stankovski, Marko Bajec, and Pavel D. Drobintsev. Trust management in a blockchain based fog computing platform with trustless smart oracles. *Future Generation Computer Systems*, 101(??):747–759, December 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19301281> [KH17]
- Kumari:2020:BAA**
- [KGTK20] Aparna Kumari, Rajesh Gupta, Sudeep Tanwar, and Neeraj Kumar. Blockchain and AI amalgamation for energy cloud management: Challenges, solutions, and future directions. *Journal of Parallel and Distributed Computing*, 143(??):148–166, September 2020. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S074373152030277X> [Kha15]
- Kleineberg:2016:SBC**
- Kaj-Kolja Kleineberg and Dirk Helbing. A social Bitcoin could sustain a democratic digital world. *European Physical Journal — Special Topics*, 225(17–18):3231–3241, December 2016. CODEN EPJSAC. ISSN 1951-6355 (print), 1951-6401 (electronic). URL <http://link.springer.com/article/10.1140/epjst/e2016-60156-7>
- Ki:2017:BAI**
- Ki and Hoon Hong. Bitcoin as an alternative investment vehicle. *Information Technology and Management*, 18(4):265–275, September 2017. CODEN ???? ISSN 1385-951X (print), 1573-7667 (electronic). URL <http://link.springer.com/article/10.1007/s10799-016-0264-6>
- Khan:2015:BPM**
- Akif Khan. Bitcoin — payment method or fraud prevention tool? *Computer Fraud & Security*, 2015(5):16–19, May 8, 2015. CODEN ???? ISSN 1361-3723 (print), 1873-7056 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1361372315300385>
- Khaknejad:2019:TEB**
- Mohammad Bayani Khaknejad. *Two Essays on Bit-*

- coin *Price and Volume*. Ph.D., Old Dominion University, Norfolk, VA, USA, 2019. 78 pp. URL <http://search.proquest.com/pqdtglobal/docview/230519119C>. [KJ17]
- [Kin13] Sunny King. Primecoin: Cryptocurrency with prime number proof-of-work. Web document., July 2013. URL <http://primecoin.io/bin/primecoin-paper.pdf>. **King:2013:PCP**
- [KJ17] Yoohwan Kim and Juyeon Jo. Binary blockchain: Solving the mining congestion problem by dynamically adjusting the mining capacity. In *Applied Computing & Information Technology*, pages 29–49. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., July 2017. **Kim:2017:BBS**
- [KJ18] Yoohwan Kim and Juyeon Jo. Binary blockchain: Solving the mining congestion problem by dynamically adjusting the mining capacity. In *Applied Computing & Information Technology*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-64051-8_3. **Kim:2018:BBS**
- [KK17a] Yoshiaki Kawase and Shoji Kasahara. Transactionconfirmation time for Bitcoin: A queueing analytical approach to blockchain mechanism. In *Queueing Theory and Network Applications*, pages 75–88. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-68520-1. URL http://link.springer.com/chapter/10.1007/978-3-319-68520-1_5. **Kawase:2017:TCT**
- [KK17b] Hiroki Kuzuno and Christian Karam. Blockchain explorer: An analytical process and investigation environment for Bitcoin. In *Blockchain Explorer: An analytical process and investigation environment for Bitcoin*. Springer, 2017. ISBN 3-319-68520-1. URL http://link.springer.com/chapter/10.1007/978-3-319-68520-1_5. **Kuzuno:2017:BEA**

- 2017 APWG Symposium on Electronic Crime Research (*eCrime*), pages 9–16. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2017. ISSN 2159-1237 (print), 2159-1245 (electronic). URL <http://ieeexplore.ieee.org/document/7945049/>. [KKJG⁺16]
- Kim:2020:MBS**
- [KK20a] Mihui Kim and Youngmin Kim. Multi-blockchain structure for a crowdsensing-based smart parking system. *Future Internet*, 12(5):90, May 16, 2020. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/5/90>.
- Konashevych:2020:RTB**
- [KK20b] Oleksii Konashevych and Oleg Khovayko. Randpay: the technology for blockchain micropayments and transactions which require recipient’s consent. *Computers & Security*, 96(??):Article 101892, September 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820301656>. [KKK⁺21]
- Koo:2021:PBP**
- [KK21] Eunho Koo and Geonwoo Kim. Prediction of bitcoin price based on manipulating distribution strategy. *Appl. Soft Comput.*, 110(??):107738, ??? 2021. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/asc/asc110.html#KooK21>.
- Kokoris-Kogias:2016:EBS**
- Eleftherios Kokoris-Kogias, Philipp Jovanovic, Nicolas Gailly, Ismail Khoffi, Linus Gasser, and Bryan Ford. Enhancing bitcoin security and performance with strong consistency via collective signing. *CoRR*, abs/1602.06997(??):??, ??? 2016. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1602.06997>; <https://dblp.org/db/journals/corr/corr1602.html#Kokoris-KogiasJ16>.
- Khan:2021:BBD**
- Ammar Ahmed Khan, Muhammad Mubashir Khan, Kashif Mehboob Khan, Junaid Arshad, and Farhan Ahmad. A blockchain-based decentralized machine learning framework for collaborative intrusion detection within UAVs. *Computer Networks (Amsterdam, Netherlands: 1999)*, 196(??):??, September 4, 2021. CODEN ??? ISSN 1389-1286 (print), 1872-

- 7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621002644>.
- [KKKT16] Aggelos Kiayias, Elias Koutsoupas, Maria Kyropoulou, and Yiannis Tselekounis. Blockchain mining games. In *Proceedings of the 2016 ACM Conference on Economics and Computation*, EC '16, pages 365–382. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-3936-0. URL <http://doi.acm.org/10.1145/2940716.2940773>.
- [KKS14] Philip Koshy, Diana Koshy, and Patrick McDaniel. An analysis of anonymity in Bitcoin using P2P network traffic. In Christin and Safavi-Naini [CSN14], pages 469–485. ISBN 3-662-45472-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-45472-5_30.
- [KKM14] Philip Koshy, Diana Koshy, and Patrick McDaniel. An analysis of anonymity in Bitcoin using P2P network traffic. In Christin and Safavi-Naini [CSN14], pages 469–485. ISBN 3-662-45472-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-45472-5_30.
- [KKM19] Murat Yasin Kubilay, Mehmet Sabir Kiraz, and Haci Ali Mantar. CertLedger: a new PKI model with certificate transparency based on blockchain. *Computers & Security*, 85(??):333–352, August 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818313014>.
- [KKS⁺17a] Lyudmila Kovalchuk, Dmytro Kaidalov, Oleksiy Shevtsov, Andrii Nastenkov, Mariia Rodinko, and Roman Oliynykov. Analysis of splitting attacks on Bitcoin and GHOST consensus protocols. In *2017 9th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS)*, volume 2, pages 978–982. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2017. URL <http://ieeexplore.ieee.org/document/8095233/>.

- [KKS⁺17b] **Kwon:2017:DBM** Yujin Kwon, Dohyun Kim, Yunmok Son, Jaeyeong Choi, and Yongdae Kim. Doppelganger in Bitcoin mining pools: An analysis of the duplication share attack. In *Information Security Applications*, pages 124–135. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-56549-4. URL http://link.springer.com/chapter/10.1007/978-3-319-56549-1_11. ■
- [KKS⁺17c] **Kwon:2017:SADb** Yujin Kwon, Dohyun Kim, Yunmok Son, Eugene Vasserman, and Yongdae Kim. Be selfish and avoid dilemmas: Fork after withholding (FAW) attacks on Bitcoin. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security, CCS '17*, pages 195–209. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3. ■
- [KKS⁺17d] **Kwon:2017:SADa** Yujin Kwon, Dohyun Kim, Yunmok Son, Eugene Y. Vasserman, and Yongdae Kim. Be selfish and avoid dilemmas: Fork after withholding (FAW) attacks on bitcoin. *CoRR*, abs/1708.09790(??): ■
- ??, ??? 2017. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1708.09790>; <https://dblp.org/db/journals/corr/corr1708.html#abs-1708-09790>. ■
- Kumar:2022:DID** Randhir Kumar, Prabhat Kumar, Rakesh Tripathi, Govind P. Gupta, Sahil Garg, and Mohamad Mehedi Hassan. A distributed intrusion detection system to detect DDoS attacks in blockchain-enabled IoT network. *Journal of Parallel and Distributed Computing*, 164(??):55–68, June 2022. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731522000351>. ■
- [KLT17] **Kow:2017:ICP** Yong Ming Kow and Caitlin Lustig. Imaginaries and crystallization processes in Bitcoin infrastructuring. *Computer Supported Cooperative Work [CSCW]*, ??(??):555–580, ??? 2017. CODEN CSCWEQ. ISSN 0925-9724 (print), 1573-7551 (electronic). URL <http://link.springer.com/article/10.1007/s10606-017-9300-2>. ■

- [KL18a] **Khalilov:2018:SAP**
 Merve Can Kus Khalilov and Albert Levi. A survey on anonymity and privacy in bitcoin-like digital cash systems. *IEEE Commun. Surv. Tutorials*, 20(3):2543–2585, 2018. CODEN 2018. ISSN 2018. URL <https://dblp.org/db/journals/comsur/comsur20.html#KhalilovL18>; <https://www.wikidata.org/entity/Q111689117>. **[KLL⁺15]**
- [KL18b] **Kow:2018:ICP**
 Yong Ming Kow and Caitlin Lustig. Imaginaries and crystallization processes in bitcoin infrastructuring. *Comput. Support. Cooperative Work.*, 27(2):209–232, 2018. CODEN 2018. ISSN 2018. URL <https://dblp.org/db/journals/cscw/cscw27.html#KowL18>.
- [Kla19] **Klarman:2019:UBN**
 Uri Klarman. *Unchaining the Blockchain Network Layer*. Ph.D., Northwestern University, Evanston, IL, USA, 2019. 127 pp. URL <http://search.proquest.com/pqdtglobal/docview/2205094634>. **[KLM17]**
- [KLDS20] **Kannengiesser:2020:TOB**
 Niclas Kannengiesser, Sebastian Lins, Tobias Dehling, and Ali Sunyaev. Trade-offs between distributed ledger technology characteristics. *ACM Computing Surveys*, 53(2):42:1–42:37, July 2020. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3379463>.
- Kong:2015:PSI**
 Weize Kong, Rui Li, Jie Luo, Aston Zhang, Yi Chang, and James Allan. Predicting search intent based on pre-search context. In *Proceedings of the 38th International ACM SIGIR Conference on Research and Development in Information Retrieval*, SIGIR ’15, pages 503–512. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3621-3.
- Kiffer:2017:SFI**
 Lucianna Kiffer, Dave Levin, and Alan Mislove. Stick a fork in it: Analyzing the Ethereum network partition. In *Proceedings of the 16th ACM Workshop on Hot Topics in Networks*, HotNets-XVI, pages 94–100. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5569-2. URL <http://doi.acm.org/10.1145/3152434.3152449>.

- [KLR⁺17a] Nesrine Kaaniche, Maryline Laurent, Pierre-Olivier Rocher, Christophe Kienert, and Joaquín García-Alfaro. **Kaaniche:2017:MPP** *PCS*, a privacy-preserving certification scheme. In García-Alfaro et al. [GANAHHJ17], pages xiii + 446. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_14. [KLZ⁺21]
- [KLR⁺17b] Nesrine Kaaniche, Maryline Laurent, Pierre-Olivier Rocher, Christophe Kienert, and Joaquín García-Alfaro. **Kaaniche:2017:PPP** *PCS*, a privacy-preserving certification scheme. In Joaquín García-Alfaro, Guillermo Navarro-Arribas, Hannes Hartenstein, and Jordi Herrera-Joancomartí, editors, *European Symposium on Research in Computer Security International Workshop on Data Privacy Management Cryptocurrencies and Blockchain Technology: ESORICS 2017, DPM 2017, CBT 2017: Data Privacy Management, Cryptocurrencies and Blockchain Technology*, Lecture Notes in Computer Science, pages 239–256. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-67816-7. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. [Kim:2021:TER]
- H. M. Kim, M. Laskowski, M. Zargham, H. Turesson, M. Barlin, and D. Kabanov. Token economics in real life: Cryptocurrency and incentives design for Insolar’s blockchain network. *Computer*, 54(1):70–80, 2021. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- Kalampakas:2020:SAB** Argyrios Kalampakas and Georgios C. Makris. Statistical analysis to bitcoin transactions network. *International Journal of Statistics and Probability*, 9(5): 85–??, ????, 2020. CODEN ????. ISSN 1927-7032 (print), 1927-7040 (electronic). URL <http://www.ccsenet.org/journal/index.php/ijsp/article/view/0/43581>.
- Khalid:2021:CBB** Rabiya Khalid, Muhammad Waseem Malik, Turki Ali Alghamdi, and Nadeem Javaid. A consortium blockchain based energy

- trading scheme for electric vehicles in smart cities. *Journal of Information Security and Applications (JISA)*, 63(?): ??, December 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621002064>. [KMOD17]
- Kumaresan:2015:HUB**
- [KMB15] Ranjit Kumaresan, Tal Moran, and Iddo Bentov. How to use Bitcoin to play decentralized poker. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security, CCS '15*, pages 195–206. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1. [KN12]
- Kasem-Madani:2017:TTU**
- [KMMW17] Saffija Kasem-Madani, Michael Meier, and Martin Wehner. Towards a toolkit for utility and privacy-preserving transformation of semi-structured data using data pseudonymization. In Garcia-Alfaro et al. [GANAHHJ17], pages 163–179. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_10. [Koe17]
- Kinai:2017:ABL**
- Andrew Kinai, Isaac Markus, Erick Oduor, and Abdigani Diriye. Asset-based lending via a secure distributed platform. In *Proceedings of the Ninth International Conference on Information Technologies and Development, ICTD '17*, pages 29:1–29:4. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5277-4. URL <http://doi.acm.org/10.1145/3136560.3136594>.
- King:2012:PPP**
- Sunny King and Scott Nadal. PPCoin: Peer-to-peer crypto-currency with proof-of-stake. Web document., August 2012. URL <https://decred.org/research/king2012.pdf>.
- Kraehenbuehl:2022:EMH**
- Mike Kraehenbuehl and Jörg Osterrieder. The efficient market hypothesis for bitcoin in the context of neural networks. *CoRR*, ??(??):??, ??? 2022. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/corr/corr2208.html#abs-2208-07254>.
- Koehler:2017:UBT**
- Thomas Koehler. Use of blockchain technology

in countering cyberattacks. M.S., Utica College, Utica, NY, USA, 2017. 41 pp. URL <http://search.proquest.com/pqdtglobal/docview/1957372076>.

Kondo:2020:CCS

[[KOJ⁺20](#)]

Masanari Kondo, Gustavo A. Oliva, Zhen Ming (Jack) Jiang, Ahmed E. Hassan, and Osamu Mizuno. Code cloning in smart contracts: a case study on verified contracts from the Ethereum blockchain platform. *Empirical Software Engineering*, 25(6):4617–4675, November 2020. CODEN ESENF. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <http://link.springer.com/article/10.1007/s10664-020-09852-5>.

Kolar:2022:PDC

[Kol22]

Martin Kolár. PNPCoin:
Distributed computing on
bitcoin infrastructure. *CoRR*,
abs/2208.12628(??):??, ???
2022. CODEN ??? ISSN
??? URL <https://dblp.org/db/journals/corr/corr2208.html#abs-2208-12628>.

Kadadha:2020:SBB

[[KOM⁺20](#)]

Maha Kadadha, Hadi
Otrok, Rabeb Mizouni,
Shakti Singh, and Anis [Koo18]
Ouali. SenseChain: a
blockchain-based crowd-
sensing framework for mul-

multiple requesters and multiple workers. *Future Generation Computer Systems*, 105 (??):650–664, April 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19312579>.

Kadadha:2022:CBP

Maha Kadadha, Hadi Otrok, Rabeb Mizouni, Shakti Singh, and Anis Ouali. On-chain behavior prediction machine learning model for blockchain-based crowdsourcing. *Future Generation Computer Systems*, 136(??):170–181, November 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22001960>.

Konig:2020:CBS

Lukas König. Comparing blockchain standards and recommendations. *Future Internet*, 12(12):222, December 07, 2020. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/12/222>.

Koops:2018:PCT

David T. Koops. Predicting the confirmation time of bitcoin transactions. *CoRR*, ??(??):??,

- ???? 2018. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1809.10596>; <https://dblp.org/db/journals/corr/corr1809.html#abs-1809-10596>.
- [KOS⁺21] **Kadadha:2021:TSP** Maha Kadadha, Hadi Otrok, Shakti Singh, Rabeb Mizouni, and Anis Ouali. Two-sided preferences task matching mechanisms for blockchain-based crowdsourcing. *Journal of Network and Computer Applications*, 191(??):??, October 1, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521001697>.
- [KPP⁺20] **Kurbucz:2022:LLM** Marcell T. Kurbucz, Péter Pósfay, and Antal Jakovác. Linear laws of Markov chains with an application for anomaly detection in bitcoin prices. *CoRR*, ??(??):??, ???? 2022. CODEN ???? ISSN ???? URL <https://arxiv.org/abs/2201.09790>; <https://dblp.org/db/journals/corr/corr2201.html#abs-2201-09790>.
- [KPK17] **Karvelas:2017:UOR** Nikolaos P. Karvelas, Andreas Peter, and Stefan Katzenbeisser. Using oblivious RAM in genomic studies. In Garcia-Alfaro et al. [GANAHJ17], pages 35–52. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_3.
- [KPS⁺20] **Kapsoulis:2020:CBS** Nikolaos Kapsoulis, Alexandros Psychas, Georgios Palaiokrassas, Achilleas Marinakis, Antonios Litke, Theodora Varvarigou, Charalampos Bouchlis, Amaryllis Raouzaïou, Gonçal Calvo, and Jordi Escudero Subirana. Consortium blockchain smart contracts for musical rights governance in a collective management organizations (CMOs) use case. *Future Internet*, 12(8):134, August 11, 2020. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/8/134>.
- [KPW19] **Knittel:2019:MTC** Megan Knittel, Shelby Pitts, and Rick Wash. “The Most Trustworthy Coin”: How ideological tensions drive trust in Bitcoin. *Proceedings of the ACM on Human-Computer Interaction (PACMHCI)*, 3

- (CSCW):36:1–36:23, November 2019. CODEN ????. ISSN 2573-0142 (electronic). URL <https://dl.acm.org/doi/10.1145/3359138>.
Kraft:2015:DCB
- [Kra15] Daniel Kraft. Difficulty control for blockchain-based consensus systems. *Peer-to-Peer Networking and Applications*, 9(2):397–413, April 2015. ISSN 1936-6442 (print), 1936-6450 (electronic).
Kraft:2016:DCB
- [Kra16a] Daniel Kraft. Difficulty control for blockchain-based consensus systems. *Peer-to-Peer Networking and Applications*, 9(2), 2016. CODEN ????. URL <http://link.springer.com/article/10.1007/s12083-015-0347-x>.
Kraft:2016:GCT
- [Kra16b] Daniel Kraft. Game channels for trustless off-chain interactions in decentralized virtual worlds. *Ledger*, 1(??):84–98, ????. 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/15>.
Kiayias:2017:OPS
- [KRDO17] Aggelos Kiayias, Alexander Russell, Bernardo David, and Roman Oliynkov. Ouroboros: a provably secure proof-of-stake blockchain protocol. In *Advances in cryptology — CRYPTO 2017. 37th annual international cryptology conference, Santa Barbara, CA, USA, August 20–24, 2017. Proceedings. Part I*, pages 357–388. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-63687-1 (paperback), 3-319-63688-X (e-book). URL http://link.springer.com/chapter/10.1007/978-3-319-63688-7_12.
Kriti:2019:BIP
- Fnu Nitya Nitya Kriti. Blockchain inspired product authentication for supply chain security. M.S., Michigan State University, East Lansing, MI 48824, USA, 2019. 114 pp. URL <http://search.proquest.com/pqdtglobal/docview/2315502479>.
Kaur:2021:BBF
- Jasleen Kaur, Rinkle Rani, and Nidhi Kalra. Blockchain-based framework for secured storage, sharing, and querying of electronic healthcare records. *Concurrency and Computation: Practice and Experience*, 33(20):e6369:1–e6369:??, October 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

- [KRL17] **Kazerani:2017:DUB**
Ali Kazerani, Domenic Rosati, and Brian Lesser. Determining the usability of Bitcoin for beginners using change tip and Coinbase. In *Proceedings of the 35th ACM International Conference on the Design of Communication*, SIGDOC '17, pages 5:1–5:5. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5160-3.
- [Kru13] **Krugman:2013:BE**
Paul Krugman. Bitcoin is evil. *New York Times*, ??(??):??, December 28, 2013. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://krugman.blogs.nytimes.com/2013/12/28/bitcoin-is-evil/>.
- [Kru18] **Krugman:2018:BBF**
Paul Krugman. Bubble, bubble, fraud and trouble. *New York Times*, ??(??):??, January 29, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/29/opinion/bitcoin-bubble-fraud.html>.
- [KS18] **Khan:2018:ISR**
Minhaj Ahmad Khan and Khaled Salah. IoT security: Review, blockchain solutions, and open chal-
- [KSA22] **Khan:2022:GCA**
Muhammad Milhan Afzal Khan, Hafiz Muhammad Azeem Sarwar, and Muhammad Awais. Gas consumption analysis of Ethereum blockchain transactions. *Concurrency and Computation: Practice and Experience*, 34(4):e6679:1–e6679:??, February 15, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [KSAB⁺21] **Krol:2021:PPU**
Michał Król, Alberto Sonnino, Mustafa Al-Bassam, Argyrios G. Tasiopoulos, Etienne Rivière, and Ioannis Psaras. Proof-of-prestige: a useful work reward system for unverifiable tasks. *ACM Transactions on Internet Technology (TOIT)*, 21(2):44:1–44:27, June 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3419483>.
- [KSCD16] **Khairuddin:2016:EMB**
Irni Eliana Khairuddin, Co-
- lenges. *Future Generation Computer Systems*, 82(?):395–411, May 2018. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167739X17315765>.

- rina Sas, Sarah Clinch, and Nigel Davies. Exploring motivations for Bitcoin technology usage. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA '16, pages 2872–2878. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4082-2.
- [Ksh17a] Nir Kshetri. Can blockchain strengthen the Internet of Things? *IT Professional*, 19(4):68–72, 2017. CODEN IPMAFM. ISSN 1520-9202 (print), 1941-045X (electronic).
- [Ksh17b] Nir Kshetri. Can blockchain strengthen the Internet of Things? *ComputingEdge*, 3(12):42–46, December 2017. ISSN 2376-113X.
- [Ksh18a] Nir Kshetri. Blockchain and electronic healthcare records [Cybertrust]. *Computer*, 51(12):59–63, December 2018. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://ieeexplore.ieee.org/document/8636458/>.
- [Ksh18b] Nir Kshetri. Cryptocurrencies: Transparency ver-
- [Ksh20] sus privacy [cybertrust]. *Computer*, 51(11):99–111, November 2018. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://www.computer.org/csdl/mags/co/2018/11/08625935.pdf>.
- [Ksh21] N. Kshetri. Blockchain-based financial technologies and cryptocurrencies for low-income people: Technical potential versus practical reality. *Computer*, 53(1):18–29, January 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [Ksh22] Nir Kshetri. The economics of blockchain-based supply chain traceability in developing countries. *Computer*, 54(8):98–103, August 2021. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [KSLC21] Gulshan Kumar, Rahul Saha, Chhagan Lal, and

- Mauro Conti. Internet-of-Forensic (IoF): a blockchain based digital forensics framework for IoT applications. *Future Generation Computer Systems*, 120(??):13–25, July 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21000686>. [KT22]
- Evgenia Kapassa and Marininos Themistocleous. Blockchain technology applied in IoV demand response management: a systematic literature review. *Future Internet*, 14(5):136, April 29, 2022. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/5/136>. **Kapassa:2022:BTA**
- Aggelos Kiayias and Qiang Tang. Traitor deterring schemes: Using Bitcoin as collateral for digital content. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security, CCS '15*, pages 231–242. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1. [KT15]
- Hasan Ali Khattak, Komal Tehreem, Ahmad Al-mogren, Zoobia Ameer, Ikram Ud Din, and Muhammad Adnan. Dynamic pricing in industrial Internet of Things: Blockchain application for energy management in smart cities. *Journal of Information Security and Applications (JISA)*, 55(??):??, December 2020. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620307808>. **Khattak:2020:DPI**
- Hiroki Kuzuno and Giannis Tziakouris. Ad-hoc analytical framework of bitcoin investigations for law enforcement. *IEICE Trans. Inf. Syst.*, 101-D(11):2644–2657, ????. 2018. CODEN ????. ISSN ????. URL http://search.ieice.org/bin/summary.php?id=e101-d_11_2644; <https://dblp.org/db/journals/ieicet/ieicet101d.html#KuzunoT18>. [KT18]
- Evgenia Kapassa, Marininos Themistocleous, Klitos Christodoulou, and Elias Iosif. Blockchain application in Internet of Vehicles: Challenges, contributions and current limitations. *Future Internet*, 13(12):313, December 10, 2021. CODEN ????. ISSN 1999-5903. URL <https://www>. **Kapassa:2021:BAI**
- [KTA⁺20]
- [KTCl21]

- mdpi.com/1999-5903/13/12/313.
- [KTM⁺21] **Kumar:2021:SDD**
 Randhir Kumar, Rakesh Tripathi, Ningrinla Marchang, Gautam Srivastava, Thippa Reddy Gadekallu, and Neal N. Xiong. A secured distributed detection system based on IPFS and blockchain for industrial image and video data security. *Journal of Parallel and Distributed Computing*, 152(??):128–143, June 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000435>.
- [KUE17] **Kianersi:2022:ERM**
 Darius Kianersi, Suraj Upalapati, Anirudh Bansal, and Jeremy Straub. Evaluation of a reputation management technique for autonomous vehicles. *Future Internet*, 14(2):31, 2022. CODEN 2022. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/2/31>.
- [KUE17] **Knirsch:2017:PPB**
 Fabian Knirsch, Andreas Unterweger, and Dominik Engel. Privacy-preserving blockchain-based electric vehicle charging with dynamic tariff decisions. *Computer Science — Research and Development*, ??(?):1–9, September 2017. CODEN 2022. ISSN 1865-2034 (print), 1865-2042 (electronic). URL <http://link.springer.com/article/10.1007/s00450-017-0348-5>.
- [KUE18] **Knirsch:2017:PPS**
 Fabian Knirsch, Andreas Unterweger, Günther Eibl, and Dominik Engel. Privacy-preserving smart grid tariff decisions with blockchain-based smart contracts. In *Sustainable Cloud and Energy Services*, pages 85–116. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., September 2017.
- [KUE18] **Knirsch:2018:PPS**
 Fabian Knirsch, Andreas Unterweger, Günther Eibl, and Dominik Engel. Privacy-preserving smart grid tariff decisions with blockchain-based smart contracts. In *Sustainable Cloud and Energy Services*. Springer-

er-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-62238-5_4.

Kugler:2018:NWC

[Kug18]

Logan Kugler. News: Why cryptocurrencies use so much energy: and what to do about it. *Communications of the ACM*, 61(7):15–17, July 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2018/7/229045/fulltext>.

Kunnapas:2016:BSC

[Kün16]

Kaido Künnapas. From Bitcoin to smart contracts: Legal revolution or evolution from the perspective of de lege ferenda? In *The Future of Law and eTechnologies*, pages 111–131. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-26896-1. URL http://link.springer.com/chapter/10.1007/978-3-319-26896-5_6.

Kuzmanovic:2019:NNUa

[Kuz19a]

Aleksandar Kuzmanovic. Net neutrality: unexpected solution to blockchain scaling. *Communications*

of the ACM, 62(5):50–55, May 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2019/5/236422/fulltext>.

Kuzmanovic:2019:NNUb

Aleksander Kuzmanovic. Net neutrality: Unexpected solution to blockchain scaling. *ACM Queue: Tomorrow's Computing Today*, 17(1):20, January 2019. CODEN AQCUE. ISSN 1542-7730 (print), 1542-7749 (electronic). URL <http://queue.acm.org/detail.cfm?id=3319534>.

Kshetri:2018:BEV

N. Kshetri and J. Voas. Blockchain-enabled e-voting. *IEEE Software*, 35(4):95–99, July/August 2018. CODEN IESOE. ISSN 0740-7459 (print), 1937-4194 (electronic).

Kuhn:2019:TSS

R. Kuhn, J. Voas, and P. Laplante. Taking score on the success of blockchain, so far. *Computer*, 52(9):24–34, September 2019. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

[Kuz19b]

[KV18]

[KVL19]

- [KVP21] **Koens:2021:BAD** Tommy Koens, Pol Van Aubel, and Erik Poll. Blockchain adoption drivers: The rationality of irrational choices. *Concurrency and Computation: Practice and Experience*, 33(8):e5843:1–e5843:??, April 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [KXSS21] **Kumaresan:2016:ISC** Ranjit Kumaresan, Vinod Vaikuntanathan, and Prashant Nalini Vasudevan. Improvements to secure computation with penalties. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, CCS '16, pages 406–417. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2978421>.
- [KYLA22] **Kim:2020:NCS** Yonggun Kim and Yoo-jae Won. A new cost-saving and efficient method for patch management using blockchain. *The Journal of Supercomputing*, 76(7):5301–5319, July 2020. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic).
- [Kwo14] **Kwon:2014:TCM** Jae Kwon. TenderMint: Consensus without mining. Technical report, Cornell University, Ithaca, NY, USA, August 2014. 11 pp. URL <https://tendermint.com/static/docs/tendermint.pdf>.
- [KXSS21] **Kim:2021:SFF** H.-Y. Kim, L. Xu, W. Shi, and T. Suh. A secure and flexible FPGA-based blockchain system for the IIoT. *Computer*, 54(2):50–59, 2021. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [KYLA22] **Kim:2022:TCM** Hyeonoh Kim, Eojin Yi, Daeyong Lee, and Kwangwon Ahn. Technological change and market conditions: Evidence from bitcoin fork. *Complex.*, 2022(??):2617752:1–2617752:7, 2022. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/complexity/complexity2022.html#KimYLA22>.
- [KYV19] **Kuhn:2019:RDL** Rick Kuhn, Dylan Yaga, and Jeffrey Voas. Rethinking distributed ledger technology. *Computer*, 52(2):68–72, February 2019. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://ieeexplore.ieee.org/document/8672407/>.

- [KZVT17] Moein Khazraee, Lu Zhang, Luis Vega, and Michael Bedford Taylor. Moonwalk: NRE optimization in ASIC clouds. *ACM SIGARCH Computer Architecture News*, 45(1):511–526, April 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). [Lam01]
- [LABK17] Wenting Li, Sébastien Andreina, Jens-Matthias Bohli, and Ghassan Karame. Securing proof-of-stake blockchain protocols. In Garcia-Alfaro et al. [GANAHHJ17], pages 297–315. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_17. [Las17]
- [Lam89] Leslie Lamport. The part-time parliament. Report SRC-RR 49, Digital Equipment Corporation, Maynard, MA, USA, 1989. URL https://computerarchive.org/files/mirror/www.bitsavers.org/pdf/dec/tech_reports/SRC-RR-49.pdf. [Lau11a]
- [Lamport:2001:PMS] Leslie Lamport. Paxos made simple. Web document., 2001. URL <http://lamport.azurewebsites.net/pubs/paxos-simple.pdf>.
- [Larimer:2013:MMH] Daniel Larimer. Momentum — a memory-hard proof-of-work via finding birthday collisions. Report, Invictus Innovations, Inc., Blacksburg, VA, USA, October 2013. 6 pp. URL <http://www.hashcash.org/papers/momentum.pdf>.
- [Laskowski:2017:BEP] Marek Laskowski. A blockchain-enabled participatory decision support framework. In *Social, Cultural, and Behavioral Modeling*, pages 329–334. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-60240-0_40.
- [Laurie:2011:DCP] Ben Laurie. Decentralised currencies are probably impossible (but let’s at least make them efficient). Web blog., July 2, 2011. URL <http://www.links.org/?p=1179>.
- [Khazraee:2017:MNO] Moein Khazraee, Lu Zhang, Luis Vega, and Michael Bedford Taylor. Moonwalk: NRE optimization in ASIC clouds. *ACM SIGARCH Computer Architecture News*, 45(1):511–526, April 2017. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). [Lar13]
- [Li:2017:SPS] Wenting Li, Sébastien Andreina, Jens-Matthias Bohli, and Ghassan Karame. Securing proof-of-stake blockchain protocols. In Garcia-Alfaro et al. [GANAHHJ17], pages 297–315. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_17. [Las17]
- [Lampert:1989:PTP] Leslie Lamport. The part-time parliament. Report SRC-RR 49, Digital Equipment Corporation, Maynard, MA, USA, 1989. URL https://computerarchive.org/files/mirror/www.bitsavers.org/pdf/dec/tech_reports/SRC-RR-49.pdf. [Lau11a]

- [Lau11b] Ben Laurie. An efficient distributed currency. Web document., July 23, 2011. URL <http://www.links.org/files/distributed-currency.pdf>. **Laurie:2011:EDC**
- [Lau17] Tiana Laurence. *Blockchain: For dummies*; Learning made easy. John Wiley, New York, NY, USA, 2017. ISBN 1-119-36559-7 (paperback), 1-119-36561-9 ebook, 1-119-36560-0 ebook. xii + 214 pp. LCCN HG1710 .L38 2017. **Laurence:2017:B**
- [Laz15] M. Lazarus. Radar everywhere. *IEEE Spectrum*, 52 (2):52–59, February 2015. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic). **Lazarus:2015:RE**
- [LB18] Salim Lahmiri and Stelios Bekiros. Chaos, randomness and multifractality in Bitcoin market. *Chaos, Solitons & Fractals*, 106(??):28–34, January 2018. CODEN CS-FOEH. ISSN 0960-0779 (print), 1873-2887 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0960077917304605>. **Lahmiri:2018:CRM**
- [LBS⁺15] Yoad Lewenberg, Yoram Bachrach, Yonatan Sompolinsky, Aviv Zohar, and Jeffrey S. Rosenschein. Bitcoin mining pools: A cooperative game theoretic analysis. In *Proceedings of the 2015 International Conference on Autonomous Agents and Multiagent Systems*, AAMAS '15, pages 919–927. International Foundation for Autonomous Agents and Multiagent Systems, Richland, SC, 2015. ISBN 1-4503-3413-X. URL <http://dl.acm.org/citation.cfm?id=2772879.2773270>. **Lewenberg:2015:BMP**
- [LC04] Ben Laurie and Richard Clayton. “Proof-of-work” proves not to work. In ????, editor, *WEIS, 2004*, page ?? ????, ????, 2004. URL <http://www.hashcash.org/papers/proof-work.pdf>; <https://www.cl.cam.ac.uk/~rnc1/proofwork.pdf>. **Laurie:2004:PWP**
- [LCB⁺20] Ao Lei, Yue Cao, Shihan Bao, Dasen Li, Philip Asuquo, Haitham Cruickshank, and Zhili Sun. A blockchain based certificate revocation scheme for vehicular communication systems. *Future Generation Computer Systems*, **Lei:2020:BBC**

- 110(?):892–903, September 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X1831522X>■
- [LCL17] Junfeng Liao, Xu Chen, and Shuhua Li. The exploration of the path of super-sovereign currency. In *Proceedings of the 2017 International Conference on Management Engineering, Software Engineering and Service Sciences, ICMSS '17*, pages 311–315. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4834-3.
- [LCL⁺22] Jung-San Lee, Chit-Jie Chew, Jo-Yun Liu, Ying-Chin Chen, and Kuo-Yu Tsai. Medical blockchain: Data sharing and privacy preserving of EHR based on smart contract. *Journal of Information Security and Applications (JISA)*, 65(?):??, March 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622000102>■
- [LCO⁺16] Loi Luu, Duc-Hiep Chu, Hrishi Olickel, Prateek Saxena, and Aquinas Hobor. Making smart contracts smarter. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS '16*, pages 254–269. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2978309>.
- [LCSR21] Hilmi Lazrag, Abdellah Chehri, Rachid Saadane, and Moulay Driss Rahmani. Efficient and secure routing protocol based on blockchain approach for wireless sensor networks. *Concurrency and Computation: Practice and Experience*, 33(22):e6144:1–e6144:??, November 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [LCZL21] Guangsong Li, Wei Chen, Bin Zhang, and Siqi Lu. A fine-grained anonymous handover authentication protocol based on consortium blockchain for wireless networks. *Journal of Parallel and Distributed Computing*, 157(?):157–167, November 2021. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521001362>■

- [LD17] **Leung:2017:UBO**
Daniel Leung and Astrid Dickinger. Use of Bitcoin in online travel product shopping: The European perspective. In *Information and Communication Technologies in Tourism 2017*, pages 741–754. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-51168-8. URL http://link.springer.com/chapter/10.1007/978-3-319-51168-9_53. [LDM⁺21]
- [LDH17] **Lundbaek:2017:CGB**
Leif-Nissen Lundbæk, Andrea Callia D’Iddio, and Michael Huth. Centrally governed blockchains: Optimizing security, cost, and availability. In *Models, Algorithms, Logics and Tools*, Lecture Notes in Computer Science, pages 578–599. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-63121-9_29. [LDWS17]
- [LDLS22] **Li:2022:SDB**
Guozhi Li, Yifan Dong, Jirui Li, and Xuekun Song. Strategy for dynamic blockchain construction and transmission in novel edge computing net- [LDY⁺22]
- works. *Future Generation Computer Systems*, 130(?): 19–32, May 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21004866>. [Lisi:2021:RRT]
- Andrea Lisi, Andrea De Salve, Paolo Mori, Laura Ricci, and Samuel Fabrizi. Rewarding reviews with tokens: an Ethereum-based approach. *Future Generation Computer Systems*, 120(?):36–54, July 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21000480>. [Laszka:2017:PPS]
- Aron Laszka, Abhishek Dubey, Michael Walker, and Doug Schmidt. Providing privacy, safety, and security in IoT-based transactive energy systems using distributed ledgers. In *Proceedings of the Seventh International Conference on the Internet of Things*, IoT ’17, pages 13:1–13:8. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5318-5. URL <http://doi.acm.org/10.1145/3131542.3131562>. [Liu:2022:BBS]
- Gao Liu, Huidong Dong,

Zheng Yan, Xiaokang Zhou, and Shohei Shimizu. B4SDC: a blockchain system for security data collection in MANETs. *IEEE Transactions on Big Data*, 8(3): 739–752, June 2022. ISSN 2332-7790.

Lee:2013:MGB

[Lee13]

Timothy B. Lee. Major glitch in Bitcoin network sparks sell-off: price temporarily falls 23%: It hit a low of \$37 as developers scrambled to fix the problem. *Ars Technica* blog., March 11, 2013. URL <https://arstechnica.com/information-technology/2013/03/major-glitch-in-bitcoin-network-sparks-sell-off-price-temporarily-falls-23/>.

[Leo20]

Lee:2015:HDC

[Lee15]

David (David Kuo Chen) Lee, editor. *Handbook of digital currency: Bitcoin, innovation, financial instruments, and big data*. Elsevier/ AP, Amsterdam, The Netherlands, 2015. ISBN 0-12-802117-9. xxiv + 588 pp. LCCN HG1710 .H32 2015.

[Ler13]

Leinonen:2016:DBC

[Lei16]

Harry Leinonen. Decentralised blockchained and centralised real-time payment ledgers: Development trends and basic requirements. In *Trans-*

forming Payment Systems in Europe, pages 236–261. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1057/9781137541215_8.

Leong:2020:SSB

Lambert T. Leong. Snapshot samplings of the bitcoin transaction network and analysis of cryptocurrency growth. *CoRR*, abs/2003.06068(??):??, ??? 2020. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2003.06068>; <https://dblp.org/db/journals/corr/corr2003.html#abs-2003-06068>.

Lerner:2013:SMH

Sergio Demian Lerner. Strict memory hard hashing functions. Web blog., December 31, 2013. URL <http://bitslog.wordpress.com/2013/12/31/strict-memory-hard-hash-functions/>; <http://www.hashcash.org/papers/memohash.pdf>.

Lerner:2014:EFB

Sergio Damian Lerner. Even faster block-chains with the DECOR protocol. Web blog., May 2, 2014. URL <https://bitslog>.

[Ler14a]

- wordpress.com/2014/05/02/decor/.
- [Ler14b] Sergio Damian Lerner. The Private Automatic Miner Backbone Protocol (PAMBA). Web blog., April 19, 2014. URL <https://bitslog.wordpress.com/2014/04/19/the-private-automatic-miner-backbone-protocol-pamba/>. [LFX⁺20]
- [Lev17] K. E. C. Levy. Book-smart, not street-smart: blockchain-based smart contracts and the social workings of law. *Engaging Science, Technology, and Society*, 3(??):1–15, ????. 2017. ISSN 2413-8053. URL <http://estsjournal.org/article/view/107>. [LFZ⁺21]
- [Lew15] Mervyn K. Lewis. *Understanding Ponzi schemes: can better financial regulation prevent investors from being defrauded?* New horizons in money and finance. Edward Elgar publishing, Cheltenham, UK, 2015. ISBN 1-78254-909-9. ix + 190 pp. LCCN ????. [LGCY22]
- [LF16] Matthias Lischke and Benjamin Fabian. Analyzing the Bitcoin network: The first four years. *Future Internet*, 8(1):7, March 07, 2016. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/8/1/7>.
- Ya-Nan Li, Xiaotao Feng, Jan Xie, Hanwen Feng, Zhenyu Guan, and Qianhong Wu. A decentralized and secure blockchain platform for open fair data trading. *Concurrency and Computation: Practice and Experience*, 32(7):e5578:1–e5578:??, April 10, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- W. Li, C. Feng, L. Zhang, H. Xu, B. Cao, and M. A. Imran. A scalable multi-layer PBFT consensus for blockchain. *IEEE Transactions on Parallel and Distributed Systems*, 32(5):1146–1160, 2021. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).
- Chia-Hung Liao, Xue-Qin Guan, Jen-Hao Cheng, and Shyan-Ming Yuan. Blockchain-based identity management and access control framework for open banking ecosystem. *Future*

- Generation Computer Systems*, 135(??):450–466, October 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22001868>. [LGL⁺22]
- Loukil:2021:DPB**
- [LGGB⁺21] Faiza Loukil, Chirine Ghedira-Guegan, Khouloud Boukadi, Aïcha-Nabila Benharkat, and Elhadj Benkhelifa. Data privacy based on IoT device behavior control using blockchain. *ACM Transactions on Internet Technology (TOIT)*, 21(1):23:1–23:20, February 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3434776>. [LGTS20]
- Lohachab:2022:TIB**
- [LGK⁺22] Ankur Lohachab, Saurabh Garg, Byeong Kang, Muhammad Bilal Amin, Junmin Lee, Shiping Chen, and Xiwei Xu. Towards interconnected blockchains: a comprehensive review of the role of interoperability among disparate blockchains. *ACM Computing Surveys*, 54(7):135:1–135:39, September 2022. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3460287>. [LHH⁺18]
- Li:2022:SLM**
- Xuejun Li, Lina Gong, Xiao Liu, Frank Jiang, Wenyu Shi, Lingmin Fan, Han Gao, Rui Li, and Jia Xu. Solving the last mile problem in logistics: a mobile edge computing and blockchain-based unmanned aerial vehicle delivery system. *Concurrency and Computation: Practice and Experience*, 34(7):e6068:1–e6068:??, March 25, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- Lagouvardos:2020:PSM**
- Sifis Lagouvardos, Neville Grech, Ilias Tsatiris, and Yannis Smaragdakis. Precise static modeling of Ethereum “memory”. *Proceedings of the ACM on Programming Languages (PACMPL)*, 4(OOPSLA):190:1–190:26, November 2020. URL <https://dl.acm.org/doi/10.1145/3428258>. [LHH⁺18]
- Lin:2018:BBB**
- Chao Lin, Debiao He, Xinyi Huang, Kim-Kwang Raymond Choo, and Athanasios V. Vasilakos. BSeIn: a blockchain-based secure mutual authentication with fine-grained access control system for industry 4.0. *Journal of Network and Computer Applications*, 116(??):42–52, Au-

- gust 15, 2018. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804518301619>.
Li:2020:IDL
- [LHL20] Defeng Li, Yuan Hu, and Mingming Lan. IoT device location information storage system based on blockchain. *Future Generation Computer Systems*, 109(??):95–102, August 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X20300169>.
Liu:2021:BAB
- [LHL21] Han Liu, Dezhi Han, and Dun Li. Behavior analysis and blockchain based trust management in VANETs. *Journal of Parallel and Distributed Computing*, 151(??):61–69, May 2021. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000320>.
Liu:2020:BBI
- [LHO⁺20] Yang Liu, Debiao He, Mohammad S. Obaidat, Neeraj Kumar, Muhammad Khuram Khan, and Kim-Kwang Raymond Choo. Blockchain-based identity management systems: a review. *Journal of Network and Computer Applications*, 166(??):??, September 15, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520302058>.
Lehner:2017:FSS
- [LHZ17] Edward Lehner, Dylan Hunzeker, and John R. Ziegler. Funding science with science: Cryptocurrency and independent academic research funding. *Ledger*, 2(??):65–76, ??? 2017. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/108>.
Lin:2021:BBB
- [LHZ⁺21] Chao Lin, Debiao He, Sherali Zeadally, Xinyi Huang, and Zhe Liu. Blockchain-based data sharing system for sensing-as-a-service in smart cities. *ACM Transactions on Internet Technology (TOIT)*, 21(2):40:1–40:21, June 2021. CODEN ??? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3397202>.
Li:2014:TDC
- [Li14a] Jianfu Li. *The Tessera D&R computational envi-*

- ronment: *Designed experiments for R-Hadoop performance and Bitcoin analysis*. PhD thesis, Purdue University, West Lafayette, IN, USA, December 2014. 139 pp. URL <https://search.proquest.com/docview/1673895283>. Thesis (Ph.D.)—Purdue University. [Lin17]
- [Li14b] Jianfu Li. *The Tessera D&R computational environment: Designed experiments for R-Hadoop performance and Bitcoin analysis*. Ph.D., Purdue University, West Lafayette, IN, USA, 2014. 139 pp. URL <http://search.proquest.com/pqdtglobal/docview/1673895283>. [Li:2014:TDR]
- [Lim18] Claudio Lima. Developing open and interoperable DLT/blockchain standards [standards]. *Computer*, 51(11):106–111, November 2018. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://www.computer.org/csdl/mags/co/2018/11/08625908>. [Liu16]
- [Lin15] Joseph Lindley. Crypto heater: A design fiction. In *Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition*, C & C '15, pages 355–356. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3598-5. [Lindell:2017:FST]
- Yehuda Lindell. Fast secure two-party ECDSA signing. In *Advances in cryptology — CRYPTO 2017. 37th annual international cryptology conference, Santa Barbara, CA, USA, August 20–24, 2017. Proceedings. Part II*, pages 613–644. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-63714-2 (paperback), 3-319-63715-0 (e-book).
- [Lin:2021:ETB] Jhan-Jia Lin. The effect of thickness-based dynamic matching mechanism on a hyperledger fabric-based TimeBank system. *Future Internet*, 13(3):65, March 06, 2021. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/3/65>.
- [Liu:2016:MRS] Paul Tak Shing Liu. Medical record system using blockchain, big data and tokenization. In *Information and Communications Security*, pages 254–261. Springer-Verlag, Berlin, Germany / Heidelberg, Ger-

- many / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-50011-9_20.
- [Liu18] Jin Liu. Business models based on IoT, AI and blockchain. Master's, Uppsala Universitet, Uppsala, Sweden, 2018. URL <http://search.proquest.com/pqdtglobal/docview/2116891841>. **Liu:2018:BMB**
- [Liu19] Yingzheng Liu. Public and shared warehouse management — a blockchain approach. M.S., State University of New York at Binghamton, Binghamton, NY, USA, 2019. 52 pp. URL <http://search.proquest.com/pqdtglobal/docview/2272720369>. **Liu:2019:PSW**
- [Liv20] Benjamin Livshits. Analyzing smart contracts with MadMax: technical perspective. *Communications of the ACM*, 63(10):86, September 2020. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/10.1145/3416259>. **Livshits:2020:ASC** [LK17]
- [LJC⁺20] Xiaoqi Li, Peng Jiang, Ting Chen, Xiapu Luo, and Qiaoyan Wen. A survey on the security of blockchain systems. *Future Generation Computer Systems*, 107(?): 841–853, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17318332>. **Laszka:2015:WBM**
- [LJG15] Aron Laszka, Benjamin Johnson, and Jens Grossklags. When Bitcoin mining pools run dry: A game-theoretic analysis of the long-term impact of attacks between mining pools. In Brenner et al. [BCJR15], pages 63–77. ISBN 3-662-48051-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_5. **Liao:2017:IBF**
- [LKB⁺17] Kevin Liao and Jonathan Katz. Incentivizing blockchain forks via whale transactions. In Jakobsson et al. [JRB⁺17], pages 264–279. ISBN 3-319-70277-7 (print), 3-319-70278-5 (e-book). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_17. **Lim:2014:ACS**
- [LKL⁺14] Il-Kwon Lim, Young-Hyuk Kim, Jae-Gwang Lee, Jae-Pil Lee, Hyun Nam-Gung, and Jae-Kwang Lee. The

- analysis and countermeasures on security breach of Bitcoin. In *Computational Science and Its Applications ICCSA 2014*, pages 720–732. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-09147-6. URL http://link.springer.com/chapter/10.1007/978-3-319-09147-1_52. [LL17a]
- [LKP⁺21] Wilton Jaciel Loch, Guilherme Piêgas Koslovski, Maurício Aronne Pillon, Charles Christian Miers, and Marcelo Pasin. A novel blockchain protocol for selecting microservices providers and auditing contracts. *The Journal of Systems and Software*, 180(??): ??, October 2021. CODEN JSSODM. ISSN 0164-1212 (print), 1873-1228 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0164121221001278>. [LL17b]
- [LL16] Boohyung Lee and Jong-Hyouk Lee. Blockchain-based secure firmware update for embedded devices in an Internet of Things environment. *The Journal of Supercomputing*, 73(3):1152–1167, September 2016. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <http://link.springer.com/article/10.1007/s11227-016-1870-0>. [Lee:2016:BBS]
- [LL17c] Boohyung Lee and Jong-Hyouk Lee. Blockchain-based secure firmware update for embedded devices in an Internet of Things environment. *The Journal of Supercomputing*, 73(3):1152–1167, March 2017. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <http://link.springer.com/article/10.1007/s11227-016-1870-0>. [Lee:2017:BBS]
- [Li:2017:DPB] Zhizhou Li and Ten H. Lai. δ -privacy: Bounding privacy leaks in privacy preserving data mining. In Garcia-Alfaro et al. [GANAHHJ17], pages xiii + 446. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_8. [Li:2017:PBP]
- [Li:2017:PBP] Zhizhou Li and Ten H. Lai. δ -privacy: Bounding privacy leaks in privacy preserving data mining. In Garcia-Alfaro et al. [GANAHHJ17], pages

124–142. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL <http://link.springer.com/10.1007/978-3-319-67816-0>.

Lambrecht:2018:AVG

[LL18]

Maxime Lambrecht and Louis Larue. After the (virtual) gold rush: is bitcoin more than a speculative bubble? *Internet Policy Rev.*, 7(4):??, ??? 2018. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/intpolrev/intpolrev7.html#LambrechtL18>.

Li:2020:TCA

[LLC⁺20]

Lun Li, Jiqiang Liu, Xiaolin Chang, Tianhao Liu, and Jingxian Liu. Toward conditionally anonymous bitcoin transactions: a lightweight-script approach. *Inf. Sci.*, 509(??):290–303, ??? 2020. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/isci/isci509.html#LiLCLL20>.

Lekssays:2021:PBB

[LLCF21]

Ahmed Lekssays, Luca Landa, Barbara Carminati, and Elena Ferrari. PAutoBotCatcher: a blockchain-based privacy-preserving botnet detector for Internet

of Things. *Computer Networks (Amsterdam, Netherlands: 1999)*, 200(??):??, December 9, 2021. CODEN ??? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S138912862100445X>.

Li:2021:LBB

[LLCH21]

Meng Li, Chhagan Lal, Mauro Conti, and Donghui Hu. LEChain: a blockchain-based lawful evidence management scheme for digital forensics. *Future Generation Computer Systems*, 115(??):406–420, February 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X1933167X>.

Lao:2020:SIA

[LLH⁺20]

Laphou Lao, Zecheng Li, Songlin Hou, Bin Xiao, Songtao Guo, and Yuanyuan Yang. A survey of IoT applications in blockchain systems: Architecture, consensus, and traffic modeling. *ACM Computing Surveys*, 53(1):18:1–18:32, May 2020. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3372136>.

- [LLH21] **Lee:2021:BBM** Tian-Fu Lee, Hong-Ze Li, and Yi-Pei Hsieh. A blockchain-based medical data preservation scheme for telecare medical information systems. *International Journal of Information Security*, 20(4): 589–601, August 2021. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-020-00521-8>. [LLL⁺21a]
- [LLHW20] **Lee:2020:TBS** Yu-Tse Lee, Jhan-Jia Lin, Jane Yung-Jen Hsu, and Ja-Ling Wu. A time bank system design on the basis of hyperledger fabric blockchain. *Future Internet*, 12(5):84, May 08, 2020. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/5/84>. [LLL⁺21b]
- [LLJ21] **Li:2021:SES** Li Li, Jiayong Liu, and Peng Jia. SecTEP: Enabling secure tender evaluation with sealed prices and quality evaluation in procurement bidding systems over blockchain. *Computers & Security*, 103(?):Article 102188, April 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404821000122>. [LLL⁺21c]
- Liu:2021:BTsSa** Fengrui Liu, Yang Li, Baitong Li, Jiaxin Li, and Huiyang Xie. Bitcoin transaction strategy construction based on deep reinforcement learning. *Appl. Soft Comput.*, 113(Part):107952, ???? 2021. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/asc/asc113.html#LiuLLX21>.
- Liu:2021:BTsB** Fengrui Liu, Yang Li, Baitong Li, Jiaxin Li, and Huiyang Xie. Bitcoin transaction strategy construction based on deep reinforcement learning. *CoRR*, ??(?):??, ???? 2021. CODEN ???? ISSN ???? URL <https://arxiv.org/abs/2109.14789>; <https://dblp.org/db/journals/corr/corr2109.html#abs-2109-14789>.
- Liu:2021:PLP** Yuan Liu, Yixiao Lan, Boyang Li, Chunyan Miao, and Zhihong Tian. Proof of learning (PoLe): Empowering neural network training with consensus building on blockchains. *Computer Networks (Amsterdam, Netherlands: 1999)*, 201(?):??, December 24, 2021. CODEN ???? ISSN 1389-1286

- (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004965> ■
- Lafourcade:2020:ABI**
- [LLP20a] Pascal Lafourcade and Marius Lombard-Platet. About blockchain interoperability. *Information Processing Letters*, 161(??): Article 105976, September 2020. CODEN IFPLAT. ISSN 0020-0190 (print), 1872-6119 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0020019020300636> ■
- Liu:2020:DPS**
- [LLP⁺20b] Yue Liu, Qinghua Lu, Hye-Young Paik, Xiwei Xu, Shiping Chen, and Liming Zhu. Design pattern as a service for blockchain-based self-sovereign identity. *IEEE Software*, 37(5): 30–36, September/October 2020. CODEN IESOEG. ISSN 0740-7459 (print), 1937-4194 (electronic).
- Li:2017:DAP**
- [LLW17] Shuai Li, Meilin Liu, and Songjie Wei. A distributed authentication protocol using identity-based encryption and blockchain for LEO network. In *Security, Privacy, and Anonymity in Computation, Communication, and Storage*, pages 446–460. Springer-er-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-72389-1_36.
- Li:2021:DES**
- [LLWH21] Kejun Li, Yunan Liu, Hong Wan, and Yining Huang. A discrete-event simulation model for the bitcoin blockchain network with strategic miners and mining pool managers. *Computers and Operations Research*, 134(??):105365, ??? 2021. CODEN CMORAP. ISSN ??? URL <https://dblp.org/db/journals/cor/cor134.html#LiLWH21> ■
- Liu:2019:EPP**
- [LLYL19] Zhenhua Liu, Yuanyuan Li, Dong Yuan, and Yao-hui Liu. Effective privacy preservation and fast signature verification in bitcoin transaction. *Int. J. Netw. Secur.*, 21(5):741–750, ??? 2019. CODEN ??? ISSN ??? URL <http://ijns.jalaxy.com.tw/contents/ijns-v21-n5/ijns-2019-v21-n5-p741-750.pdf>; <https://dblp.org/db/journals/ijnsec/ijnsec21.html#LiuLYL19> ■
- Liu:2017:ESE**
- [LLZ⁺17] Yi Liu, Xingtong Liu, Lei Zhang, Chaojing Tang, and

- Hongyan Kang. An efficient strategy to eliminate malleability of Bitcoin transaction. In IEEE, editor, *2017 4th International Conference on Systems and Informatics (ICSAI), 11–13 November 2017, Hangzhou, China*, pages 960–964. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, November 2017. [LMC18]
- Yizhong Liu, Jianwei Liu, Zongyang Zhang, and Hui Yu. A fair selection protocol for committee-based permissionless blockchains. *Computers & Security*, 91(??):Article 101718, April 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820300055>. [LLZY20] [LMH16]
- Han Lee and Maode Ma. Blockchain-based mobility management for 5G. *Future Generation Computer Systems*, 110(??):638–646, September 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19306843>. [LM20] [LML⁺19]
- Walter Leal Filho, Robert W. Marans, and John Callewaert, editors. *Handbook of sustainability and social science research*. World sustainability series. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. ISBN 3-319-67121-9 (print), 3-319-67122-7 (e-book). ISSN 2199-7373. LCCN HC79.E5. URL <http://link.springer.com/10.1007/978-3-319-67122-2>. LealFilho:2018:HSS
- Benjamin Leiding, Parisa Memarmoshrefi, and Dieter Hogrefe. Self-managed and blockchain-based vehicular ad-hoc networks. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct, UbiComp '16*, pages 137–140. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4462-3. URL <http://doi.acm.org/10.1145/2968219.2971409>. Leiding:2016:SMB
- Xiaolong Liu, Khan Muhammad, Jaime Lloret, Yu-Wen Chen, and Shyan-Ming Yuan. Elastic and cost-effective data carrier architecture for smart contract in blockchain. *Fu-* Liu:2019:ECE

- ture Generation Computer Systems*, 100(??):590–599, November 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18328334>
- [LMLA17] **Lajoie-Mazenc:2017:HBC**
Thibaut Lajoie-Mazenc, Romaric Ludinard, and Emmanuelle Anceaume. Handling Bitcoin conflicts through a glimpse of structure. In *Proceedings of the Symposium on Applied Computing*, SAC '17, pages 444–449. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4486-0. URL <http://doi.acm.org/10.1145/3019612.3019657>.
- [LMR17] **Lewis:2017:BFM**
Rebecca Lewis, John McPartland, and Rajeev Rangan. Blockchain and financial market innovation. *Economic Perspectives*, 7(??): 1–13, ??? 2017. ISSN 0164-0682. URL [https://www.chicagofed.org/~media/publications/economic-perspectives/2017/ep2017-7-pdf.pdf](https://www.chicagofed.org~/media/publications/economic-perspectives/2017/ep2017-7-pdf.pdf).
- [LMWL17] **Lee:2017:FVE**
Boohyung Lee, Sehrish Malik, Sarang Wi, and Jong-Hyouk Lee. Firmware verification of embedded devices based on a blockchain. In *Quality, Reliability, Security and Robustness in Heterogeneous Networks*, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, pages 52–61. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL link.springer.com/chapter/10.1007/978-3-319-60717-1_7_6.
- [LN15] **Lustig:2015:AAC**
C. Lustig and B. Nardi. Algorithmic authority: The case of Bitcoin. In *2015 48th Hawaii International Conference on System Sciences*, pages 743–752. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, January 2015. ISSN 1530-1605.
- [LN17] **Leiding:2017:MRS**
Benjamin Leiding and Alex Norta. Mapping requirements specifications into a formalized blockchain-enabled authentication protocol for secured personal identity assurance. In *Future Data and Security Engineering*, pages 181–196. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL

- http://link.springer.com/chapter/10.1007/978-3-319-70004-5_13.
Luu:2016:SSP
- [LNZ⁺16] Loi Luu, Viswesh Narayanan, Chaodong Zheng, Kunal Baweja, Seth Gilbert, and Prateek Saxena. A secure sharding protocol for open blockchains. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, CCS '16, pages 17–30. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2978389>. [LP18b]
- Linnhoff-Popien:2017:B**
- [LP17a] Claudia Linnhoff-Popien. 1. Blockchain. *Digitale Welt*, 2(1):24–25, December 2017. ISSN 2510-3008.
- Linnhoff-Popien:2017:BNB**
- [LP17b] Claudia Linnhoff-Popien. Blockchain — the next big thing? *Digitale Welt*, 2(1):7, December 2017. ISSN 2510-3008.
- Linnhoff-Popien:2017:BTN**
- [LP17c] Claudia Linnhoff-Popien. Blockchain — the next big thing? *Digitale Welt*, 2(1):7, December 2017. ISSN 2510-3008.
- Linnhoff-Popien:2018:B**
- [LP18a] Claudia Linnhoff-Popien. 1. blockchain. *Digitale Welt*, 2(1):24–25, 2018. CO-DEN ???? ISSN 2510-3008. URL <http://link.springer.com/article/10.1007/s42354-018-0007-4>. [LP18d]
- Linnhoff-Popien:2018:BNB**
- Claudia Linnhoff-Popien. Blockchain — the next big thing? *Digitale Welt*, 2(1), 2018. CO-DEN ???? ISSN 2510-3008. URL <http://link.springer.com/article/10.1007/s42354-018-0001-x>.
- Lipton:2018:BB**
- Alexander Lipton and Alex ‘Sandy’ Pentland. Breaking the bank: New financial networks could stop the concentration of wealth and increased participation in the economy — but only if used with care. *Scientific American*, 318(1):26–31, January 2018. CO-DEN SCAMAC. ISSN 0036-8733 (print), 1946-7087 (electronic). URL <http://www.nature.com/scientificamerican/journal/v318/n1/full/scientificamerican0118-26.html>; <http://www.nature.com/scientificamerican/journal/v318/n1/pdf/scientificamerican0118-26.pdf>.
- Lipton:2018:BBN**
- Alexander Lipton and Alex ‘Sandy’ Pentland.

- Breaking the bank: New financial networks could stop the concentration of wealth and increased participation in the economy — but only if used with care. *Scientific American*, 318(1):26–31, January 2018. CODEN SCAMAC. ISSN 0036-8733 (print), 1946-7087 (electronic). URL <http://www.nature.com/scientificamerican/journal/v318/n1/full/scientificamerican0118-26.html>; <http://www.nature.com/scientificamerican/journal/v318/n1/pdf/scientificamerican0118-26.pdf>. [LPS⁺20a]
- Xabier Larrucea and Cesare Pautasso. Blockchain and smart contract engineering. *IEEE Software*, 37(5):23–29, September/October 2020. CODEN IESOE. ISSN 0740-7459 (print), 1937-4194 (electronic). [LP20]
- Orlenys López-Pintado, Luciano García-Bañuelos, Marlon Dumas, Ingo Weber, and Alexander Ponomarev. Caterpillar: a business process execution engine on the Ethereum blockchain. *Software—Practice and Experience*, 49(7):1162–1193, July 2019. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic). [LPGBD⁺19]
- Jian-Hong Lin, Kevin Primicerio, Tiziano Squartini, Christian Decker, and Claudio J. Tessone. Lightning network: a second path towards centralisation of the bitcoin economy. *CoRR*, ??(??):??, ??? 2020. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2002.02819>; <https://dblp.org/db/journals/corr/corr2002.html#abs-2002-02819>. [Lin:2020:LNS]
- Riccardo Longo, Alessandro Sebastian Podda, and Roberto Saia. Analysis of a consensus protocol for extending consistent subchains on the bitcoin blockchain. *Comput.*, 8(3):67, ??? 2020. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/computation/computation8.html#LongoPS20>. [Longo:2020:ACP]
- Ioannis E. Livieris, Emmanuel Pintelas, Stavros Stavroyiannis, and Panagiotis Pintelas. Ensemble deep learning models for forecasting cryptocurrency time-series. *Algorithms (Basel)*, 13(5), May 2020. CODEN ALGOCH. ISSN 1999- [Livieris:2020:EDL]

4893 (electronic). URL <https://www.mdpi.com/1999-4893/13/5/121>.

Linnhoff-Popien:2018:DMU

- [LPSZ18] Claudia Linnhoff-Popien, Ralf Schneider, and Michael Zaddach, editors. *Digital Marketplaces Unleashed*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. ISBN 3-662-49274-1, 3-662-49275-X (e-book). xxxiii + 935 pp. LCCN QA75.5-76.95. URL <http://link.springer.com/10.1007/978-3-662-49275-8>. [LQYG19]

Linnhoff-Popien:2017:BTG

- [LPW17a] Claudia Linnhoff-Popien and Aloysius Widmann. Blockchain — zum geleit. *Digitale Welt*, 2(1):26–28, December 2017. ISSN 2510-3008.

Linnhoff-Popien:2017:BGG

- [LPW17b] Claudia Linnhoff-Popien and Aloysius Widmann. Blockchain — Zum Geleit. (German) [Blockchain — preface]. *Digitale Welt*, 2(1):26–28, December 2017. ISSN 2510-3008.

Linnhoff-Popien:2018:BG

- [LPW18] Claudia Linnhoff-Popien and Aloysius Widmann. Blockchain — zum geleit. *Digitale Welt*, 2(1), 2018. CODEN ???? ISSN 2510-3008. URL <http://link.springer.com/article/10.1007/s42354-018-0008-3>. [LR22]

springer.com/article/10.1007/s42354-018-0008-3.

Lei:2019:WBE

H. Lei, C. Qiu, H. Yao, and S. Guo. When blockchain-enabled Internet of Things meets cloud computing. *Computer*, 52(12):16–17, December 2019. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

Lyu:2020:SSB

Qiuyun Lyu, Yizhen Qi, Xiaochen Zhang, Huaping Liu, Qiuhua Wang, and Ning Zheng. SBAC: a secure blockchain-based access control framework for information-centric networking. *Journal of Network and Computer Applications*, 149(??):??, January 1, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519303042>.

Liu:2022:IBC

Jian Liu and Kui Ren. Improving blockchains with client-assistance. *IEEE Transactions on Computers*, 71(5):1230–1236, May 2022. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

- [LS17] **Lemieux:2017:PAB** Victoria L. Lemieux and Manu Sporny. Preserving the archival bond in distributed ledgers: A data model and syntax. In *Proceedings of the 26th International Conference on World Wide Web Companion*, WWW '17 Companion, pages 1437–1443. International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva, Switzerland, 2017. ISBN 1-4503-4914-5.
- [LS20] **Lasi:2020:SDM** Davide Lasi and Lukas Saul. A system dynamics model of bitcoin: Mining as an efficient market and the possibility of “Peak hash”. *CoRR*, ??(??):??, ??? 2020. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2004.09212>; <https://dblp.org/db/journals/corr/corr2004.html#abs-2004-09212>.
- [LS21] **Lajeunesse:2021:COM** David Lajeunesse and Hugo D. Scolnik. A cooperative optimal mining model for bitcoin. *CoRR*, abs/2107.09707(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2107.09707>; <https://dblp.org/db/journals/corr/corr2107.html#abs-2107-09707>.
- [LSFK17] **Li:2017:TSP** Wenting Li, Alessandro Sforzin, Sergey Fedorov, and Ghassan O. Karame. Towards scalable and private industrial blockchains. In *Proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts*, BCC '17, pages 9–14. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4974-9. URL <http://doi.acm.org/10.1145/3055518.3055531>.
- [LSH13] **Luo:2013:PCB** Z. Luo, W. Shen, and L. Hu. Parallel computing based Bitcoin currency system analysis approach. In *2013 International Conference on Computer Sciences and Applications*, pages 483–486. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2013.
- [LSM17] **Lin:2017:UBT** Jun Lin, Zhiqi Shen, and Chunyan Miao. Using blockchain technology to build trust in sharing LoRaWAN IoT. In *Proceedings of the 2Nd International Conference on Crowd Science and Engineering*, ICCSE'17, pages 38–43.

ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5375-4. URL <http://doi.acm.org/10.1145/3126973.3126980>.

Leiding:2021:MEM

[LSN21]

Benjamin Leiding, Priyanka Sharma, and Alexander Norta. The machine-to-everything (M2X) economy: Business enactments, collaborations, and e-governance. *Future Internet*, 13(12):319, December 19, 2021. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/12/319>.

Lerner:2015:AUQ

[LSO⁺15]

Adam Lerner, Alisha Saxena, Kirk Ouimet, Ben Turley, Anthony Vance, Tadayoshi Kohno, and Franziska Roesner. Analyzing the use of quick response codes in the wild. In *Proceedings of the 13th Annual International Conference on Mobile Systems, Applications, and Services*, MobiSys '15, pages 359–374. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3494-6.

Lamport:1982:BCP

[LSP82]

Leslie Lamport, Robert Shostak, and Marshall Pease. The Byzantine Generals problem. *ACM Transactions on Programming*

Languages and Systems, 4(3):382–401, July 1982. CODEN ATPSDT. ISSN 0164-0925 (print), 1558-4593 (electronic). They proved that Byzantine agreement (the subject of Section ??) cannot be reached unless fewer than one-third of the processes are faulty. This result assumes that authentication, i.e., the crypting of messages to make them unforgeable, is not used. With unforgeable messages, they show that the problem is solvable for any $n \geq t > 0$, where n is the total number of processes and t is the number of faulty processes.

Luu:2015:PSG

[LSP⁺15]

L. Luu, R. Saha, I. Parameshwaran, P. Saxena, and A. Hobor. On power splitting games in distributed computation: The case of Bitcoin pooled mining. In *2015 IEEE 28th Computer Security Foundations Symposium*, pages 397–411. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, July 2015. ISSN 1063-6900 (print), 2377-5459 (electronic).

Litke:2014:CSM

[LSS14]

Pat Litke, Joe Stewart, and Ben Small. Cryptocurrency-stealing malware landscape. Web blog., Febru-

- ary 26, 2014. URL <https://www.secureworks.com/research/cryptocurrency-stealing-malware-landscape>.

[LST⁺17] Xueping Liang, Sachin Shetty, Deepak Tosh, Charles Kamhoua, Kevin Kwiat, and Laurent Njilla. ProvChain: A blockchain-based data provenance architecture in cloud environment with enhanced privacy and availability. In *Proceedings of the 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*, CCGrid ’17, pages 468–477. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5090-6610-1.

[LSZ⁺21] Ye Luo, Zehai Su, Wei Zheng, Zhaobin Chen, Fuqin Wang, Zhemin Zhang, and Jinjun Chen. A novel memory-hard password hashing scheme for blockchain-based cyber-physical systems. *ACM Transactions on Internet Technology (TOIT)*, 21(2):42:1–42:21, June 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3408310>.

[LST⁺17] Xueping Liang, Sachin Shetty, Deepak Tosh, Charles Kamhoua, Kevin Kwiat, and Laurent Njilla. ProvChain: A blockchain-based data provenance architecture in cloud environment with enhanced privacy and availability. In *Proceedings of the 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*, CCGrid ’17, pages 468–477. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5090-6610-1.

[LTB⁺22] Lin Liu, Wei-Tek Tsai, Md. Zakirul Alam Bhuiyan, Hao Peng, and Mingsheng Liu. Blockchain-enabled fraud discovery through abnormal smart contract detection on Ethereum. *Future Generation Computer Systems*, 128(?):158–166, March 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21003319>.

[LBY20] Ron Lavi, Or Sattath, and Aviv Zohar. Redesigning Bitcoin’s fee market. *ACM Transactions on Economics and Computation*, 10(1):5:1–5:31, March 2022. CODEN ???? ISSN 2167-8375 (print), 2167-8383 (electronic). URL <https://dl.acm.org/doi/10.1145/3530799>; <https://dblp.org/db/journals/teco/teco10.html#LaviSZ22>.

[LBY20] Ron Lavi, Or Sattath, and Aviv Zohar. Redesigning Bitcoin’s fee market. *ACM Transactions on Economics and Computation*, 10(1):5:1–5:31, March 2022. CODEN ???? ISSN 2167-8375 (print), 2167-8383 (electronic). URL <https://dl.acm.org/doi/10.1145/3530799>; <https://dblp.org/db/journals/teco/teco10.html#LaviSZ22>.

- matic blockchain whitepapers analysis via heterogeneous graph neural network. *Journal of Parallel and Distributed Computing*, 145(??):1–12, November 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520302938>. [LTMW19]
- Zhiqiang Liu, Shuyang Tang, Sherman S. M. Chow, Zhen Liu, and Yu Long. Fork-free hybrid consensus with flexible proof-of-activity. *Future Generation Computer Systems*, 96(??): 515–524, July 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18326256>. [LTC⁺19] [Liu:2019:FFH] [LTW⁺21]
- Loi Luu, Jason Teutsch, Raghav Kulkarni, and Prateek Saxena. Demystifying incentives in the consensus computer. In *Proceedings of the 22nd ACM SIGSAC Conference on Computer and Communications Security*, CCS ’15, pages 706–719. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1. URL <http://doi.acm.org/10.1145/2810103.2813659>. [LTKS15] [Luu:2015:DIC]
- Wenjuan Li, Steven Tug, Weizhi Meng, and Yu Wang. Designing collaborative blockchain signature-based intrusion detection in IoT environments. *Future Generation Computer Systems*, 96(??): 481–489, July 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18327237>. [Li:2019:DCB]
- Qinghua Lu, An Binh Tran, Ingo Weber, Hugo O’Connor, Paul Rimba, Xiwei Xu, Mark Staples, Liming Zhu, and Ross Jeffery. Integrated model-driven engineering of blockchain applications for business processes and asset management. *Software—Practice and Experience*, 51(5): 1059–1079, May 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic). [Lu:2021:IMD]
- Kamwoo Lee, Sinan Ulkuatam, Peter A. Beling, and William T. Scherer. Generating synthetic bitcoin transactions and predicting market price movement via inverse reinforcement learning and agent-based modeling. *J. Artif. Soc. Soc. Simul.*, 21(3):??, ????. [Lee:2018:GSB] [LUBS18]

2018. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/jasss/jasss21.html#LeeUBS18>.
- [Lus18] Caitlin Lustig. Algorithmic authority of the Bitcoin blockchain. M.S., University of California, Irvine, Irvine, CA, USA, 2018. 132 pp. URL <http://search.proquest.com/pqdtglobal/docview/2099224272>. [LWA21]
- [Lut17] William Luther. David Columbia, the politics of Bitcoin: Software as right-wing extremism. *The Review of Austrian Economics*, ??(??):213–226, ???? 2017. CODEN ???? ISSN 0889-3047 (print), 1573-7128 (electronic). URL <http://link.springer.com/article/10.1007/s11138-017-0397-9>. [LWCX21]
- [Luu17] The Loi Luu. *Towards Secure Public Blockchain Protocols at Scale*. Ph.D., National University of Singapore, Singapore, 2017. 165 pp. URL <http://search.proquest.com/pqdtglobal/docview/2085943129>.
- [LW16] V. Lee and H. Wei. Exploratory simulation models for fraudulent detection in Bitcoin system. In *2016 IEEE 11th Conference on Industrial Electronics and Applications (ICIEA)*, pages 1972–1977. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2016.
- Wenjuan Li, Yu Wang, and Man Ho Au. Toward a blockchain-based framework for challenge-based collaborative intrusion detection. *International Journal of Information Security*, 20(2):127–139, April 2021. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <https://link.springer.com/article/10.1007/s10207-020-00488-6>.
- Jing Lu, Shihong Wu, Hanlei Cheng, and Zhiyu Xiang. Smart contract for distributed energy trading in virtual power plants based on blockchain. *Computational Intelligence*, 37(3):1445–1455, August 2021. CODEN COMIE6. ISSN 0824-7935 (print), 1467-8640 (electronic).

- Ji, Yiming Liu, and Heli Zhang. Blockchain-empowered data-driven networks: a survey and outlook. *ACM Computing Surveys*, 54(3):58:1–58:38, June 2021. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3446373>. [LWQ⁺21]
- Li:2022:PIT**
- [LWL⁺22a] Zecheng Li, Haotian Wu, Lap Hou Lao, Songtao Guo, Yuanyuan Yang, and Bin Xiao. Pistis: Issuing trusted and authorized certificates with distributed ledger and TEE. *IEEE Transactions on Parallel and Distributed Systems*, 33(7):1636–1649, July 2022. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic). [LWY⁺19]
- Liu:2022:EAS**
- [LWL⁺22b] Tonglai Liu, Jigang Wu, Jiaxing Li, Jingyi Li, and Zikai Zhang. Efficient algorithms for storage load balancing of outsourced data in blockchain network. *The Computer Journal*, 65(6):1512–1526, June 2022. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL <http://academic.oup.com/comjnl/article/65/6/1512/6146586>. [LWZ⁺21a]
- Li:2021:BBS**
- Haiyu Li, Tao Wang, Zirui Qiao, Bo Yang, Yueyang Gong, Jingyi Wang, and Guoyong Qiu. Blockchain-based searchable encryption with efficient result verification and fair payment. *Journal of Information Security and Applications (JISA)*, 58(??):??, May 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S221421262100034X>.
- Li:2019:CBB**
- M. Li, J. Weng, A. Yang, W. Lu, Y. Zhang, L. Hou, J. Liu, Y. Xiang, and R. H. Deng. CrowdBC: a blockchain-based decentralized framework for crowdsourcing. *IEEE Transactions on Parallel and Distributed Systems*, 30(6):1251–1266, June 2019. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).
- Liang:2021:FBS**
- Haoran Liang, Jun Wu, Xi Zheng, Mengshi Zhang, Jianhua Li, and Alireza Jolfaei. Fog-based secure service discovery for Internet of Multimedia Things: a cross-blockchain approach. *ACM Transactions on Multimedia Computing, Communications, and Applications*, 16(3s):96:1–96:23,

- January 2021. CODEN ????. ISSN 1551-6857 (print), 1551-6865 (electronic). URL <https://dl.acm.org/doi/10.1145/3415151>.
Lu:2021:NMP
- [LWZ⁺21b] Ning Lu, Bin Wang, Yongxin Zhang, Wenbo Shi, and Christian Esposito. NeuCheck: a more practical Ethereum smart contract security analysis tool. *Software—Practice and Experience*, 51(10):2065–2084, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
Lu:2017:ABB
- [LX17] Qinghua Lu and Xiwei Xu. Adaptable blockchain-based systems: A case study for product traceability. *IEEE Software*, 34(6):21–27, November/December 2017. CODEN IESOE. ISSN 0740-7459 (print), 1937-4194 (electronic). URL <https://www.computer.org/csdl/mags/so/2017/06/mso2017060021-abs.html>.
Lu:2020:AH
- [LX20] Anthony Luo and Dianxiang Xu. Assessing holistic impacts of major events on the bitcoin blockchain network. *CoRR*, abs/2006.02416(??):
Liu:2021:FDD
- [LX21] Yong Liu and Guangxia Xu. Fixed degree of decentralization DPoS consensus mechanism in blockchain based on adjacency vote and the average fuzziness of vague value. *Computer Networks (Amsterdam, Netherlands: 1999)*, 199(??):??, November 9, 2021. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621003947>.
Lu:2019:UUB
- [LXL⁺19] Qinghua Lu, Xiwei Xu, Yue Liu, Ingo Weber, Liming Zhu, and Weishan Zhang. uBaaS: a unified blockchain as a service platform. *Future Generation Computer Systems*, 101(??):564–575, December 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18319873>.
Lyndell:2014:VCR
- [Lyn14] Kevin Lyndell, editor. *Virtual currencies: regula-*

tory and tax compliance issues. Government procedures and operations. Nova Publishers, New York, NY, USA, 2014. ISBN 1-63463-129-3 (hardcover). ix + 128 pp. LCCN HG1710 .V56 2014.

Li:2021:LPP

[LYW⁺21]

Kunchang Li, Yifan Yang, Shuhao Wang, Runhua Shi, and Jianbin Li. A lightweight privacy-preserving and sharing scheme with dual-blockchain for intelligent pricing system of smart grid. *Computers & Security*, 103(?):Article 102189, April 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404821000134>.

[LZD21]

Lv:2021:MPT

[LYZ⁺21]

Lingling Lv, Zhipeng Yang, Lei Zhang, Quanzhen Huang, and Zhihong Tian. Multi-party transaction framework for drone services based on alliance blockchain in smart cities. *Journal of Information Security and Applications (JISA)*, 58(?):??, May 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000363>.

[LZDA16]

Liu:2017:DSD

[LZC⁺17]

Zhengjun Liu, Hui Zhao,

Wen Chen, Xiaochun Cao, Haipeng Peng, Jin Yang, Tao Yang, and Ping Lin. Double-spending detection for fast Bitcoin payment based on artificial immune. In *Theoretical Computer Science*, pages 133–143. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 981-10-6893-3. URL http://link.springer.com/chapter/10.1007/978-981-10-6893-5_10.

Li:2021:WSC

Xiaoyun Li, Zibin Zheng, and Hong-Ning Dai. When services computing meets blockchain: Challenges and opportunities. *Journal of Parallel and Distributed Computing*, 150(?):1–14, April 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520304196>.

Liao:2016:BCD

K. Liao, Z. Zhao, A. Doupe, and G. J. Ahn. Behind closed doors: measurement and analysis of CryptoLocker ransoms in Bitcoin. In *2016 APWG Symposium on Electronic Crime Research (eCrime)*, pages 1–13. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver

- Spring, MD 20910, USA, June 2016.
- Li:2017:EQL**
- [LZY⁺17] Yang Li, Kai Zheng, Ying Yan, Qi Liu, and Xiaofang Zhou. EtherQL: A query layer for blockchain system. In *Database Systems for Advanced Applications*, pages 556–567. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-55699-4_34.
- Li:2022:SBS**
- [LZY22] Chunlin Li, Jing Zhang, and Xianmin Yang. Scalable blockchain storage mechanism based on two-layer structure and improved distributed consensus. *The Journal of Supercomputing*, 78(4):4850–4881, March 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04061-3>.
- Liu:2020:NRV**
- [LZZ⁺20] Yaping Liu, Shuo Zhang, Haojin Zhu, Peng-Jun Wan, Lixin Gao, Yaoxue Zhang, and Zhihong Tian. A novel routing verification approach based on blockchain for inter-domain routing in smart metropolitan area networks. *Journal of Parallel and Distributed Computing*, 142(??):77–89, August 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731519308317>.
- Liu:2021:DBB**
- Yulin Liu, Luyao Zhang, and Yinhong Zhao. Deciphering bitcoin blockchain data by cohort analysis. *CoRR*, abs/2103.00173(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2103.00173>; <https://dblp.org/db/journals/corr/corr2103.html#abs-2103-00173>.
- Luo:2022:NCC**
- Xiangyang Luo, Pei Zhang, Mingliang Zhang, Hao Li, and Qingfeng Cheng. A novel covert communication method based on bitcoin transaction. *IEEE Trans. Ind. Informatics*, 18(4):2830–2839, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/tii/tii18.html#LuoZZLC22>.
- Monem:2022:ICS**
- [MAAAW⁺22] Maruf Monem, Md. Golam Rabiul Alam, Mohammad Abdullah-Al-Wadud,

- Shamsul Huda, Mohammad Mehedi Hassan, and Giancarlo Fortino. An Industry-4.0-complaint sustainable bitcoin model through optimized transaction selection and sustainable block integration. *IEEE Trans. Ind. Informatics*, 18(12):9162–9172, 2022. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/tii/tii18.html#MonemAAHHF22>. [Mal18]
- [MAAN19] Imran Makhdoom, Mehran Abolhasan, Haider Abbas, and Wei Ni. Blockchain’s adoption in IoT: the challenges, and a way forward. *Journal of Network and Computer Applications*, 125(??):251–279, January 1, 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804518303473>. [MAM22]
- [Mah18] Pradip S. Maharjan. Performance analysis of blockchain platforms. M.S.C.S., University of Nevada, Las Vegas, Las Vegas, NV, USA, 2018. 51 pp. URL <http://search.proquest.com/pqdtglobal/docview/2181699564>. [MAP16]
- [Mai18] Florian Mair. Assessment of data integrity risks in public blockchain systems. M.S., University of Nebraska at Omaha, Omaha, NE, USA, 2018. 119 pp. URL <http://search.proquest.com/pqdtglobal/docview/2132138951>. [Malomo:2018:CTB]
- Olumide Olugbenga Malomo. *Cybersecurity through a Blockchain Enabled Federated Cloud Framework*. Ph.D., Howard University, Washington, DC, USA, 2018. 133 pp. URL <http://search.proquest.com/pqdtglobal/docview/2195473563>. [Melo:2022:MBA]
- Carlos Melo, Jean Araujo, and Paulo Maciel. A model-based approach for planning blockchain service provisioning. *Computing*, 104(2):315–337, February 2022. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic). URL <https://link.springer.com/article/10.1007/s00607-021-00956-4>. [MacDonald:2016:BBS]
- Trent J. MacDonald, Darcy W. E. Allen, and Jason Potts. Blockchains and the boundaries of self-organized economies: Predictions for the future of banking. In *Banking Beyond Banks and Money*, pages 279–296. Springer International Publishing, 2016.

- [MAQ99] H. Massias, X. S. Avila, and J.-J. Quisquater. Design of a secure timestamping service with minimal trust requirements. In ????, editor, *20th Symposium on Information Theory in the Benelux, May 1999*, page ?? ???, ???, 1999.
- [Mat13] Jon Matonis. Bitcoin casinos release 2012 earnings. *Forbes*, ??(??):??, January ??, 2013. CODEN FORBA5. ISSN 0015-6914.
- [Mat14] Joe Matonis. The Bitcoin mining arms race: GHash.io and the 51% issue. Web blog., July 2014. URL <https://www.coindesk.com/bitcoin-mining-detente-ghash-io-51-issue/>.
- [MB15] Malte Möser and Rainer Böhme. Trends, tips, tolls: A longitudinal study of Bitcoin transaction fees. In Brenner et al. [BCJR15], pages 19–33. ISBN 3-662-48051-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_2; <http://ssrn.com/abstract=2530843>.
- [MB17a] A. Miller and I. Bentov. Zero-collateral lotteries in Bitcoin and Ethereum. In *2017 IEEE European Symposium on Security and Privacy Workshops (EuroSPW)*, pages 4–13. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2017. URL <http://ieeexplore.ieee.org/document/7966964/>.
- [Moser:2017:PAE] Malte Möser and Rainer Böhme. The price of anonymity: empirical evidence from a market for bitcoin anonymization. *J. Cybersecur.*, 3(2):127–135, ??? 2017. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/cybersecurity/cybersecurity3.html#MoserB17>; <https://www.wikidata.org/entity/Q111687789>.
- [Mser:2013:IML] M. Möser, R. Böhme, and D. Breuker. An inquiry into money laundering tools in the Bitcoin ecosystem. In *2013 APWG eCrime Researchers Summit*, pages 1–14. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2013.

- [MBB13b] **Moser:2013:IML** Malte Möser, Rainer Böhme, and Dominic Breuker. An inquiry into money laundering tools in the Bitcoin ecosystem. In *2013 APWG eCrime Researchers Summit, 17–18 September 2013, San Francisco, CA, USA*, pages 1–14. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2013.
- [MBB14] **Moser:2014:TRS** Malte Möser, Rainer Böhme, and Dominic Breuker. Towards risk scoring of Bitcoin transactions. In Christin and Safavi-Naini [CSN14], pages 16–32. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_2. [MBC⁺17b]
- [MBB⁺15] **Melara:2015:CBK** Marcela S. Melara, Aaron Blankstein, Joseph Bonneau, Edward W. Felten, and Michael J. Freedman. CONIKS: Bringing key transparency to end users. In USENIX, editor, *Proceedings of the 24th Usenix Security Symposium, August 12–14, 2015, Washington, DC, 2015*, pages 383–398. USENIX, San Francisco, CA, USA, 2015. ISBN 1-931971-23-4. URL <https://www.usenix.org/system/files/conference/usenixsecurity15/sec15-paper-melara.pdf>. [MBC17a]
- Melo:2017:HBC** Wilson S. Melo, Jr, Alysson Bessani, and Luiz F. R. C. Carmo. How blockchains can help legal metrology. In *Proceedings of the 1st Workshop on Scalable and Resilient Infrastructures for Distributed Ledgers, SERIAL '17*, pages 5:1–5:2. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5173-5. URL <http://doi.acm.org/10.1145/3152824.3152829>.
- Missier:2017:MMV** Paolo Missier, Shaimaa Bajoudah, Angelo Caposese, Andrea Gaglione, and Michele Nati. Mind my value: A decentralized infrastructure for fair and trusted IoT data trading. In *Proceedings of the Seventh International Conference on the Internet of Things, IoT '17*, pages 15:1–15:8. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5318-5. URL <http://doi.acm.org/10.1145/3131542.3131564>.
- Malkhi:2012:PCF** Dahlia Malkhi, Mahesh Balakrishnan, John D. Davis, Vijayan Prabhakaran, and Ted Wobber. From

- Paxos to CORFU: a flash-speed shared log. *Operating Systems Review*, 46(1):47–51, January 2012. CODEN OSRED8. ISSN 0163-5980 (print), 1943-586X (electronic). [MBT19]
- [MBF⁺20] Daniele Mazzei, Giacomo Baldi, Gualtiero Fantoni, Gabriele Montelisciani, Antonio Pitasi, Laura Ricci, and Lorenzo Rizzello. A Blockchain Tokenizer for Industrial IOT trustless applications. *Future Generation Computer Systems*, 105(?): 432–445, April 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19317686>. [MC13]
- [Manzoor:2021:PRE] [McC18] Ahsan Manzoor, An Braeken, Salil S. Kanhere, Mika Ylianttila, and Madhysanka Liyanage. Proxy re-encryption enabled secure and anonymous IoT data sharing platform based on blockchain. *Journal of Network and Computer Applications*, 176(?):??, February 15, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303763>. [MCD15]
- [Manevich:2019:EHF] Y. Manevich, A. Barger, and Y. Tock. Endorsement in hyperledger fabric via service discovery. *IBM Journal of Research and Development*, 63(2–3): 2:1–2:9, March/May 2019. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic).
- [Moore:2013:BME] Tyler Moore and Nicolas Christin. Beware the middleman: Empirical analysis of Bitcoin-exchange risk. In Sadeghi [Sad13], pages 25–33. ISBN 3-642-39884-7. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-642-39884-1_3.
- [McCorry:2018:ABU] Patrick McCorry. *Applications of the Blockchain using cryptography*. Ph.D., University of Newcastle Upon Tyne (United Kingdom), Newcastle, UK, 2018. URL <http://search.proquest.com/pqdtglobal/docview/2307359667>.
- [Matl:2015:EMM] Lubos Matl, Tomas Cerny, and Michael J. Donahoo. Effective multicast messaging for Kademlia network. In *Proceedings of the 30th Annual ACM Symposium on Applied Comput-*

- ing*, SAC '15, pages 646–652. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3196-3.
- [MCF20] **Moubarak:2020:DLS**
 Joanna Moubarak, Maroun Chamoun, and Eric Filiol. On distributed ledgers security and illegal uses. *Future Generation Computer Systems*, 113(??):183–195, December 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17330650>.
- [McG18] **McGraw:2018:SBTd**
 Gary McGraw. Silver Bullet talks with Nick Weaver. *IEEE Security & Privacy*, 16(4):7–10, July/August 2018. CODEN ???? ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040007.html>.
- [MCHM17] **Mc:2017:ATR**
 Patrick Mc, Corry, Ethan Heilman, and Andrew Miller. Atomically trading with Roger: Gambling on the success of a hardfork. In Garcia-Alfaro et al. [GANAHHJ17], pages xiii + 446. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_19.
- [MCJ17] **Meshkov:2017:SPR**
 Dmitry Meshkov, Alexander Chepur, and Marc Jansen. Short paper: Revisiting difficulty control for blockchain systems. In Garcia-Alfaro et al. [GANAHHJ17], pages 429–436. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_25.
- [McK19] **McKay:2019:CES**
 Tom McKay. Crypto exchange says it can't repay \$190 million to clients after founder dies with only password. Gizmodo Web site, February 3, 2019. URL <https://gizmodo.com/crypto-exchange-says-it-cant-repay-190-million-to-clie-1832309454>.
- [McL13] **McLeod:2013:BSV**
 Andrew Saks McLeod. Bitcoins soar in value in Argentina due to capital control laws. Forex Magnates Web site., July 9, 2013. URL <https://www.financemagnates.com/>.

- [MCLH19] **McGhin:2019:BHA**
 Thomas McGhin, Kim-Kwang Raymond Choo, Charles Zhechao Liu, and Debiao He. Blockchain in healthcare applications: Research challenges and opportunities. *Journal of Network and Computer Applications*, 135(??):62–75, June 1, 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519300864>.
- [McM13] **McMillan:2013:HSW**
 Robert McMillan. \$1.2M hack shows why you should never store Bitcoins on the Internet. *Wired*, ??(??):??, November 7, 2013. CODEN WREDEM. ISSN 1059-1028 (print), 1078-3148 (electronic).
- [MCS18] **Moore:2018:RRB**
 Tyler Moore, Nicolas Christin, and Janos Szurdi. Revisiting the risks of Bitcoin currency exchange closure. *ACM Transactions on Internet Technology (TOIT)*, 18(4):50:1–50:??, November 2018. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic).
- [MCS⁺21] **Mendes:2021:NRS**
 G. S. Mendes, D. Chen, B. M. C. Silva, C. Ser-
 rao, and J. Casal. A novel reputation system for mobile app stores using blockchain. *Computer*, 54(2):39–49, 2021. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [MDAP16] **Mac:2016:BBS**
 Trent J. Mac, Donald, Darcy W. E. Allen, and Jason Potts. Blockchains and the boundaries of self-organized economies: Predictions for the future of banking. In *Banking Beyond Banks and Money*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-42448-4_14.
- [MDN⁺18] **Mencias:2018:OBS**
 A. Nuñez Mencias, D. Dillenberger, P. Novotny, F. Toth, T. E. Morris, V. Paprotski, J. Dayka, T. Visegrady, B. O’Farrell, J. Lang, and E. Carbarnes. An optimized blockchain solution for the IBM z14. *IBM Journal of Research and Development*, 62(2–3):4:1–4:11, ???? 2018. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic). URL <https://ieeexplore.ieee.org/document/8276264/>.

- [ME17] **Marfia:2017:BSB**
 Gustavo Marfia and Piergiorgio Degli Esposti. Blockchain and sensor-based reputation enforcement for the support of the reshoring of business activities. In *Reshoring of Manufacturing*, pages 125–139. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-58883-4_6. [Mer80]
- [Mea19] **Mearian:2019:WBB**
 Lucas Mearian. Why blockchain-based voting could threaten democracy. <https://www.computerworld.com/article/3430697/why-blockchain-could-be-a-threat-to-democracy.html>, August 12, 2019.
- [Mei18] **Meiklejohn:2018:TTO**
 Sarah Meiklejohn. Top ten obstacles along distributed ledgers path to adoption. *IEEE Security & Privacy*, 16(4):13–19, July/August 2018. CODEN ???? ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040013-abs.html>. [Mer88]
- [Men19] **Mendoza:2019:TCM**
 Ron Mendoza. Trump campaign manager announces cryptocurrency ‘Frax’, more stable than Bitcoin. IBT Business Web site, October 23, 2019. URL <https://www.ibtimes.com/trump-campaign-manager-announces-cryptocurrency-frax-more-stable-bitcoin-2851923>.
- Merkle:1980:PPK**
 Ralph C. Merkle. Protocols for public key cryptosystems. In ???? , editor, *Proceedings of the IEEE Symposium on Security and Privacy, Oakland, CA, USA, 14–16 April, 1980*, pages 122–134. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1980. ISSN 1540-7993 (print), 1558-4046 (electronic). URL <http://ieeexplore.ieee.org/document/6233691/>; <http://www.merkle.com/papers/Protocols.pdf>.
- Merkle:1988:DSB**
 Ralph C. Merkle. A digital signature based on a conventional encryption function. In Carl Pomerance, editor, *Advances in Cryptology — CRYPTO ’87*, volume 293 of *Lecture Notes in Computer Science*, pages 369–378. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1988. ISBN 3-540-48184-2.

- [Mer19] Daniel Mera. Quorum blockchain stress evaluation in different environments. M.S., City University of New York John Jay College of Criminal Justice, New York, NY, USA, 2019. 129 pp. URL <http://search.proquest.com/pqdtglobal/docview/2288064966>. **Mera:2019:QBS**
- [MES16] Malte Möser, Ittay Eyal, and Emin Gün Sirer. Bitcoin covenants. In Clark et al. [CMR⁺16], pages 126–141. ISBN 3-662-53357-X. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-53357-4_9. **Moser:2016:BC**
- [Mez19] Ben Mezrich. *Bitcoin Billionaires: a True Story of Genius, Betrayal, and Redemption*. Flatiron Books, New York, NY, USA, 2019. ISBN 1-250-21774-1 (hardcover), 1-250-23938-9. x + 276 pp. LCCN HG4751 .M499 2019. **Mezrich:2019:BBT**
- [MF19] Dennys C. A. Mallqui and Ricardo A. S. Fernandes. Predicting the direction, maximum, minimum and closing prices of daily bitcoin exchange rate using machine learning techniques. *Appl. Soft Comput.*, [MG16] 75(??):596–606, 2019. CODEN 75(??) ISSN 1557-6051 (print), 1557-6051 (electronic). URL <https://doi.org/10.1145/3445788>. **Mallqui:2019:PDM**
- [MFE⁺20] Naram Mhaisen, Noora Fetais, Aiman Erbad, Amr Mohamed, and Mohsen Guizani. To chain or not to chain: a reinforcement learning approach for blockchain-enabled IoT monitoring applications. *Future Generation Computer Systems*, 111(??):39–51, October 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19334399>. **Mhaisen:2020:CCR**
- [MFR⁺21] Sabah Mohammed, Jinan Fiaidhi, Carlos Ramos, Tai-Hoon Kim, Wai Chi Fang, and Tarek Abdelzaher. Blockchain in eCommerce: a special issue of the *ACM Transactions on Internet of Things*. *ACM Transactions on Internet Technology (TOIT)*, 21(1):4:11–4:55, February 2021. CODEN 75(??) ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3445788>. **Mohammed:2021:BES**
- [MGO16] Felix Mago and Tobias
- Mago:2016:BHB**

Gillen. *Das Bitcoin-Handbuch: Bitcoin von A bis Z. (German) [The Bitcoin Handbook: Bitcoin from A to Z]*. BASIC thinking. jmb-Verlag, Hannover, Germany, 2016. ISBN 3-944342-77-1. 134 pp. LCCN ????

Moura:2017:BVE

[MG17]

Teogenes Moura and Alexandre Gomes. Blockchain voting and its effects on election transparency and voter confidence. In *Proceedings of the 18th Annual International Conference on Digital Government Research*, dg.o '17, pages 574–575. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5317-7. URL <http://doi.acm.org/10.1145/3085228.3085263>.

[MGE20]

Mytis-Gkometh:2017:NKR

[MGDEK17]

P. Mytis-Gkometh, G. Drosatos, P. S. Efraimidis, and E. Kaldoudi. Notarization of knowledge retrieval from biomedical repositories using blockchain technology. In *Precision Medicine Powered by pHealth and Connected Health*, pages 69–73. Springer Singapore, November 2017.

[MGGR13]

Mytis-Gkometh:2018:NKR

[MGDEK18]

P. Mytis-Gkometh, G. Drosatos, P. S. Efraimidis, and E. Kaldoudi. Notarization of knowledge retrieval from

biomedical repositories using blockchain technology. In *Precision Medicine Powered by pHealth and Connected Health*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-981-10-7419-6_12.

Mirsky:2020:LCA

Yisroel Mirsky, Tomer Golomb, and Yuval Elovici. Lightweight collaborative anomaly detection for the IoT using blockchain. *Journal of Parallel and Distributed Computing*, 145(??):75–97, November 2020. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520303154>.

Miers:2013:ZAD

I. Miers, C. Garman, M. Green, and A. D. Rubin. Zerocoin: Anonymous distributed e-cash from Bitcoin. In *2013 IEEE Symposium on Security and Privacy*, pages 397–411. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2013. ISSN 1081-6011 (print), 2375-1207 (electronic).

- [MGM⁺17] Roger Maull, Phil God-siff, Catherine Mulligan, Alan Brown, and Beth Kewell. Distributed ledger technology: Applications and implications. *Strategic Change*, 26(5):481–489, 2017. CODEN STCHFT. ISSN 1086-1718 (print), 1099-1697 (electronic).
- [MHH⁺16] Roman Matzutt, Oliver Hohlfeld, Martin Henze, Robin Rawiel, Jan Henrik Ziegeldorf, and Klaus Wehrle. Poster: I don’t want that content! On the risks of exploiting Bitcoin’s blockchain as a content store. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, CCS ’16, pages 1769–1771. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2989059>.
- [MGN⁺22] Rui Mu, Bei Gong, Zhenhu Ning, Jiangjiang Zhang, Yang Cao, Zheng Li, Wei Wang, and Xiaoping Wang. An identity privacy scheme for blockchain-based on edge computing. *Concurrency and Computation: Practice and Experience*, 34(1):e6545:1–e6545:??, January 10, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [MHL20] Haiying Ma, Elmo X. Huang, and Kwok-Yan Lam. Blockchain-based mechanism for fine-grained authorization in data crowd-sourcing. *Future Generation Computer Systems*, 106(??):121–134, May 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19300822>.
- [MGS22] Shikha Mehta, Mukta Goyal, and Dinesh Saini. Efficient bitcoin mining using genetic algorithm-based proof of work. *Int. J. Fuzzy Syst. Appl.*, 11(2):1–17, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/ijfsa/ijfsa11.html#MehtaMGS22>.
- [MHM17] Patrick McCorry, Ethan Heilman, and Andrew Miller. Atomically trading with Roger: Gambling on the success of a hardfork. In Garcia-Alfaro

- et al. [GANAHHJ17], pages 334–353. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL <http://link.springer.com/10.1007/978-3-319-67816-0>. [Mic16]
- [MHWK16] Mitar Milutinovic, Warren He, Howard Wu, and Maxinder Kanwal. Proof of luck: An efficient blockchain consensus protocol. In *Proceedings of the 1st Workshop on System Software for Trusted Execution*, SysTEX '16, pages 2:1–2:6. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4670-7. URL <http://doi.acm.org/10.1145/3007788.3007790>. [Mil15]
- [Mic14] Anastasia Michailaki. Mixed reality through the Internet of Things and Bitcoin: How laws affect them. In *E-Democracy, Security, Privacy and Trust in a Digital World*, pages 165–169. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-11710-6. URL http://link.springer.com/chapter/10.1007/978-3-319-11710-2_15. [MISS22]
- Michael:2016:RNI**
K. Michael. RFID/NFC implants for Bitcoin transactions. *IEEE Consumer Electronics Magazine*, 5(3): 103–106, July 2016. ISSN 2162-2248 (print), 2162-2256 (electronic).
- Miller:2015:UGB**
Michael Miller. *The ultimate guide to Bitcoin*. Que Corporation, Indianapolis, IN, USA, 2015. ISBN 0-7897-5324-3 (paperback). xii + 227 pp. LCCN HG221.M6455 2015.
- Mishra:2017:ARC**
Vineet Mishra. An approach to recovery of critical data of smart cities using blockchain. M.S., Arizona State University, Tempe, AZ, USA, 2017. 61 pp. URL <http://search.proquest.com/pqdtglobal/docview/1990937755>.
- Masuduzzaman:2022:UBM**
Md Masuduzzaman, Anik Islam, Kazi Sadia, and Soo Young Shin. UAV-based MEC-assisted automated traffic management scheme using blockchain. *Future Generation Computer Systems*, 134(??):256–270, September 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://>

- www.sciencedirect.com/science/article/pii/S0167739X22001418
- Miller:2014:PRB**
- [MJS⁺14] A. Miller, A. Juels, E. Shi, B. Parno, and J. Katz. Permacoin: Repurposing Bitcoin work for data preservation. In *2014 IEEE Symposium on Security and Privacy*, pages 475–490. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2014. ISSN 1081-6011 (print), 2375-1207 (electronic).
- Miscione:2015:BBC**
- [MK15] Gianluca Miscione and Donncha Kavanagh. Bitcoin and the blockchain: A coup d’État in digital heterotopia? *SSRN Electronic Journal*, 2015. ISSN 1556-5068.
- Magaki:2016:ACSa**
- [MKGT16a] Ikuo Magaki, Moein Khazraee, Luis Vega Gutierrez, and Michael Bedford Taylor. ASIC clouds: Specializing the datacenter. *ACM SIGARCH Computer Architecture News*, 44(3):178–190, June 2016. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).
- Magaki:2016:ACSB**
- [MKGT16b] Ikuo Magaki, Moein Khazraee, Luis Vega Gutierrez, and [MKL⁺22]
- Michael Bedford Taylor. ASIC clouds: Specializing the datacenter. In *Proceedings of the 43rd International Symposium on Computer Architecture*, ISCA ’16, pages 178–190. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016. ISBN 1-4673-8947-1.
- Miller:2014:NSP**
- Andrew Miller, Ahmed Kosba, Jonathan Katz, and Elaine Shi. Nonoutsourcable scratch-off puzzles to discourage Bitcoin mining coalitions. Preprint, University of Maryland, College Park, MD, USA, 2014. 19 pp. URL http://soc1024.ece.illinois.edu/nonoutsourcable_full.pdf.
- Miller:2015:NSP**
- Andrew Miller, Ahmed Kosba, Jonathan Katz, and Elaine Shi. Nonoutsourcable scratch-off puzzles to discourage Bitcoin mining coalitions. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security*, CCS ’15, pages 680–691. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1.
- Min:2022:BNM**
- Xinping Min, Lanju Kong,

- Qingzhong Li, Yuan Liu, Baochen Zhang, Yongguang Zhao, Zongshui Xiao, and Bin Guo. Blockchain-native mechanism supporting the circulation of complex physical assets. *Computer Networks (Amsterdam, Netherlands: 1999)*, 202(??):??, January 15, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004928>. [ML14]
- [MKS⁺19] Sana Moin, Ahmad Karim, Zanab Safdar, Kalsoom Safdar, Ejaz Ahmed, and Muhammad Imran. Securing IoTs in distributed blockchain: Analysis, requirements and open issues. *Future Generation Computer Systems*, 100(??):325–343, November 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18330851>. [ML15]
- [MKY⁺21] Umer Majeed, Latif U. Khan, Ibrar Yaqoob, S. M. Ah-san Kazmi, Khaled Salah, and Choong Seon Hong. Blockchain for IoT-based smart cities: Recent advances, requirements, and future challenges. *Journal of Network and Computer Applications*, 181(??):??, May 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521000345>. [Miller:2014:ABC]
- Andrew Miller and Joseph J. LaViola, Jr. Anonymous Byzantine consensus from moderately-hard puzzles: A model for Bitcoin. Technical report, University of Central Florida, Orlando, FL, USA, 2014. 7 pp. URL <https://socrates1024.s3.amazonaws.com/consensus.pdf>. [Mann:2015:TFA]
- Christopher Mann and Daniel Loebenberger. Two-factor authentication for the Bitcoin protocol. In *Security and Trust Management*, pages 155–171. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-24858-8. URL http://link.springer.com/chapter/10.1007/978-3-319-24858-5_10. [Mann:2017:TFA]
- Christopher Mann and Daniel Loebenberger. Two-factor authentication for the Bitcoin protocol. *International Journal of In-*

- formation Security, 16 (2):213–226, April 2017. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-016-0325-1>.
Myung:2020:ESC
- [ML20] Sein Myung and Jong-Hyoun Lee. Ethereum smart contract-based automated power trading algorithm in a microgrid environment. *The Journal of Supercomputing*, 76(7):4904–4914, July 2020. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic).
Mainelli:2019:ESC
- [MLD19] Michael R. Mainelli, Matthew Leitch, and Dionysios Demetis. Economic simulation of cryptocurrencies and their control mechanisms. *Ledger*, 4(??):??, ???? 2019. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/130>.
Matta:2015:PIW
- [MLM15] M. Matta, I. Lunesu, and M. Marchesi. The predictor impact of Web search media on Bitcoin trading volumes. In *2015 7th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (IC3K)*, volume 01, pages 620–626. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, November 2015.
Matta:2016:BMP
- Martina Matta, Ilaria Lunesu, and Michele Marchesi. Is Bitcoin’s market predictable? Analysis of Web search and social media. In *Knowledge Discovery, Knowledge Engineering and Knowledge Management*, pages 155–172. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-52758-4. URL http://link.springer.com/chapter/10.1007/978-3-319-52758-4_10.
Meng:2020:TBE
- Weizhi Meng, Wenjuan Li, Steven Tug, and Jiao Tan. Towards blockchain-enabled single character frequency-based exclusive signature matching in IoT-assisted smart cities. *Journal of Parallel and Distributed Computing*, 144(??):268–277, October 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520302926>.

- [MLYL20] **Meng:2020:ECB**
 Weizhi Meng, Wenjuan Li, Laurence T. Yang, and Peng Li. Enhancing challenge-based collaborative intrusion detection networks against insider attacks using blockchain. *International Journal of Information Security*, 19 (3):279–290, June 2020. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-019-00462-x>. ■
- [MM17] **Mirzayi:2017:BSA**
 Sahar Mirzayi and Mohammad Mehrzad. Bitcoin, an SWOT analysis. In IEEE, editor, *2017 7th International Conference on Computer and Knowledge Engineering (ICCKE)*, 26–27 October 2017, Mashhad, Iran, pages 205–210. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2017.
- [MMM21] **Muzumdar:2021:TIS**
 Ajit Muzumdar, Chirag Modi, Madhu G. M., and C. Vyjayanthi. A trustworthy and incentivized smart grid energy trading framework using distributed ledger and smart contracts. *Journal of Network and Computer Applications*, ??
- [MMR16] **Maesa:2016:UBB**
 D. D. F. Maesa, A. Marino, and L. Ricci. Uncovering the Bitcoin blockchain: An analysis of the full users graph. In *2016 IEEE International Conference on Data Science and Advanced Analytics (DSAA)*, pages 537–546. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2016.
- [MMR⁺21] **Misra:2021:BEP**
 S. Misra, A. Mukherjee, A. Roy, N. Saurabh, Y. Rahulamathavan, and M. Rajarajan. Blockchain at the edge: Performance of resource-constrained IoT networks. *IEEE Transactions on Parallel and Distributed Systems*, 32(1): 174–183, 2021. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).
- [MMSH16] **McCorry:2016:TBP**
 Patrick McCorry, Malte Möser, Siamak F. Shandashti, and Feng Hao. Towards Bitcoin payment networks. In *Information Security and Privacy*,
- (?):??, ???? 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521000977>. ■

pages 57–76. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-40252-8 (paperback), 3-319-40253-6 (e-book). URL http://link.springer.com/chapter/10.1007/978-3-319-40253-6_4.

Malavolta:2017:CPP

[MMSK⁺17]

Giulio Malavolta, Pedro Moreno-Sanchez, Aniket Kate, Matteo Maffei, and Srivatsan Ravi. Concurrency and privacy with payment-channel networks. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security, CCS '17*, pages 455–471. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3. URL <http://doi.acm.org/10.1145/3133956.3134096>. [MNB⁺17]

Monamo:2016:ULR

[MMT16a]

P. Monamo, V. Marivate, and B. Twala. Unsupervised learning for robust Bitcoin fraud detection. In *2016 Information Security for South Africa (ISSA)*, pages 129–134. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, August 2016. [MO15]

Monamo:2016:MAB

[MMT16b]

P. M. Monamo, V. Mari-

vate, and B. Twala. A multifaceted approach to Bitcoin fraud detection: Global and local outliers. In *2016 15th IEEE International Conference on Machine Learning and Applications (ICMLA)*, pages 188–194. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2016.

Mengelkamp:2017:BBS

Esther Mengelkamp, Benedikt Notheisen, Carolin Beer, David Dauer, and Christof Weinhardt. A blockchain-based smart grid: towards sustainable local energy markets. *Computer Science — Research and Development*, ??(?):1–8, August 2017. CODEN ???? ISSN 1865-2034 (print), 1865-2042 (electronic). URL <http://link.springer.com/article/10.1007/s00450-017-0360-9>.

Meiklejohn:2015:PEO

Sarah Meiklejohn and Claudio Orlandi. Privacy-enhancing overlays in Bitcoin. In Brenner et al. [BCJR15], pages 127–141. ISBN 3-662-48051-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_10.

- [MÖ22] **Metin:2022:MMF**
Serdar Metin and Can Özturan. Max-min fairness based faucet design for blockchains. *Future Generation Computer Systems*, 131(??):18–27, June 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000164> [MOM22]
- [Moh17] **Mohan:2017:TBD**
C. Mohan. Tutorial: Blockchains and databases. *Proceedings of the VLDB Endowment*, 10(12):2000–2001, August 2017. CODEN ??? ISSN 2150-8097.
- [Moh19] **Mohammad:2019:DAU**
Atif Farid Mohammad. *Decision Analytics Using Permissioned Blockchain “CommLedger”*. Ph.D., The University of North Dakota, Grand Forks, ND, USA, 2019. 81 pp. URL <http://search.proquest.com/pqdtglobal/docview/2246338016> [Mor17a]
- [Möl13] **Molleken:2013:BGB**
Dirk Mölleken. *Bitcoin: Geld ohne Banken — ist das möglich? (German) [Bitcoin: money without banks — is that possible?]*. Diplomarbeit. Bachelor + Master Publishing, Hamburg, Germany, 2013. ISBN 3-86341-425-X, 3-86341-925-1 (e-book). 71 pp. LCCN HF5548.32.M65 2013. URL <http://public.eblib.com/choice/publicfullrecord.aspx?p=1593931>; <http://site.ebrary.com/id/10851161>.
- Melo:2022:PAE**
Carlos Melo, Felipe Oliveira, and Paulo Maciel. Performance and availability evaluation of the blockchain platform hyperledger fabric. *The Journal of Supercomputing*, 78(10):12505–12527, July 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-022-04361-2>.
- Morabito:2017:BES**
Vincenzo Morabito. Blockchain and enterprise systems. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages 125–142. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-8_5_7.
- Morabito:2017:BG**
Vincenzo Morabito. Blockchain governance. In *Business Innovation through*

- Blockchain: the B3 Perspective* [Mor17f], pages 41–59. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_3.
- [Mor17c] Vincenzo Morabito. The blockchain paradigm change structure. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages 3–20. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_1.
- [Mor17d] Vincenzo Morabito. Blockchain practices. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages 145–166. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_8.
- [Mor17e] Vincenzo Morabito. Blockchain value system. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages 21–39. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_2.
- [Mor17f] Vincenzo Morabito. *Business Innovation through Blockchain: the B3 Perspective*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). xxii + 173 pp. LCCN HD45. URL <http://link.springer.com/10.1007/978-3-319-48478-5>.
- [Mor17g] Vincenzo Morabito. Blockchain conclusion: The B3 perspective. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages 167–170. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_9.
- [Mor17h] Vincenzo Morabito. Digital currencies. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages

- 81–100. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_5.
- [Mor17i] Vincenzo Morabito. The security of blockchain systems. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages 61–78. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_4.
- [Mor17j] Vincenzo Morabito. Smart contracts and licensing. In *Business Innovation through Blockchain: the B3 Perspective* [Mor17f], pages 101–124. ISBN 3-319-48477-X (print), 3-319-48478-8 (e-book). LCCN HD45. URL http://link.springer.com/chapter/10.1007/978-3-319-48478-5_6.
- [MPC⁺23] Johnnatan Messias, Vabuk Pahari, Balakrishnan Chandrasekaran, Krishna P. Gummadi, and Patrick Loiseau. Dissecting bitcoin and Ethereum transactions: On the lack of transaction contention and prioritization transparency in blockchains. *CoRR*, ??(??):??, ??? 2023. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/corr/corr2302.html#abs-2302-06962>.
- [MPJ⁺13] Sarah Meiklejohn, Marjori Pomarole, Grant Jordan, Kirill Levchenko, Damon McCoy, Geoffrey M. Voelker, and Stefan Savage. A fistful of Bitcoins: Characterizing payments among men with no names. In *Proceedings of the 2013 Conference on Internet Measurement Conference*, IMC '13, pages 127–140. ACM Press, New York, NY 10036, USA, 2013. ISBN 1-4503-1953-X.
- [MPJ⁺16] Sarah Meiklejohn, Marjori Pomarole, Grant Jordan, Kirill Levchenko, Damon McCoy, Geoffrey M. Voelker, and Stefan Savage. A fistful of Bitcoins: characterizing payments among men with no names. *Communications of the ACM*, 59(4):86–93, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2016/4/200174/fulltext>.

- [MPSP17] **Marandi:2017:RPH** Parisa Jalili Marandi, Marco Primi, Nicolas Schiper, and Fernando Pedone. Ring Paxos: High-throughput atomic broadcast. *The Computer Journal*, 60(6): 866–882, June 1, 2017. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL <https://academic.oup.com/comjnl/article/60/6/866/3058780>.
- [MPSW19] **Maxwell:2019:SSM** Gregory Maxwell, Andrew Poelstra, Yannick Seurin, and Pieter Wuille. Simple Schnorr multi-signatures with applications to Bitcoin. *Designs, Codes, and Cryptography*, 87(9):2139–2164, September 2019. CODEN DCCREC. ISSN 0925-1022 (print), 1573-7586 (electronic). URL <https://link.springer.com/article/10.1007/s10623-019-00608-x>.
- [MRG18] **Malomo:2018:NGC** Olumide O. Malomo, Danda B. Rawat, and Moses Garuba. Next-generation cybersecurity through a blockchain-enabled federated cloud framework. *The Journal of Supercomputing*, 74(10): 5099–5126, October 2018. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic).
- [MRR⁺20] **Mohanty:2020:ELI** Sachi Nandan Mohanty, K. C. Ramya, S. Sheeba Rani, Deepak Gupta, K. Shankar, S. K. Lakshmanaprabu, and Ashish Khanna. An efficient Lightweight integrated Blockchain (ELIB) model for IoT security and privacy. *Future Generation Computer Systems*, 102(??):1027–1037, January 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19319843>.
- [MS15] **Montalcini:2015:DTT** Fabio Montalcini and Camillo Sacchetto. *Diritto tributario telematico*. G. Giappichelli Editore, Torino, 2015. ISBN 88-348-5539-6. xxx + 276 pp. LCCN KKH3558 .M668 2015.
- [MSA⁺22] **McCalman:2022:AAF** Lachlan McCalman, Daniel Steinberg, Grace Abuhamad, Marc-Etienne Brunet, Robert C. Williamson, and Richard Zemel. Assessing AI fairness in finance. *Computer*, 55(1):94–97, January 2022. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [MSC15] **Maxwell:2015:EIO** Deborah Maxwell, Chris Speed, and Dug Campbell.

- ‘Effing’ the ineffable: Opening up understandings of the blockchain. In *Proceedings of the 2015 British HCI Conference*, British HCI ’15, pages 208–209. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3643-4. URL <http://doi.acm.org/10.1145/2783446.2783593>. [MSMH21]
- McCorry:2015:AKE**
- [MSCH15] Patrick McCorry, Siamak F. Shahandashti, Dylan Clarke, and Feng Hao. Authenticated key exchange over Bitcoin. In *Security Standardisation Research*, pages 3–20. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-27152-0. URL http://link.springer.com/chapter/10.1007/978-3-319-27152-1_1. [MTR⁺21]
- McCorry:2017:RAB**
- [MSH17] Patrick McCorry, Siamak F. Shahandashti, and Feng Hao. Refund attacks on Bitcoin’s payment protocol. In Grossklags and Preneel [GP17b], pages 581–599. ISBN 3-662-54970-0. ISSN 0302-9743. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-54970-4_34. [Mue18]
- Modesti:2021:FMS**
- Paolo Modesti, Siamak F. Shahandashti, Patrick McCorry, and Feng Hao. Formal modelling and security analysis of Bitcoin’s payment protocol. *Computers & Security*, 107(??):Article 102279, August 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404821001036>.
- Melo:2021:FSF**
- Wilson S. Melo, Luiz V. G. Tarelho, Bruno A. Rodrigues, Alysson N. Bessani, and Luiz F. R. C. Carmo. Field surveillance of fuel dispensers using IoT-based metering and blockchains. *Journal of Network and Computer Applications*, 175(??):??, February 1, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303738>.
- Muehleemann:2018:SPD**
- Anton Muehleemann. Sentiment protocol: A decentralized protocol leveraging crowdsourced wisdom. *Ledger*, 3(??):??, 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/>

- ojs/index.php/ledger/article/view/113.
- [Muf16] Sead Muftic. BIX certificates: Cryptographic tokens for anonymous transactions based on certificates public ledger. *Ledger*, 1(??): 19–37, 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/27>.
- [Mul14a] P. Carl Mullan. Bitcoin challenges. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations*, pages 138–142. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_21.
- [Mul14b] P. Carl Mullan. Bitcoin decentralized virtual currency. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations*, pages 84–92. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_13.
- [Mul14c] P. Carl Mullan. Bitcoin differences. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations*, pages 102–110. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_16.
- [Mul14d] P. Carl Mullan. Bitcoin merchant services. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations*, pages 143–145. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_22.
- [Mul14e] P. Carl Mullan. Bitcoin mining. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Fi-*

nancial Regulations, pages 97–101. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_15. ■

Mullan:2014:BO

[Mul14f]

P. Carl Mullan. Bitcoin opportunity. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations*, pages 146–148. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_23. ■ [MWV⁺18]

Mullan:2014:EB

[Mul14g]

P. Carl Mullan. Early Bitcoin. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations*, pages 93–96. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_14. ■

Mullan:2014:GB

P. Carl Mullan. Global Bitcoin. In *The Digital Currency Challenge: Shaping Online Payment Systems through US Financial Regulations*, pages 131–137. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 1-137-38255-4. URL http://link.springer.com/chapter/10.1057/9781137382559_20. ■

Mendling:2018:BBP

Jan Mendling, Ingo Weber, Wil Van Der Aalst, Jan Vom Brocke and Cristina Cabanillas, Florian Daniel, Søren Debois, Claudio Di Ciccio, Marlon Dumas, Schahram Dustdar, Avigdor Gal, Luciano García-Bañuelos, Guido Governatori, Richard Hull, Marcello La Rosa, Henrik Leopold, Frank Leymann, Jan Recker, Manfred Reichert, Hajo A. Reijers, Stefanie Rinderle-Ma, Andreas Solti, Michael Rosemann, Stefan Schulte, Munindar P. Singh, Tijs Slaats, Mark Staples, Barbara Weber, Matthias Weidlich, Mathias Weske, Xiwei Xu, and Liming Zhu. Blockchains for business process management — challenges and opportunities. *ACM Transactions on*

Management Information Systems (TMIS), 9(1):4:1–4:??, February 2018. CODEN ???? ISSN 2158-656X (print), 2158-6578 (electronic).

Miller:2016:HBB

[MXC⁺16]

Andrew Miller, Yu Xia, Kyle Croman, Elaine Shi, and Dawn Song. The honey badger of BFT protocols. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security*, CCS '16, pages 31–42. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2978399>.

Ma:2022:BEF

[MXW22]

Xuyang Ma, Du Xu, and Katinka Wolter. Blockchain-enabled feedback-based combinatorial double auction for cloud markets. *Future Generation Computer Systems*, 127(??):225–239, February 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21003551>.

Martins:2011:IBP

[MY11]

Sergio Martins and Yang Yang. Introduction to Bitcoins: A pseudo-anonymous electronic currency system. In *Proceedings of*

the 2011 Conference of the Center for Advanced Studies on Collaborative Research, CASCON '11, pages 349–350. IBM Corporation, San Jose, CA, USA, 2011. URL <http://dl.acm.org/citation.cfm?id=2093889.2093944>.

Mukta:2022:SDM

[MyPLK22]

Rahma Mukta, Hye young Paik, Qinghua Lu, and Salil S. Kanhere. A survey of data minimisation techniques in blockchain-based healthcare. *Computer Networks (Amsterdam, Netherlands: 1999)*, 205(??):??, March 14, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128622000044>.

Miller:2019:ITA

[MYSZ19]

Nikolay Miller, Yiming Yang, Bruce Sun, and Guoyi Zhang. Identification of technical analysis patterns with smoothing splines for bitcoin prices. *Journal of Applied Statistics*, 46(12):2289–2297, December 2019. CODEN ???? ISSN 0266-4763 (print), 1360-0532 (electronic).

Morrow:2019:BTI

Monique J. Morrow and Mehran Zarrebini. Blockchain and the tokenization of the

[MZ19]

- individual: Societal implications. *Future Internet*, 11 (10):220, October 22, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/10/220>. [MZWX21]
- Makhdoom:2020:PBB**
- [MZA⁺20] Imran Makhdoom, Ian Zhou, Mehran Abolhasan, Justin Lipman, and Wei Ni. PrivySharing: a blockchain-based framework for privacy-preserving and secure data sharing in smart cities. *Computers & Security*, 88(?):Article 101653, January 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S016740481930197X>. [NAH15]
- Ma:2020:TBE**
- [MZLW20] Zhaofeng Ma, Weizhe Zhao, Shoushan Luo, and Lingyun Wang. Trusted-BaaS: Blockchain-enabled distributed and higher-level trusted platform. *Computer Networks (Amsterdam, Netherlands: 1999)*, 183(?):Article 107600, December 24, 2020. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128620312330>. [NAH16]
- Meng:2021:CBC**
- T. Meng, Y. Zhao, K. Wolter, and C.-Z. Xu. On consortium blockchain consistency: a queueing network model approach. *IEEE Transactions on Parallel and Distributed Systems*, 32 (6):1369–1382, 2021. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).
- Neudecker:2015:SMA**
- T. Neudecker, P. Andelfinger, and H. Hartenstein. A simulation model for analysis of attacks on the Bitcoin peer-to-peer network. In *2015 IFIP/IEEE International Symposium on Integrated Network Management (IM)*, pages 1327–1332. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2015. ISSN 1573-0077.
- Neudecker:2016:TAI**
- T. Neudecker, P. Andelfinger, and H. Hartenstein. Timing analysis for inferring the topology of the Bitcoin peer-to-peer network. In *2016 Intl IEEE Conferences on Ubiquitous Intelligence Computing, Advanced and Trusted Computing, Scalable Computing, Cloud and Big Data Computing, Internet of People,*

and Smart World Congress (UIC/ ATC/ ScalCom/ CBDCCom/ IoP/ Smart-World), pages 358–367. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, July 2016.

Nakamoto:2008:BPP

[Nak08a]

S. Nakamoto. Bitcoin: A peer-to-peer electronic cash system. Web document., 2008. URL <https://bitcoin.org/bitcoin.pdf>.

[Nar19]

Nakamoto:2008:RBP

[Nak08b]

S. Nakamoto. Re: Bitcoin P2P e-cash paper. Web document, 2008. URL <http://satoshi.nakamotoinstitute.org/emails/cryptography/11/>.

Nakamura:2018:CRU

[Nak18]

Yuji Nakamura. Coincheck to repay users who lost money in \$400 million hack. Web story, January 27, 2018. URL <https://www.bloomberg.com/news/articles/2018-01-27/coincheck-to-repay-customers-who-lost-money-in-400-million-hack>.

[NAR22a]

Nasir:2022:SBS

[NAK⁺22]

Muhammad Hassan Nasir, Junaid Arshad, Muhammad Mubashir Khan, Mahawish Fatima, Khaled

Salah, and Raja Jayaraman. Scalable blockchains — a systematic review. *Future Generation Computer Systems*, 126(??):136–162, January 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21002971>.

Narvaez:2019:UBB

Rafael Santiago Narvaez. Use of a blockchain based electronic data interchange framework for enabling automated merchant and sales tax data exchange between state and municipal governments of Puerto Rico to support sales tax evasion monitoring and supervision efforts. M.S.M.E., Polytechnic University of Puerto Rico, San Juan, Puerto Rico, 2019. 81 pp. URL <http://search.proquest.com/pqdtglobal/docview/2302689399>.

Naresh:2022:PSB

Vankamamidi S. Naresh, V. V. L. Divakar Allavarpu, and Sivaranjani Reddi. Provably secure blockchain privacy-preserving smart contract centric dynamic group key agreement for large WSN. *The Journal of Supercomputing*, 78 (6):8708–8732, April 2022. CODEN JOSUED. ISSN

- 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04175-8>.
Naresh:2022:PSS
- [NAR⁺22b] Vankamamidi S. Naresh, V. V. L. Divakar Allavarpu, Sivaranjani Reddi, Pilla Sita Rama Murty, N. V. S. Lakshmipathi Raju, and R. N. V. Jagan Mohan. A provably secure sharding based blockchain smart contract centric hierarchical group key agreement for large wireless ad-hoc networks. *Concurrency and Computation: Practice and Experience*, 34(3):e6553:1–e6553:??, February 1, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
Naviglia:2017:TER
- [Nav17] Jennifer Callen Naviglia. *The Technological, Economic and Regulatory Challenges of Digital Currency: an Exploratory Analysis of Federal Judicial Cases Involving Bitcoin*. D.Sc., Robert Morris University, Moon Township, PA, USA, 2017. 177 pp. URL <http://search.proquest.com/pqdtglobal/docview/2015186339>.
Narayanan:2016:BCT
- [NBF⁺16] Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, and Steven Goldfeder. *Bitcoin and cryptocurrency technologies: a comprehensive introduction*. Princeton University Press, Princeton, NJ, USA, 2016. ISBN 0-691-17169-6 (hardcover), 1-4008-8415-2 (e-book). xxvii + 304 pp. LCCN HG1710 .N35 2016. URL https://lopp.net/pdf/princeton_bitcoin_book.pdf.
Nerurkar:2021:SLM
- [NBP⁺21] Pranav Nerurkar, Sunil Bhirud, Dhiren R. Patel, Romaric Ludinard, Yann Busnel, and Saru Kumari. Supervised learning model for identifying illegal activities in bitcoin. *Appl. Intell.*, 51(6):3824–3843, ??? 2021. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/apin/apin51.html#NerurkarBPLBK21>.
Nair:2017:BEB
- Malavika Nair and Nicolás Cachanosky. Bitcoin and entrepreneurship: breaking the network effect. *The Review of Austrian Economics*, 30(3):263–275, July 2017. CODEN ??? ISSN 0889-3047 (print), 1573-7128 (electronic). URL <http://link.springer.com/article/10.1007/s11138-016-0348-x>.
Narayanan:2017:BAP
- Arvind Narayanan and

- Jeremy Clark. Bitcoin's academic pedigree. *Communications of the ACM*, 60 (12):36–45, December 2017. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2017/12/223058-bitcoins-academic-pedigree>
- [NCS17] Benedikt Notheisen, Jacob Benjamin Cholewa, and Arun Prasad Shanmugam. Trading real-world assets on blockchain. *Business & Information Systems Engineering*, 59(6):425–440, October 2017. CODEN ???? ISSN 1867-0202 (print), 2363-7005 (electronic). URL <http://link.springer.com/article/10.1007/s12599-017-0499-8>
- [NGHS17] Michael Nofer, Peter Gomber, Oliver Hinz, and Dirk Schiereck. Blockchain. *Business & Information Systems Engineering*, 59 (3):183–187, March 2017. CODEN ???? ISSN 1867-0202 (print), 2363-7005 (electronic). URL <http://link.springer.com/article/10.1007/s12599-017-0467-3>
- [NGS⁺19] Senthil Nathan, Chan-der Govindarajan, Adarsh Nathan:2017:TRW [NH17] [NCS17] [NHM16] [Nia19]
- Saraf, Manish Sethi, and Praveen Jayachandran. Blockchain meets database: design and implementation of a blockchain relational database. *Proceedings of the VLDB Endowment*, 12(11):1539–1552, July 2019. CODEN ???? ISSN 2150-8097.
- Neudecker:2017:CNI
- Till Neudecker and Hannes Hartenstein. Could network information facilitate address clustering in Bitcoin? In Jakobsson et al. [JRB⁺17], pages 155–169. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_9
- Neilson:2016:BFT
- David Neilson, Sukhvinder Hara, and Ian Mitchell. Bitcoin forensics: A tutorial. In *Global Security, Safety and Sustainability — The Security Challenges of the Connected World*, pages 12–26. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-51064-9. URL http://link.springer.com/chapter/10.1007/978-3-319-51064-4_2
- Niayeshpour:2019:EVB
- Farshad Niayeshpour. Engineering valuation of blockchain

technology in the context of petroleum supply chain: a real options approach. M.S., Iowa State University, Ames, IA, USA, [Nis16b] 2019. 68 pp. URL <http://search.proquest.com/pqdtglobal/docview/2306548695>.

Nichols:2017:NDH

[Nic17]

Shaun Nichols. NiceHash diced up by hackers, thousands of Bitcoin pilfered. Mining outfit says its entire wallet gone, estimated \$62m. *The Register*, ??(??):??, December 6, 2017. URL <http://www.bbc.com/news/technology-42275523>; <http://www.bleepingcomputer.com/news/security/largest-cryptocurrency-mining-market-nicehash-hacked/>; <http://www.theregister.co.uk/2017/12/06/nicehash-diced-up-by-hackers-thousands-of-bitcoin-pilfered/>; <http://www.wsj.com/articles/millions-may-be-missing-in-bitcoin-heist-1512625176>. [NML16]

Nishibe:2016:EMG

[Nis16a]

Makoto Nishibe. *The enigma of money: gold, central banknotes, and Bitcoin*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 981-10-1818-9 (print), 981-10-1819-7 (e-book). xiv + 93 + 3 pp. LCCN HB71-74; HG1272. URL <http://link.springer.com/10.1007/978-981-10-1819-0>. [NML19]

[/link.springer.com/10.1007/978-981-10-1819-0](http://link.springer.com/10.1007/978-981-10-1819-0).

Nishibe:2016:MSF

Makoto Nishibe. Money as the self-fulfillment of an idea: The difference between a Bank of Japan note and Bitcoin. In *The Enigma of Money*, pages 37–58. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 981-10-1819-7. URL http://link.springer.com/chapter/10.1007/978-981-10-1819-0_3.

Narayanan:2016:RPC

Arvind Narayanan, Andrew Miller, and Song Han. Research for practice: Cryptocurrencies, blockchains, and smart contracts; hardware for deep learning. *ACM Queue: Tomorrow's Computing Today*, 14(6):60:43–60:55, December 2016. CODEN AQCUAE. ISSN 1542-7730 (print), 1542-7749 (electronic). URL <http://doi.acm.org/10.1145/3028687.3043967>.

Norta:2019:SFB

Alex Norta, Raimundas Matulevicius, and Benjamin Leiding. Safeguarding a formalized blockchain-enabled identity-authentication protocol by applying security risk-oriented pat-

- terns. *Computers & Security*, 86(??):253–269, September 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818302670>. [Nor17b]
- [NMt16] Shen Noether, Adam Mackenzie, and the Monero Research Lab. Ring confidential transactions. *Ledger*, 1(??):1–18, ??? 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/34>. [Nor17c]
- [NNGV19] C. Narayanaswami, R. Nooyi, S. R. Govindaswamy, and R. Viswanathan. Blockchain anchored supply chain automation. *IBM Journal of Research and Development*, 63(2–3):7:1–7:11, March/May 2019. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic). [NOT15]
- [Nor17a] A. Nordrum. Govern by blockchain: Dubai wants one platform to rule them all, while Illinois will try anything. *IEEE Spectrum*, 54(10):54–55, October 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- Nordrum:2017:ITB**
- A. Nordrum. Is it time to become a blockchain developer? [resources careers]. *IEEE Spectrum*, 54(9):21, September 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- Nordrum:2017:WSO**
- A. Nordrum. Wall Street occupies the blockchain — financial firms plan to move trillions in assets to blockchains in 2018. *IEEE Spectrum*, 54(10):40–45, October 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- Norta:2015:CRL**
- Alex Norta, Anis Ben Othman, and Kuldar Taveter. Conflict-resolution lifecycles for governed decentralized autonomous organization collaboration. In *Proceedings of the 2015 2Nd International Conference on Electronic Governance and Open Society: Challenges in Eurasia*, EGOSE ’15, pages 244–257. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-4070-9. URL <http://doi.acm.org/10.1145/2846012.2846052>.
- Nordrum:2017:GBD**

- [Not19] **Notheisen:2019:EDM**
 Benedikt Notheisen. *Engineering Decentralized Markets — A Blockchain Approach*. Ph.D., Karlsruhe Institut für Technologie, Universität Karlsruhe (TH), Karlsruhe, Germany, 2019. URL <http://search.proquest.com/pqdtglobal/docview/2305779823>. ■
- [NPG⁺22] **Nerurkar:2021:DBB**
 Pranav Nerurkar, Dhiren Patel, Yann Busnel, Romaric Ludinard, Saru Kumari, and Muhammad Khuram Khan. Dissecting bitcoin blockchain: Empirical analysis of bitcoin network (2009–2020). *Journal of Network and Computer Applications*, 177(??):??, March 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303982>. ■
- [NPDS20] **Nguyen:2020:BBN**
 Dinh C. Nguyen, Pubudu N. Pathirana, Ming Ding, and Aruna Seneviratne. Blockchain for 5G and beyond networks: a state of the art survey. *Journal of Network and Computer Applications*, 166(??):??, September 15, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520301673>. ■
- Natgunanathan:2022:BBA**
 Iynkaran Natgunanathan, Purathani Praitheeshan, Longxiang Gao, Yong Xiang, and Lei Pan. Blockchain-based audio watermarking technique for multimedia copyright protection in distribution networks. *ACM Transactions on Multimedia Computing, Communications, and Applications*, 18(3):86:1–86:23, August 2022. CODEN ????? ISSN 1551-6857 (print), 1551-6865 (electronic). URL <https://dl.acm.org/doi/10.1145/3492803>. ■
- Norvill:2017:ALU**
 R. Norvill, B. B. Fiz Pontiveros, R. State, I. Awan, and A. Cullen. Automated labeling of unknown contracts in Ethereum. In *2017 26th International Conference on Computer Communication and Networks (ICCCN)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, July 2017. URL <http://ieeexplore.ieee.org/document/8038513/>. ■

- [NQ20] Pengxiang Ning and Boqin Qin. Stuck-me-not: A deadlock detector on blockchain software in Rust. *Procedia Computer Science*, 177:599–604, 2020. ISSN 1877-0509. URL <https://www.sciencedirect.com/science/article/pii/S1877050920323565>. [NSNF17]
- The 11th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2020) / The 10th International Conference on Current and Future Trends of Information and Communication Technologies in Healthcare (ICTH 2020) / Affiliated Workshops.
- [NRP⁺20] Karthik Nandakumar, Nalini Ratha, Sharath Pankanti, Alex Pentland, and Maurice Herlihy. Blockchain: From technology to marketplaces. *Computer*, 53(7): 14–18, July 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [NSB19] Ryunosuke Nagayama, Kazuyuki Shudo, and Ryohei Banno. Simulation of the bitcoin network considering compact block relay and internet improvements. *CoRR*, abs/1912.05208(??): ??, 2019. CODEN ????. ISSN ????. URL <http://arxiv.org/abs/1912.05208>; <https://dblp.org/db/journals/corr/corr1912.html#abs-1912-05208>.
- [NST⁺17] Bettina Nissen, Kate Symons, Ella Tallyn, Chris Speed, Deborah Maxwell, and John Vines. New value transactions: Understanding and designing for distributed autonomous organisations. In *Proceedings of the 2017 ACM Conference Companion Publication on Designing Interactive Systems*, DIS '17 Companion, pages 352–355. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4991-9. URL <http://doi.acm.org/10.1145/3098954.3098958>.
- [Neisse:2017:BBA] Ricardo Neisse, Gary Steri, and Igor Nai-Fovino. A blockchain-based approach for data accountability and provenance tracking. In *Proceedings of the 12th International Conference on Availability, Reliability and Security*, ARES '17, pages 14:1–14:10. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5257-X. URL <http://doi.acm.org/10.1145/3098954.3098958>.
- [Nissen:2017:NVT] Bettina Nissen, Kate Symons, Ella Tallyn, Chris Speed, Deborah Maxwell, and John Vines. New value transactions: Understanding and designing for distributed autonomous organisations. In *Proceedings of the 2017 ACM Conference Companion Publication on Designing Interactive Systems*, DIS '17 Companion, pages 352–355. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4991-9. URL <http://doi.acm.org/10.1145/3098954.3098958>.
- [Nagayama:2019:SBN] Ryunosuke Nagayama, Kazuyuki Shudo, and Ryohei Banno. Simulation of the bitcoin network considering compact block relay and internet improvements. *CoRR*, abs/1912.05208(??): ??, 2019. CODEN ????. ISSN ????. URL <http://arxiv.org/abs/1912.05208>; <https://dblp.org/db/journals/corr/corr1912.html#abs-1912-05208>.

- //doi.acm.org/10.1145/3064857.3064862.
- [NT21] **Nguyen:2021:BBI**
 Truc D. T. Nguyen and My T. Thai. A blockchain-based iterative double auction protocol using multi-party state channels. *ACM Transactions on Internet Technology (TOIT)*, 21(2): 39:1–39:22, June 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3389249> [NVE⁺21]
- [NTKS17] **Nakamura:2017:DPS**
 Toru Nakamura, Welder-ufael B. Tesfay, Shinsaku Kiyomoto, and Jetzabel Serna. Default privacy setting prediction by grouping user’s attributes and settings preferences. In Garcia-Alfaro et al. [GANAHHJ17], pages 107–123. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_7 [NVWF14]
- [NTRK22] **Nainani:2022:FRL**
 Jatin Nainani, Nirman Taterh, Md Ausaf Rashid, and Ankit Khivasara. Feature-rich long-term bitcoin trading assistant. *CoRR*, ??(?):??, ???? 2022.
- CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/corr/corr2209.html#abs-2209-12664>.
- Nguyen:2021:SBE**
 Gia Nhu Nguyen, Nin Ho Le Viet, Mohamed Elhoseny, K. Shankar, B. B. Gupta, and Ahmed A. Abd El-Latif. Secure blockchain enabled cyber-physical systems in healthcare using deep belief network with ResNet model. *Journal of Parallel and Distributed Computing*, 153(??):150–160, July 2021. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000642>
- Noyen:2014:WML**
 Kay Noyen, Dirk Volland, Dominic Wörner, and Elgar Fleisch. When money learns to fly: Towards sensing as a service applications using bitcoin. *CoRR*, ??(?):??, ???? 2014. CODEN ???? ISSN ???? URL <http://arxiv.org/abs/1409.5841>; <https://dblp.org/db/journals/corr/corr1409.html#NoyenVWF14>
- Niu:2020:IABa**
 Jianyu Niu, Ziyu Wang, Fangyu Gai, and Chen Feng. Incentive analy-

- sis of Bitcoin-NG, revisited. *Perform. Evaluation*, 144(??):102144, ??? 2020. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/pe/pe144.html#NiuWGF20>.
Niu:2020:IAB
- [NWGF20b] Jianyu Niu, Ziyu Wang, Fangyu Gai, and Chen Feng. Incentive analysis of Bitcoin-NG, revisited. *ACM SIGMETRICS Performance Evaluation Review*, 48(3):59–60, December 2020. CODEN ??? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dblp.org/db/journals/sigmetrics/sigmetrics48.html#NiuWGF20>; <https://dl.acm.org/doi/10.1145/3453953.3453966>. [OAB⁺17]
- Nosouhi:2020:BSL**
- [NYZ⁺20] Mohammad Reza Nosouhi, Shui Yu, Wanlei Zhou, Marthie Grobler, and Habiba Keshtiar. Blockchain for secure location verification. *Journal of Parallel and Distributed Computing*, 136(??):40–51, February 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S074373151930320X>. [OAS⁺21]
- Ojo:2017:BNG**
- [OA17] Adegboyega Ojo and Samuel Adebayo. Blockchain as a next generation government information infrastructure: A review of initiatives in D5 countries. In *Government 3.0 — Next Generation Government Technology Infrastructure and Services*, Public Administration and Information Technology, pages 283–298. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-63743-3_11.
- Ozisik:2017:GNP**
- A. Pinar Ozisik, Gavin Andresen, George Bissias, Amir Houmansadr, and Brian Levine. Graphene: A new protocol for block propagation using set reconciliation. In Garcia-Alfaro et al. [GANAHHJ17], pages 420–428. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_24.
- Oliveira:2021:ATC**
- Vinicius C. Oliveira, Julia Almeida Valadares, Jose Eduardo A. Sousa, Alex Borges Vieira, Heder Soares Bernardino, Saulo

- Moraes Villela, and Glauber Dias Goncalves. Analyzing transaction confirmation in Ethereum using machine learning techniques. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):12–15, May 2021. CODEN ????. ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3466826>. [OEO16]
- [OC16] David Orrell and Roman Chlupatý. *The evolution of money*. Columbia University Press, New York, NY, USA, 2016. ISBN 0-231-17372-5 (hardcover). 309 pp. LCCN HG231 .O77 2016. [Orrell:2016:EM]
- [O’C17] Russell O’Connor. Simplicity: A new language for blockchains. In *Proceedings of the 2017 Workshop on Programming Languages and Analysis for Security*, PLAS ’17, pages 107–120. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5099-2. URL <http://doi.acm.org/10.1145/3139337.3139340>. [OConnor:2017:SNL]
- [OdVP20] Pim Otte, Martijn de Vos, and Johan Pouwelse. TrustChain: a Sybil-resistant scalable blockchain. *Future Genera-* [OF15]
- tion Computer Systems*, 107(??):770–780, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17318988>. [Ouaddah:2016:TNP]
- Aafaf Ouaddah, Anas Abou Elkalam, and Abdellah Ait Ouahman. Towards a novel privacy-preserving access control model based on blockchain technology in IoT. In *Advances in Intelligent Systems and Computing*, pages 523–533. Springer International Publishing, ???, September 2016. [Ouaddah:2017:TNP]
- Aafaf Ouaddah, Anas Abou Elkalam, and Abdellah Ait Ouahman. Towards a novel privacy-preserving access control model based on blockchain technology in IoT. In *Europe and MENA Cooperation Advances in Information and Communication Technologies*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-46568-5_53. [Oswald:2015:ACE]
- Elisabeth Oswald and Marc

- Fischlin, editors. *Advances in Cryptology — EURO-CRYPT 2015: 34th Annual International Conference on the Theory and Applications of Cryptographic Techniques, Sofia, Bulgaria, April 26–30, 2015, Proceedings, Part II*, volume 9057 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-662-46802-6 (print), 3-662-46803-4 (e-book). LCCN QA76.9.A25. URL <http://www.springerlink.com/content/978-3-662-46803-6>. [ØJ17]
- [OFA22] John Joseph O’Hare, Allen Fairchild, and Umrán Ali. Money and trust in metaverses, bitcoin and stablecoins in global social XR. *CoRR*, ??(??):??, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/corr/corr2207.html#abs-2207-09460>. **OHare:2022:MTM**
- [OHJ20] Gustavo A. Oliva, Ahmed E. Hassan, and Zhen Ming (Jack) Jiang. An exploratory study of smart contracts in the Ethereum blockchain platform. *Empirical Software Engineering*, 25(3):1864–1904, May 2020. CO-DEN ESENFV. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <http://link.springer.com/article/10.1007/s10664-019-09796-5>. **Olnes:2017:BTS**
- Svein Ølnes and Arild Jansen. Blockchain technology as support infrastructure in e-government. In *Electronic Government, Lecture Notes in Computer Science*, pages 215–227. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-64677-0_18. **Ober:2013:SAB**
- Micha Ober, Stefan Katzenbeisser, and Kay Hamacher. Structure and anonymity of the Bitcoin transaction graph. *Future Internet*, 5(2):237–250, ??? 2013. ISSN 1999-5903. URL <http://www.mdpi.com/1999-5903/5/2/237>. **Olenick:2018:LCM**
- Doug Olenick. Legal cryptocurrency mining operation’s power draw creates concern. SC Magazine Web article., March 6, 2018. URL <https://www.scmagazine.com/legal-cryptocurrency-mining-operations-power-draw->

- creates-concern/article/749118/.
- [Øln16] Svein Ølnes. Beyond Bitcoin enabling smart government using blockchain technology. In *Electronic Government*, Lecture Notes in Computer Science, pages 253–264. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-44421-2. URL http://link.springer.com/chapter/10.1007/978-3-319-44421-5_20.
- [Olu21] Oluwafemi Olukoya. Distilling blockchain requirements for digital investigation platforms. *Journal of Information Security and Applications (JISA)*, 62(??):??, November 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621001800>.
- [OM14] K. J. O'Dwyer and D. Malone. Bitcoin mining and its energy footprint. In *25th IET Irish Signals Systems Conference 2014 and 2014 China-Ireland International Conference on Information and Communications Technologies (ISSC 2014/CICT 2014)*, pages 280–285. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2014.
- [OO91] Tatsuaki Okamoto and Kazuo Ohta. Universal electronic cash. *Lecture Notes in Computer Science*, 576:324–??, 1991. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL <http://link.springer-ny.com/link/service/series/0558/bibs/0576/05760324.htm>; <http://link.springer-ny.com/link/service/series/0558/papers/0576/05760324.pdf>.
- [ODonovan:2019:SAR] Peter O'Donovan and Dominic T. J. O'Sullivan. A systematic analysis of real-world energy blockchain initiatives. *Future Internet*, 11(8):174, August 10, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/8/174>.
- [OLeary:2017:EAB] Kevin O'Leary, Philip O'Reilly, Joseph Feller, Rob Gleasure, Shanping Li, and Jerry Cristoforo. Exploring the application of blockchain technology to

- combat the effects of social loafing in cross functional group projects. In *Proceedings of the 13th International Symposium on Open Collaboration*, OpenSym '17, pages 13:1–13:8. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5187-5. URL <http://doi.acm.org/10.1145/3125433.3125464>.
- [OR17] Olaf Owe and Toktam Ramezanifarkhani. Confidentiality of interactions in concurrent object-oriented systems. In Garcia-Alfaro et al. [GANAHHJ17], pages 19–34. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_2.
- [Ort16] Matteo Ortisi. Bitcoin market volatility analysis using grand canonical minority game. *Ledger*, 1(??): 111–118, ??? 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/61>.
- [Osb18a] Charlie Osborne. Hacker returns 20,000 ETH stolen during CoinDash ICO: Cryptocurrency stolen from the platform during an ICO has reappeared as mysteriously as the attacker’s apparent conscience. Web article., February 26, 2018. URL <http://www.zdnet.com/article/hacker-returns-20000-eth-stolen-during-coindash-ico/>.
- [Osb18b] Charlie Osborne. Venezuela’s Petro cryptocurrency raises \$735 million at launch, perhaps. Web article., February 21, 2018. URL <http://www.zdnet.com/article/venezuelas-petro-cryptocurrency-raises-735-million-at-launch/>. Opinion: Presidential promises are not enough to disguise the lack of planning for the oil-backed coin.
- [OTS⁺21] Catarina Oliveira, João Torres, Maria Inês Silva, David Aparício, João Tiago Ascensão, and Pedro Bizarro. GuiltyWalker: Distance to illicit nodes in the bitcoin network. *CoRR*, ??(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2102.05373>; <https://dblp.org/db/journals/corr/corr2102.html#abs-2102-05373>.

- [ÖY17] **Ozyilmaz:2017:ILP** Kazım Rifat Özyilmaz and Arda Yurdakul. Integrating low-power IoT devices to a blockchain-based infrastructure: Work-in-progress. In *Proceedings of the Thirteenth ACM International Conference on Embedded Software 2017 Companion*, EM-SOFT '17, pages 13:1–13:2. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5186-7. URL <http://doi.acm.org/10.1145/3125503.3125628>. [Pan96]
- [OZ16] **Olleros:2016:RHD** F. Xavier Olleros and Majlinda Zhegu, editors. *Research Handbook on Digital Transformations*. Edward Elgar Publishing, Cheltenham, UK, 2016. ISBN 1-78471-775-4 (hardcover), 1-78471-776-2 (e-book). xi + 461 pp. LCCN HM851 .R465 2016.
- [P16] **Perez-Marco:2016:BDT** Ricardo Pérez-Marco. Bitcoin and decentralised trust protocols. *European Mathematical Society. Newsletter*, 100:31–38, 2016. ISSN 1027-488X. [Pan18]
- [Pal18] **Palmer:2018:CMT** Danny Palmer. ComboJack malware tries to steal your cryptocurrency by changing the data in your clipboard this newly uncovered malware is delivered by phishing emails — and hopes users don't bother to check which wallet they sending money to. ZDNet Web story., March 6, 2018. URL <http://www.zdnet.com/article/combojack-malware-tries-to-steal-your-cryptocurrency-by-changing-the-data-in-your-clipboard/>.
- Panurach:1996:MEC** Patiwat Panurach. Money in electronic commerce: digital cash, electronic fund transfer, and Ecash. *Communications of the ACM*, 39 (6):45–50, June 1996. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://www.acm.org/pubs/toc/Abstracts/0001-0782/228512.html>; <http://www.acm.org/pubs/toc/Abstracts/cacm/228512.html>.
- Panesir:2018:BAD** Mohit Singh Panesir. Blockchain applications for disaster management and national security. M.S., State University of New York at Buffalo, Buffalo, NY, USA, 2018. 115 pp. URL <http://search.proquest.com/pqdtglobal/docview/2057242991>.
- Pass:2015:MDC** Rafael Pass and abhi she-

- lat. Micropayments for decentralized currencies. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security, CCS '15*, pages 207–218. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1. [PB17]
- [PASA22] Navid Parvini, Mahsa Abdollahi, Sattar Seifollahi, and Davood Ahmadian. Forecasting bitcoin returns with long short-term memory networks and wavelet decomposition: a comparison of several market determinants. *Appl. Soft Comput.*, 121(??):108707, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/asc/asc121.html#ParviniASA22>.
- [Pav18] John Pavlus. The world Bitcoin created: The first big digital currency gave us a glimpse of a new economic order — one that raises more questions than it answers. *Scientific American*, 318(1):32–37, January 2018. CODEN SCAMAC. ISSN 0036-8733 (print), 1946-7087 (electronic). URL <http://www.nature.com/scientificamerican/journal/v318/n1/full/scientificamerican0118-32.html>; <http://www.nature.com/scientificamerican/>
- <http://www.nature.com/scientificamerican0118-32.pdf>.
- Pesch:2017:DTO**
- Paulina Pesch and Rainer Böhme. Datenschutz trotz öffentlicher Blockchain?. (German) [Privacy despite public block chain?]. *Datenschutz und Datensicherheit — DuD*, 41(2):93–98, February 2017. CODEN ??? ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0735-x>.
- Pillai:2021:BCA**
- Babu Pillai, Kamanashis Biswas, Zhé Hóu, and Valipuram Muthukkumarasamy. Burn-to-claim: an asset transfer protocol for blockchain interoperability. *Computer Networks (Amsterdam, Netherlands: 1999)*, 200(??):??, December 9, 2021. CODEN ??? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004369>.
- Priyadharshini:2021:LCC**
- K. Priyadharshini and R. Aroul Canessane. Light chain consensus reinforcement machine learning: an effective blockchain model for Internet of Things using for its advancement

and challenges. *Computational Intelligence*, 37(4): 1651–1672, November 2021. CODEN COMIE6. ISSN 0824-7935 (print), 1467-8640 (electronic).

Palit:2022:ABB

- [PCC22] Sudip Kumar Palit, Mohuya Chakraborty, and Subhalaxmi Chakraborty. AUGChain: blockchain-based mobile user authentication scheme in global mobility network. *The Journal of Supercomputing*, 78(5):6788–6816, April 2022. [PCP20] CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04139-y>.

Paquet-Clouston:2019:RPB

- [PCHD19] Masarah Paquet-Clouston, Bernhard Haslhofer, and Benoit Dupont. Ransomware payments in the bitcoin ecosystem. *J. Cybersecur.*, 5(1):tyz003, 2019. CODEN 2019. ISSN 2019. URL <https://dblp.org/db/journals/cybersecurity/cybersecurity5.html#Paquet-Clouston19>. [PDJ22]

Powell:2021:PPS

- [PCM⁺21] Warwick Powell, Shoufeng Cao, Thomas Miller, Marcus Foth, Xavier Boyen, Barry Earsman, Santiago del Valle, and Charles

Turner-Morris. From premise to practice of social consensus: How to agree on common knowledge in blockchain-enabled supply chains. *Computer Networks (Amsterdam, Netherlands: 1999)*, 200(??):??, December 9, 2021. CODEN 2021. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004606>.

Phillip:2020:GBS

Andrew Phillip, Jennifer Chan, and Shelton Peiris. On generalized bivariate Student-*t* Gegenbauer long memory stochastic volatility models with leverage: Bayesian forecasting of cryptocurrencies with a focus on Bitcoin. *Econometrics and Statistics*, 16(??):69–90, October 2020. CODEN 2020. ISSN 2452-3062. URL <http://www.sciencedirect.com/science/article/pii/S2452306218300753>.

Pal:2022:BIA

Shantanu Pal, Ali Dorri, and Raja Jurdak. Blockchain for IoT access control: Recent trends and future research directions. *Journal of Network and Computer Applications*, 203(??):??, July 2022. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (elec-

- tronic). URL <http://www.sciencedirect.com/science/article/pii/S10848045163000352>.
- [PdWWS16] Marloes Pomp, Maarten-Jan de Wit, Jorrit Wigchert, and Irene Schoemakers. Blockchains: op weg naar geautomatiseerd vertrouwen. (Dutch) [Blockchains: on the road to automated trust]. *HEADline*, 33(4):14–16, October 2016. CODEN ????. URL <http://link.springer.com/article/10.1007/s40739-016-0042-x>.
- [Pec12] Morgan E. Peck. The cryptoanarchists’ answer to cash. *IEEE Spectrum*, 49(6):50–56, June 2012. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Pec13] M. E. Peck. The Bitcoin arms race is on! *IEEE Spectrum*, 50(6):11–13, June 2013. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Pec15] M. E. Peck. Bitcoin needs to get its act together [news]. *IEEE Spectrum*, 52(11):9–11, November 2015. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Pec17a] Morgan E. Peck. A blockchain currency that beat’s Bitcoin on privacy [news]. *IEEE Spectrum*, 53(12):11–13, December 2016. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Pec17b] Morgan E. Peck. Blockchain world — do you need a blockchain? This chart will tell you if the technology can solve your problem. *IEEE Spectrum*, 54(10):38–60, October 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Peo13] People’s Bank of China and Five Associated Ministries. Prevention of risks associated with Bitcoin. Web document., 2013. URL <https://vip.btcchina.com/page/bocnotice2013>.

- [Per09] **Percival:2009:SKD**
Colin Percival. Stronger key derivation via sequential memory-hard functions. Web document, May 2009. URL <https://www.tarsnap.com/scrypt/scrypt.pdf>. This is the origin of the scrypt proof-of-work function that is used in Litecoin (LTC). [PF18]
- [Per17] **Perlman:2017:BHH**
Radia Perlman. Blockchain: Hype or hope? *login: the USENIX Association newsletter*, 42(2):??, Summer 2017. CODEN LOGNEM. ISSN 1044-6397. URL <https://www.usenix.org/publications/login/summer2017/perlman>. [PGS⁺21]
- [Per20] **Perry:2020:AVY**
Tekla S. Perry. AR/VR is this year’s hot ticket for jobs: But growth in demand for blockchain developers stutters — [careers]. *IEEE Spectrum*, 57(4):19, 2020. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Per22] **Perry:2022:BWM**
Tekla S. Perry. A bitcoin wallet for the masses: Square simplified credit-card transactions. now it wants to build cryptocurrency hardware. *IEEE Spectrum*, 59(1):42–43, January 2022. CODEN
- IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- Pixley:2018:CJM**
Jocelyn Pixley and Helena Flam, editors. *Critical junctures in mobile capital*. Cambridge University Press, Cambridge, UK, 2018. ISBN 1-107-18951-9 (hardcover), 1-316-63914-2 (paperback). ??? pp. LCCN HG3891 .C75 2018.
- Paul:2021:BBS**
Rourab Paul, Nimisha Ghosh, Suman Sau, Amilan Chakrabarti, and Prasant Mohapatra. Blockchain based secure smart city architecture using low resource IoTs. *Computer Networks (Amsterdam, Netherlands: 1999)*, 196(??):??, September 4, 2021. CODEN ??? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621002759>.
- Portnoff:2017:BBU**
Rebecca S. Portnoff, Danny Yuxing Huang, Periwinkle Doerfler, Sadia Afroz, and Damon McCoy. Backpage and Bitcoin: Uncovering human traffickers. In *Proceedings of the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, KDD

'17, pages 1595–1604. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4887-4. URL <http://doi.acm.org/10.1145/3097983.3098082>.

Patil:2020:EPP

[PHH⁺20]

Akash Suresh Patil, Rafik Hamza, Alzubair Hassan, Nan Jiang, Hongyang Yan, and Jin Li. Efficient privacy-preserving authentication protocol using PUFs with blockchain smart contracts. *Computers & Security*, 97(?):Article 101958, October 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820302340>.

[Pie20]

fair smart contract casinos. *Ledger*, 1(?):99–110, 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/29>.

Pierro:2020:ORE

Giuseppe Antonio Pierro. An organized repository of Ethereum smart contracts' source codes and metrics. *Future Internet*, 12(11):197, November 15, 2020. CODEN 2020-5903. URL <https://www.mdpi.com/1999-5903/12/11/197>.

Pilkington:2016:BTP

Marc Pilkington. Blockchain technology: principles and applications. In Olleros and Zhegu [OZ16], pages 225–253. ISBN 1-78471-775-4 (hardcover), 1-78471-776-2 (e-book). LCCN HM851 .R465 2016.

Pal:2019:UBP

[PHRH21]

Shantanu Pal, Ambrose Hill, Tahiry Rabehaja, and Michael Hitchens. A blockchain-based trust management framework with verifiable interactions. *Computer Networks (Amsterdam, Netherlands: 1999)*, 200(?):??, December 9, 2021. CODEN 2021-1389 ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004436>.

[PK19]

A. Pal and K. Kant. Using blockchain for provenance and traceability in Internet of Things-integrated food logistics. *Computer*, 52(12):94–98, December 2019. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

Piasecki:2016:GSC

[Pia16]

Piotr J. Piasecki. Gaming self-contained provably

[PK21]

Prashanth Podili and Kotaro Kataoka. TRAQR:

Podili:2021:TTA

- Trust aware End-to-End QoS routing in multi-domain SDN using Blockchain. *Journal of Network and Computer Applications*, 182 (??):??, May 15, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521000795>. **Pon:2022:BBC**
- [PK22] Partheeban Pon and Kavitha V. Blockchain based cloud service security architecture with distributed machine learning for smart device traffic record transaction. *Concurrency and Computation: Practice and Experience*, 34(3):e683:1–e683:??, February 1, 2022. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). **Perelgut:2016:HIY**
- [PL16] Stephen Perelgut and Collette Lacroix. Hands-on: Implement your first blockchain solution. In *Proceedings of the 26th Annual International Conference on Computer Science and Software Engineering*, CASCON '16, page 350. IBM Corporation, San Jose, CA, USA, 2016. URL <http://dl.acm.org/citation.cfm?id=3049877.3049937>. **Pandey:2020:SAH**
- [PL20] Prateek Pandey and Ratanesh Litoriya. Securing and authenticating healthcare records through blockchain technology. *Cryptologia*, 44(4):341–356, 2020. CODEN CRYPE6. ISSN 0161-1194 (print), 1558-1586 (electronic). URL <http://www.tandfonline.com/doi/full/10.1080/01611194.2019.1706060>. **Platzer:2013:BKG**
- Jörg Platzer. *Bitcoin — kurz und gut. (German) [Bitcoin — short and good]*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2013. ISBN 3-95561-650-9 (print), 3-95561-653-3. 204 pp. LCCN HG1710 .P53 2014. **Padon:2017:PME**
- [PLSS17] Oded Padon, Giuliano Losa, Mooly Sagiv, and Sharon Shoham. Paxos made EPR: decidable reasoning about distributed protocols. *Proceedings of the ACM on Programming Languages (PACMPL)*, 1 (OOPSLA):108:1–108:??, October 2017. CODEN ???? ISSN 2475-1421. **Peck:2017:BB**
- [PM17] Morgan E. Peck and Samuel K. Moore. The blos-

soming of the blockchain. *IEEE Spectrum*, 54(10):24–25, October 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).

Pele:2019:UHF

[Pop15]

- [PMMP19] Daniel Traian Pele and Miruna Mazurencu-Marinescu. Pele. Using high-frequency entropy to forecast bitcoin’s daily value at risk. *Entropy*, 21(2):102, ??? 2019. CODEN ENTRFG. ISSN ??? URL <https://dblp.org/db/journals/entropy/entropy21.html#PeleM19>; <https://www.wikidata.org/entity/Q103832669>.

Putz:2019:SAL

- [PMP19] Benedikt Putz, Florian Menges, and Günther Pernul. A secure and auditable logging infrastructure based on a permissioned blockchain. *Computers & Security*, 87(??): Article 101602, November 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818313907>.

Poelstra:2014:DCP

- [Poe14] Andrew Poelstra. Distributed consensus from proof of stake is impossible. Web blog, May 28, 2014. URL <https://>

www.smithandcrown.com/open-research/distributed-consensus-from-proof-of-stake-is-impossible/.

Popper:2015:DGB

Nathaniel Popper. *Digital gold: Bitcoin and the inside story of the misfits and millionaires trying to reinvent money*. Harper, New York, NY, 2015. ISBN 0-06-236249-6 (hardcover). xv + 398 pp. LCCN HG1710 .P68 2015.

Popov:2016:PAN

Serguei Popov. A probabilistic analysis of the Nxt forging algorithm. *Ledger*, 1(??):69–83, ??? 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/46>.

Popper:2016:DGB

Nathaniel Popper. *Digital gold: Bitcoin and the inside story of the misfits and millionaires trying to reinvent money*. Harper, New York, NY, USA, 2016. ISBN 0-06-236250-X (paperback). xv + 412 pp. LCCN HG1710 .P68 2016.

Popper:2017:BSI

Nathaniel Popper. As Bitcoin scrapes \$10,000, an investment boom like no other. *New York*

- Times*, ??(?):??, November 27, 2017. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2017/11/27/technology/bitcoin-price-10000.html>. [Pou20]
- [Pop17b] **Popper:2017:HWT**
Nathaniel Popper. How the Winklevoss twins found vindication in a Bitcoin fortune. *New York Times*, ??(?):??, December 19, 2017. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2017/12/19/technology/bitcoin-winklevoss-twins.html>.
- [Pop18a] **Popper:2018:TNV** [PP16]
Nathaniel Popper. There is nothing virtual about Bitcoin's energy appetite. *New York Times*, ??(?):??, January 21, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/21/technology/bitcoin-mining-energy-consumption.html>.
- [Pop18b] **Popper:2018:VBB**
Nathaniel Popper. The view from the Bitcoin bubble. *New York Times*, ??(?):??, January 22, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/22/technology/bitcoin-bubble.html>. [PPMT17]
- Pournaras:2020:PWP**
Evangelos Pournaras. Proof of witness presence: Blockchain consensus for augmented democracy in smart cities. *Journal of Parallel and Distributed Computing*, 145(??):160–175, November 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520303282>.
- Peters:2016:UMB**
Gareth W. Peters and Efsthios Panayi. Understanding modern banking ledgers through blockchain technologies: Future of transaction processing and smart contracts on the Internet of Money. In *Banking Beyond Banks and Money*, pages 239–278. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-42448-4_13.
- Porru:2017:BOS**
Simone Porru, Andrea Pinna, Michele March-

- esi, and Roberto Tonelli. Blockchain-oriented software engineering: Challenges and new directions. In *Proceedings of the 39th International Conference on Software Engineering Companion*, ICSE-C '17, pages 169–171. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5386-1589-4. [PR16]
- [PPR⁺20] Rafael Páez, Manuel Pérez, Gustavo Ramírez, Juan Montes, and Lucas Bouvarel. An architecture for biometric electronic identification document system based on blockchain. *Future Internet*, 12(1):10, January 11, 2020. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/1/10>. [PR21]
- [PPW⁺15] Michal Polasik, Anna Iwona Piotrowska, Tomasz Piotr Wisniewski, Radoslaw Kotkowski, and Geoffrey Lightfoot. Price fluctuations and the use of bitcoin: an empirical inquiry. *Int. J. Electron. Commer.*, 20(1):9–49, ????. 2015. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/ijecommerce/ijecommerce20.html#PolasikPWKL15>; [Pro13]
- Paez:2020:ABE**
- Pinzon:2016:DSA**
- Carlos Pinzón and Camilo Rocha. Double-spend attack models with time advantage for Bitcoin. In *CLEI 2016—The Latin American Computing Conference*, volume 329 of *Electron. Notes Theor. Comput. Sci.*, pages 79–103. Elsevier Sci. B. V., Amsterdam, 2016.
- Panja:2021:SEE**
- Somnath Panja and Bimal Roy. A secure end-to-end verifiable e-voting system using blockchain and cloud server. *Journal of Information Security and Applications (JISA)*, 59(??):??, June 2021. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000557>■
- Province:2013:BRB**
- Jay Province. *Bitcoin rising: beginner's guide to Bitcoin*. CreateSpace, ????, USA, 2013. ISBN 1-4948-5944-0 (paperback). iii + 33 pp. LCCN HF5548.32 .P76 2013.
- Province:2014:BRB**
- Jay Province. *Bitcoin rising: beginner's guide to Bitcoin*. CreateSpace, ????,

- USA, 2014. ISBN 1-4948-5944-0 (paperback). 33 pp. LCCN HF5548.32 .P76 2013.
- Prinz:2018:B**
- [PRO⁺18] Prof.Dr.Wolfgang Prinz, Prof.Dr.Thomas Rose, Prof.Dr.Thomas Osterland, Prof.Dr.Clemens Putschli, Thomas Osterland, and Clemens Putschli. Blockchain. In *Digitalisierung*, pages 311–319. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-662-55890-4_18.
- Pinto:2022:BDC**
- [PRS22] Flavio Pinto, Yogachandran Rahulamathavan, and James Skinner. Blockchain for doping control applications in sports: A conceptual approach. *Future Internet*, 14(7):210, July 14, 2022. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/7/210>.
- Perez-Sola:2016:PBT**
- [PS16] Jordi Herrera-Joancomartí and Cristina Pérez-Solà. Privacy in Bitcoin transactions: New challenges from blockchain scalability solutions. In *Modeling Decisions for Artificial Intelligence*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-45656-0_3.
- Pass:2017:FFB**
- Rafael Pass and Elaine Shi. FruitChains: A fair blockchain. In *Proceedings of the ACM Symposium on Principles of Distributed Computing*, PODC '17, pages 315–324. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4992-7. URL <http://doi.acm.org/10.1145/3087801.3087809>.
- Pirlea:2018:MBC**
- George Pirlea and Ilya Sergey. Mechanising blockchain consensus. In *Proceedings of the 7th ACM SIGPLAN International Conference on Certified Programs and Proofs*, CPP 2018, pages 78–90. ACM Press, New York, NY 10036, USA, 2018. ISBN 1-4503-5586-2. URL <http://doi.acm.org/10.1145/3167086>.
- Perez-Sola:2019:DSP**
- Cristina Pérez-Solà, Sergi Delgado-Segura, Guillermo Navarro-Arribas, and Jordi Herrera-Joancomartí. Double-spending prevention for Bitcoin zero-confirmation transactions. *International Journal of Information Security*, 18(4):

- 451–463, August 2019. CODEN ??? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-018-0422-4>.
- Przytarski:2022:QPB**
- [PSGM22] Dennis Przytarski, Christoph Stach, Clémentine Gritti, and Bernhard Mitschang. Query processing in blockchain systems: Current state and future challenges. *Future Internet*, 14(1):1, December 21, 2022. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/1/1>.
- Prybila:2020:RVB**
- [PSHW20] Christoph Prybila, Stefan Schulte, Christoph Hochreiner, and Ingo Weber. Runtime verification for business processes utilizing the Bitcoin blockchain. *Future Generation Computer Systems*, 107(??):816–831, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X1731837X>.
- Pass:2017:ABP**
- [PSS17] Rafael Pass, Lior Seeman, and Abhi Shelat. Analysis of the blockchain protocol in asynchronous networks. In Jesper Buus Nielsen and Jean-Sébastien Coron, editors, *Advances in cryptology — EUROCRYPT 2017: 36th Annual International Conference on the Theory and Applications of Cryptographic Techniques, Paris, France, April 30–May 4, 2017, proceedings*, Lecture Notes in Computer Science, pages 643–673. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-56614-8. LCCN QA76.9.A25 .E97 2017eb. URL http://link.springer.com/chapter/10.1007/978-3-319-56614-6_22.
- Polap:2021:AAI**
- [PSY21] Dawid Połap, Gautam Srivastava, and Keping Yu. Agent architecture of an intelligent medical system based on federated learning and blockchain technology. *Journal of Information Security and Applications (JISA)*, 58(??):??, May 2021. CODEN ??? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000016>.
- Patil:2017:FBB**
- Akash Suresh Patil, Bayu Adhi Tama, Youngho Park, and Kyung-Hyune Rhee. A framework for blockchain based secure smart green house farming. In *Advances in Computer Science*

- and Ubiquitous Computing*, pages 1162–1167. Springer Singapore, December 2017.
- [PTPR18] Akash Suresh Patil, Bayu Adhi Tama, Youngho Park, and Kyung-Hyune Rhee. A framework for blockchain based secure smart green house farming. In *Advances in Computer Science and Ubiquitous Computing*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-981-10-7605-3_185.
- [PW17a] Morgan E. Peck and David Wagman. Energy trading for fun and profit buy your neighbor’s rooftop solar power or sell your own — it’ll all be on a blockchain. *IEEE Spectrum*, 54(10):56–61, October 2017. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [PW17b] Cécile Pierrot and Benjamin Wesolowski. Malleability of the blockchain’s entropy. *Cryptography and Communications*, 10(1):211–233, November 2017. CODEN ??? URL <http://link.springer.com/article/10.1007/s12095-017-0264-3>.
- [PYC21] Yangheran Piao, Kai Ye, and Xiaohui Cui. A data sharing scheme for GDPR-compliance based on consortium blockchain. *Future Internet*, 13(8):217, August 21, 2021. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/8/217>.
- [PZZ⁺20] Cesare Pautasso, Olaf Zimmermann, Liming Zhu, Thomas Bocek, and Xavier Larrucea. Unchain or block the hype?: Decision drivers, success factors, and perspectives for blockchain adoption. *IEEE Software*, 37(5):97–103, September/October 2020. CODEN IESOEG. ISSN 0740-7459 (print), 1937-4194 (electronic).
- [QFLM17] Renming Qi, Chen Feng, Zheng Liu, and Nezih Mrad. Blockchain-powered Internet of Things, e-governance and e-democracy. In *E-Democracy for Smart Cities*, pages 509–520. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL <http://link.springer.com/chapter/>

- 10.1007/978-981-10-4035-1_17.
- Qi:2021:PPB**
- [QHNL21] Yuanhang Qi, M. Shamim Hossain, Jiangtian Nie, and Xuandi Li. Privacy-preserving blockchain-based federated learning for traffic flow prediction. *Future Generation Computer Systems*, 117(??):328–337, April 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X2033065X>.
- Qin:2020:CDP**
- [QHW⁺20] Bo Qin, Jikun Huang, Qin Wang, Xizhao Luo, Bin Liang, and Wenchang Shi. Cecoin: a decentralized PKI mitigating MitM attacks. *Future Generation Computer Systems*, 107(??):805–815, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17318381>.
- Qiu:2022:AMP**
- [QL22] Hao Qiu and Tong Li. Auction method to prevent bidding strategies in mobile blockchain edge computing resource allocation. *Future Generation Computer Systems*, 128(??):1–15, March 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21003770>.
- Qu:2019:STB**
- [QNM⁺19] Qiang Qu, Ildar Nurgaliev, Muhammad Muzammal, Christian S. Jensen, and Jianping Fan. On spatio-temporal blockchain query processing. *Future Generation Computer Systems*, 98(??):208–218, September 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18314213>.
- Qu:2023:BEF**
- Youyang Qu, Md Palash Uddin, Chenquan Gan, Yong Xiang, Longxiang Gao, and John Yearwood. Blockchain-enabled federated learning: a survey. *ACM Computing Surveys*, 55(4):70:1–70:??, May 2023. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3524104>.
- Qu:2021:EFPP**
- [QXC⁺21] Qian Qu, Ronghua Xu, Yu Chen, Erik Blasch, and Alexander Aved. Enable fair proof-of-work (PoW) consensus for blockchains

- in IoT by Miner Twins (MinT). *Future Internet*, 13(11):291, November 19, 2021. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/11/291>.
- Rajput:2015:SYE**
- [RAH⁺15] Ubaidullah Rajput, Fizza Abbas, Rasheed Hussain, Hasoo Eun, and Heekuck Oh. A simple yet efficient approach to combat transaction malleability in Bitcoin. In *Information Security Applications*, pages 27–37. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-15087-1. URL http://link.springer.com/chapter/10.1007/978-3-319-15087-1_3.
- Raj:2018:BTP**
- [Raj18] Pethuru Raj, editor. *Blockchain technology: platforms, tools and use cases*, volume 111 of *Advances in computers*. Academic Press, New York, NY, USA, 2018. ISBN 0-12-813852-1 (hardcover), 0-12-813884-X (e-book). x + 278 pp. LCCN QA76.9.D32. URL <https://www.sciencedirect.com/science/bookseries/00652458>.
- Rao:2014:TBB**
- [Rao14] Siddharth Prakash Rao. [RBL⁺17]
- Turning bitcoins into the best-coins. *CoRR*, abs/1412.7424 (??):??, ????. 2014. CODEN ????. ISSN ????. URL <http://arxiv.org/abs/1412.7424>; <https://dblp.org/db/journals/corr/corr1412.html#Rao14>.
- Raskin:2013:MBM**
- Max Raskin. Meet the Bitcoin millionaires. *Bloomberg Businessweek*, ??(??):??, April 10, 2013. ISSN 0007-7135 (print), 2162-657X (electronic).
- Razavi:2019:CBS**
- Ardalan Razavi. Combining blockchain and swarm robotics to deploy surveillance missions. M.S., San Jose State University, San Jose, CA, USA, 2019. 53 pp. URL <http://search.proquest.com/pqdtglobal/docview/2281091881>.
- Ricci:2019:BBB**
- J. Ricci, I. Baggili, and F. Breitingner. Blockchain-based distributed cloud storage digital forensics: Where’s the beef? *IEEE Security & Privacy*, 17(1): 34–42, January/February 2019. ISSN 1540-7993 (print), 1558-4046 (electronic).
- Rodrigues:2017:BBA**
- Bruno Rodrigues, Thomas

- Bocek, Andri Lareida, David Hausheer, Sina Rafati, and Burkhard Stiller. A blockchain-based architecture for collaborative DDoS mitigation with smart contracts. In *Security of Networks and Services in an All-Connected World*, Lecture Notes in Computer Science, pages 16–29. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-60774-0_2. [RC16]
- [RBM17] Nadine Rückeshäuser, Christian Brenig, and Günter Müller. Blockchains als Grundlage digitaler Geschäftsmodelle. (German) [Blockchains as the basis of digital business models]. *Datenschutz und Datensicherheit — DuD*, 41 (8):492–496, August 2017. CODEN ??? ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0818-8>. [RC17]
- [RBS17] Bruno Rodrigues, Thomas Bocek, and Burkhard Stiller. Multi-domain DDoS mitigation based on blockchains. In *Security of Networks and Services in an All-Connected World*, Lecture Notes in Computer Science, pages 185–190. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-60774-0_19. [Reijers:2016:BNT]
- Wessel Reijers and Mark Coeckelbergh. The blockchain as a narrative technology: Investigating the social ontology and normative configurations of cryptocurrencies. *Philosophy & Technology*, ??(?):1–28, October 2016. CODEN ??? ISSN 2210-5433 (print), 2210-5441 (electronic). URL <http://link.springer.com/article/10.1007/s13347-016-0239-x>. [Recabarren:2017:HSB]
- Ruben Recabarren and Bogdan Carbutar. Hardening Stratum, the Bitcoin Pool Mining Protocol. *Proc. Priv. Enhancing Technol.*, 2017(3):57, ??? 2017. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/popets/popets2017.html#RecabarrenC17>. [Recabarren:2019:TBB]
- Ruben Recabarren and Bogdan Carbutar. Tithonus: a bitcoin based censorship

- resilient system. *Proc. Priv. Enhancing Technol.*, 2019(1):68–86, 2019. CODEN 2019 ISSN 2019 URL <https://dblp.org/db/journals/popets/popets2019.html#RecabarrenC19>.
- [RCD⁺19] Pingcheng Ruan, Gang Chen, Tien Tuan Anh Dinh, Qian Lin, Beng Chin Ooi, and Meihui Zhang. Fine-grained, secure and efficient data provenance on blockchain systems. *Proceedings of the VLDB Endowment*, 12(9):975–988, May 2019. CODEN 2019 ISSN 2150-8097.
- [RDL⁺20] Pingcheng Ruan, Tien Tuan Anh Dinh, Qian Lin, Meihui Zhang, Gang Chen, and Beng Chin Ooi. Revealing every story of data in blockchain systems. *SIGMOD Record (ACM Special Interest Group on Management of Data)*, 49(1):70–77, September 2020. CODEN SRECD8. ISSN 0163-5808 (print), 1943-5835 (electronic). URL <https://dl.acm.org/doi/10.1145/3422648>.
- [RDDDB19] Deepsubhra Guha Roy, Puja Das, Debashis De, and Rajkumar Buyya. QoS-aware secure transaction framework for Internet of Things using blockchain mechanism. *Journal of Network and Computer Applications*, 144(??):59–78, October 15, 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S108480451930219X>.
- [RE18] Matthias Roth and Michael Eitelwein. Funktionsweise Blockchain: Wie funktioniert eine Blockchain?. (German) [How blockchain works: How does a blockchain work?]. *Digitale Welt*, 2(1):35–38, January 2018. CODEN 2018 ISSN 2510-3008. URL <http://link.springer.com/article/10.1007/s42354-018-0014-5>.
- [RDDL17] Henrique Rocha, Stéphane Ducasse, Marcus Denker, and Jason Lecerf. Solidity parsing using SmaCC: Challenges and irregularities. In *Proceedings of the 12th Edition of the International Workshop on Smalltalk Technologies, IWST '17*, pages 2:1–2:9. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5554-4. URL <http://doi.acm.org/10.1145/3139903.3139906>.
- [Roth:2018:FBW] Matthias Roth and Michael Eitelwein. Funktionsweise Blockchain: Wie funktioniert eine Blockchain?. (German) [How blockchain works: How does a blockchain work?]. *Digitale Welt*, 2(1):35–38, January 2018. CODEN 2018 ISSN 2510-3008. URL <http://link.springer.com/article/10.1007/s42354-018-0014-5>.
- [Ruan:2019:FGS] Pingcheng Ruan, Gang Chen, Tien Tuan Anh Dinh, Qian Lin, Beng Chin Ooi, and Meihui Zhang. Fine-grained, secure and efficient data provenance on blockchain systems. *Proceedings of the VLDB Endowment*, 12(9):975–988, May 2019. CODEN 2019 ISSN 2150-8097.
- [Ruan:2020:RES] Pingcheng Ruan, Tien Tuan Anh Dinh, Qian Lin, Meihui Zhang, Gang Chen, and Beng Chin Ooi. Revealing every story of data in blockchain systems. *SIGMOD Record (ACM Special Interest Group on Management of Data)*, 49(1):70–77, September 2020. CODEN SRECD8. ISSN 0163-5808 (print), 1943-5835 (electronic). URL <https://dl.acm.org/doi/10.1145/3422648>.
- [Rocha:2017:SPU] Henrique Rocha, Stéphane Ducasse, Marcus Denker, and Jason Lecerf. Solidity parsing using SmaCC: Challenges and irregularities. In *Proceedings of the 12th Edition of the International Workshop on Smalltalk Technologies, IWST '17*, pages 2:1–2:9. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5554-4. URL <http://doi.acm.org/10.1145/3139903.3139906>.

- [Rec19] Kyle Rechard. *Essays on Monetary Policy and Bitcoin Financial Economics*. Ph.D., Clemson University, Clemson, SC, USA, 2019. 74 pp. URL <http://search.proquest.com/pqdtglobal/docview/2240033855>. ■
- [RGS GHGCG21] Alexandra Rivero-García, Iván Santos-González, Candelaria Hernández-Goya, and Pino Caballero-Gil. Using blockchain in the follow-up of emergency situations related to events. *Software—Practice and Experience*, 51(10):2000–2014, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- [RBM⁺18] Saulo Ricci, Eduardo Ferreira, Daniel Sadoc Menasche, ■ Artur Ziviani, Jose Eduardo Souza, and Alex Borges Vieira. Learning blockchain delays: a queueing theory approach. *ACM SIGMETRICS Performance Evaluation Review*, 46(3):122–125, December 2018. CODEN ■■■■ ISSN 0163-5999 (print), 1557-9484 (electronic).
- [RGB20] Mohsin Ur Rahman, Barbara Guidi, and Fabrizio Baiardi. Blockchain-based access control management for decentralized online social networks. *Journal of Parallel and Distributed Computing*, 144(??):41–54, October 2020. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520302902>. ■
- [RH11a] F. Reid and M. Harrigan. An analysis of anonymity in the Bitcoin system. In *2011 IEEE Third International Conference on Privacy, Security, Risk and Trust and 2011 IEEE Third International Conference on Social Computing*, pages 1318–1326. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2011.
- [RH11b] Fergal Reid and Martin Harrigan. An analysis of anonymity in the bitcoin system. *CoRR*, ??(??):??, ■■■■ 2011. CODEN ■■■■ ISSN ■■■■ URL <http://arxiv.org/abs/1107.4524>; <https://dblp.org/db/journals/corr/corr1107.html#abs-1107-4524>.

- [RH13] **Reid:2013:AAB**
Fergal Reid and Martin Harrigan. An analysis of anonymity in the Bitcoin system. In *Security and Privacy in Social Networks*, pages 197–223. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 1-4614-4139-0. URL http://link.springer.com/chapter/10.1007/978-1-4614-4139-7_10. [Riz16]
- [RIMP22] **Rakshit:2022:IBT**
Sandip Rakshit, Nazrul Islam, Sandeep Mondal, and Tripti Paul. Influence of blockchain technology in SME internationalization: Evidence from high-tech SMEs in India. *Technovation*, 115(??):??, July 2022. [RJK⁺17]
CODEN ???? ISSN 0166-4972 (print), 1879-2383 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0166497222000657>.
- [Rin18] **Rinaldi:2018:PPD**
James Rinaldi. Peer to peer digital rights management using blockchain. M.S.Eng., University of the Pacific, Stockton, CA, USA, 2018. 68 pp. URL <http://search.proquest.com/pqdtglobal/docview/2042953385>.
- [Riv04] **Rivest:2004:PM**
Ronald L. Rivest. Pep-
percoin micropayments. In Juels [Jue04], pages 2–8. ISBN 3-540-27809-5, 3-540-27809-5 (e-book). LCCN HG1710 .F35 2004. URL https://link.springer.com/content/pdf/10.1007/978-3-540-27809-2_2.pdf; <https://people.csail.mit.edu/rivest/pubs/Riv04c.slides.slides.pdf>.
- Rizun:2016:STS**
Peter R. Rizun. Subchains: A technique to scale Bitcoin and improve the user experience. *Ledger*, 1(??):38–52, 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/40>.
- Ranshous:2017:EPM**
Stephen Ranshous, Cliff A. Joslyn, Sean Kreyling, Kathleen Nowak, Nagiza F. Samatova, Curtis L. West, and Samuel Winters. Exchange pattern mining in the Bitcoin transaction directed hypergraph. In Jakobsson et al. [JRB⁺17], pages 248–263. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_16.
- Rathore:2019:BBB**
Shailendra Rathore, Byung Wook Kwon, and Jong Hyuk

- Park. BlockSecIoTNet: Blockchain-based decentralized security architecture for IoT network. *Journal of Network and Computer Applications*, 143(??):167–177, October 1, 2019. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519302243>. **Ruffing:2015:LLC**
- [RKS15] Tim Ruffing, Aniket Kate, and Dominique Schröder. Liar, liar, coins on fire!: Penalizing equivocation by loss of Bitcoins. In *Proceedings of the 22Nd ACM SIGSAC Conference on Computer and Communications Security, CCS '15*, pages 219–230. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3832-1. **Rejeb:2019:LIT**
- [RKT19] Abderahman Rejeb, John G. Keogh, and Horst Treiblmaier. Leveraging the Internet of Things and blockchain technology in supply chain management. *Future Internet*, 11(7):161, July 20, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/7/161>. **Rana:2022:FAR**
- [RKTV22] Ranvir Rana, Sreeram Kannan, David Tse, and Pramod Viswanath. Free2Share: Adversary-resistant distributed resource allocation for blockchains. *Proceedings of the ACM on Measurement and Analysis of Computing Systems (PO-MACS)*, 6(1):11:1–11:38, March 2022. CODEN ???? ISSN 2476-1249. URL <https://dl.acm.org/doi/10.1145/3508031>. **Ruoti:2020:BTW**
- [RKY⁺20] Scott Ruoti, Ben Kaiser, Arkady Yerukhimovich, Jeremy Clark, and Robert Cunningham. Blockchain technology: what is it good for? *Communications of the ACM*, 63(1):46–53, January 2020. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3369752>. **Ren:2021:MCS**
- Yongjun Ren, Yan Leng, Jian Qi, Pradip Kumar Sharma, Jin Wang, Zafer Almakhadmeh, and Amr Tolba. Multiple cloud storage mechanism based on blockchain in smart homes. *Future Generation Computer Systems*, 115(??):304–313, February 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19319041>.

- [RLS⁺21] **Ren:2021:PPB**
 Yanli Ren, Xiangyu Li, Shi-Feng Sun, Xingliang Yuan, and Xinpeng Zhang. Privacy-preserving batch verification signature scheme based on blockchain for vehicular ad-hoc networks. *Journal of Information Security and Applications (JISA)*, 58(??):??, May 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620308450> [RMS17]
- [RLT17] **Rohrer:2017:TCD**
 Elias Rohrer, Jann-Frederik Laß, and Florian Tschorsch. Towards a concurrent and distributed route selection for payment channel networks. In Garcia-Alfaro et al. [GANAHHJ17], pages 411–419. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_23 [RMSK14]
- [RM19] **Rezaeibagha:2019:EMC**
 Fatemeh Rezaeibagha and Yi Mu. Efficient micropayment of cryptocurrency from blockchains. *The Computer Journal*, 62(4): 507–517, April 2019. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL <http://academic.oup.com/comjnl/article/62/4/507/5155318> [RMS17]
- Ruffing:2017:VMC**
 Tim Ruffing and Pedro Moreno-Sanchez. ValueShuffle: Mixing confidential transactions for comprehensive transaction privacy in Bitcoin. In Jakobsson et al. [JRB⁺17], pages 133–154. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_8
- Ruffing:2014:CPD**
 Tim Ruffing, Pedro Moreno-Sanchez, and Aniket Kate. CoinShuffle: Practical decentralized coin mixing for Bitcoin. In *Computer Security — ESORICS 2014*, pages 345–364. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-11212-0. URL http://link.springer.com/chapter/10.1007/978-3-319-11212-1_20
- Ro:2013:BTH**
 Sam Ro. A Bloomberg TV host gifted Bitcoin on air and it immediately got stolen. Business Insider article., December 23, 2013. URL <http://www.businessinsider>.

- com/bloomberg-matt-miller-bitcoin-gift-stolen-2013-12.
- [ROH16] Wessel Reijers, Fiachra O'Brolcháin, and Paul Haynes. Governance in blockchain technologies & social contract theories. *Ledger*, 1(??):134–151, ????. 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/62>.
- [Ros03] Rocky Ross. Deconstructing Paxos. *ACM SIGACT News*, 34(1):47–67, March 2003. CODEN SIGNDM. ISSN 0163-5700 (print), 1943-5827 (electronic).
- [Ros11] Meni Rosenfeld. Analysis of Bitcoin pooled mining reward systems. Web document., November 17, 2011. URL https://bitcoil.co.il/pool_analysis.pdf.
- [Ros12] Meni Rosenfeld. Overview of colored coins. Web document., 2012. URL <https://bitcoil.co.il/BitcoinX.pdf>; <https://web.archive.org/web/20170922052930/>.
- [Rot17] Adam Rothstein. *The end of money: the story of Bitcoin, cryptocurrencies and the blockchain revolution*. Nicholas Brealey Publishing, Boston, MA, 2017. ISBN 1-85788-669-0 (paperback), 1-85788-974-6. xii + 228 pp. LCCN HG256 .R67 2017.
- [Roi13] Denis Jaromil Roio. Bitcoin, the end of the taboo on money. Report, Dyne.org Digital Press, April 6, 2013. 17 pp. URL https://files.dyne.org/readers/Bitcoin_end_of_taboo_on_money.pdf.
- [Roi18] Denis Roio. *Algorithmic Sovereignty*. Ph.D. thesis, University of Plymouth, Plymouth, UK, January 2018. 196 pp. URL <https://pearl.plymouth.ac.uk/bitstream/handle/10026.1/11101/>.
- [Roo18] Kevin Roose. Kodak's dubious cryptocurrency gamble. *New York Times*, ??(??): ??, January 30, 2018. CO-
- DEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/2018/01/30/technology/kodak-blockchain-bitcoin.html>.

- [Rou18] **Roubini:2018:BBP** Nouriel Roubini. Blockchain; broken promises. Web site., January 26, 2018.
- [RRCL17] **Rahman:2017:SPR** Mizanur Rahman, Ruben Recabarren, Bogdan Carbunar, and Dongwon Lee. Stateless puzzles for real time online fraud preemption. In *Proceedings of the 2017 ACM on Web Science Conference, WebSci '17*, pages 23–32. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4896-3.
- [RRD17] **Raju:2017:CDB** Saravanan Raju, Vandita Rajesh, and Jitender S. Deogun. The case for a data bank: An institution to govern healthcare and education. In *Proceedings of the 10th International Conference on Theory and Practice of Electronic Governance, ICE-GOV '17*, pages 538–539. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4825-4. URL <http://doi.acm.org/10.1145/3047273.3047275>.
- [RRF22] **Rajabi:2022:MBL** Shahab Rajabi, Pardis Roozkhosh, and Nasser Motahari Farimani. MLP-based learnable window size for bitcoin price prediction. *Appl. Soft Com-*
- put.*, 129(??):109584, ????, 2022. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/asc/asc129.html#RajabiRF22>.
- [RRM18] **Remy:2018:TBU** Cazabet Remy, Baccour Rym, and Latapy Matthieu. Tracking Bitcoin users activity using community detection on a network of weak signals. In *Complex Networks & Their Applications VI*, pages 166–177. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. ISBN 3-319-72150-X. URL http://link.springer.com/chapter/10.1007/978-3-319-72150-7_14.
- [RS96a] **Rivest:1996:PMTa** R. Rivest and A. Shamir. PayWord and MicroMint — two simple micropayment schemes. Published in [RS96b]., April 1996. URL <http://theory.lcs.mit.edu/~rivest>.
- [RS96b] **Rivest:1996:PMTb** Ronald L. Rivest and Adi Shamir. PayWord and MicroMint: Two simple micropayment schemes. *CryptoBytes*, 2(1):7–11, Spring 1996. URL <ftp://ftp.rsa.com/pub/cryptobytes/crypto2n1.pdf>. See [RS96a].

- [RS13] Dorit Ron and Adi Shamir. Quantitative analysis of the full Bitcoin transaction graph. In Sadeghi [Sad13], pages 6–24. ISBN 3-642-39884-7. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-642-39884-1_2.
- [RS14] Dorit Ron and Adi Shamir. How did dread pirate Roberts acquire and protect his Bitcoin wealth? In Christin and Safavi-Naini [CSN14], pages 3–15. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_1.
- [RS17] Dr.Marten Risius and Dr.Kai Spohrer. A blockchain research framework. *Business & Information Systems Engineering*, 59(6): 385–409, December 2017. CODEN ???? ISSN 1867-0202 (print), 2363-7005 (electronic). URL <http://link.springer.com/article/10.1007/s12599-017-0506-0>.
- [RS21a] Barath Raghavan and Bruce Schneier. Bitcoin’s greatest feature is also its existential threat. The cryptocurrency depends on the integrity of the blockchain. But China’s censors, the FBI, or powerful corporations could fragment it into oblivion. Web site, March 9, 2021. URL <https://www.wired.com/story/opinion-bitcoins-greatest-feature-is-also-its-existential-threat/>.
- [RS21b] Dorit Ron and Adi Shamir. How did dread pirate Roberts acquire and protect his Bitcoin wealth? In Christin and Safavi-Naini [CSN14], pages 3–15. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_1.
- [RSGA⁺21] Dr.Marten Risius and Dr.Kai Spohrer. A blockchain research framework. *Business & Information Systems Engineering*, 59(6): 385–409, December 2017. CODEN ???? ISSN 1867-0202 (print), 2363-7005 (electronic). URL <http://link.springer.com/article/10.1007/s12599-017-0506-0>.
- [RSH22] Barath Raghavan and Bruce Schneier. Bitcoin’s greatest feature is also its existential threat. The cryptocurrency depends on the integrity of the blockchain. But China’s censors, the FBI, or powerful corporations could fragment it into oblivion. Web site, March 9, 2021. URL <https://www.wired.com/story/opinion-bitcoins-greatest-feature-is-also-its-existential-threat/>.
- [Roy:2021:BBC] Deepsubhra Guha Roy and Satish Narayana Srirama. A blockchain-based cyber attack detection scheme for decentralized Internet of Things using software-defined network. *Software—Practice and Experience*, 51(7):1540–1556, July 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- [Regueiro:2021:BBA] Cristina Regueiro, Iñaki Seco, Iván Gutiérrez-Agüero, Borja Urquizu, and Jason Mansell. A blockchain-based audit trail mechanism: Design and implementation. *Algorithms (Basel)*, 14(12):??, December 2021. CODEN ALGOCH. ISSN 1999-4893 (electronic). URL <https://www.mdpi.com/1999-4893/14/12/341>.
- [Ruckel:2022:FIP] Timon Rückel, Johannes

- Sedlmeir, and Peter Hofmann. Fairness, integrity, and privacy in a scalable blockchain-based federated learning system. *Computer Networks (Amsterdam, Netherlands: 1999)*, 202(??):??, January 15, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621005132>. [RSR17]
 - Rathore:2021:TDL
Heena Rathore, Abhay Samant, and Murtuza Jadliwala. TangleCV: a distributed ledger technique for secure message sharing in connected vehicles. *ACM Transactions on Cyber-Physical Systems (TCPS)*, 5(1):6:1–6:25, January 2021. CODEN ???? ISSN 2378-962X (print), 2378-9638 (electronic). URL <https://dl.acm.org/doi/10.1145/3404500>. [RST11]
 - Ryu:2019:BBD
Jung Hyun Ryu, Pradip Kumar Sharma, Jeong Hoon Jo, and Jong Hyuk Park. A blockchain-based decentralized efficient investigation framework for IoT digital forensics. *The Journal of Supercomputing*, 75(8):4372–4387, August 2019. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic).
 - Ramos:2017:WAM
ReyesMacedo:2017:WAM
V́ctor Gabriel Reyes Macedo and Moisés Salinas-Rosales. WannaCry: Análisis del movimiento de recursos financieros en el blockchain de bitcoin. (Spanish) [WannaCry: Analysis of the movement of financial resources on the bitcoin blockchain]. *Res. Comput. Sci.*, 137(??):147–155, ????. 2017. CODEN ???? ISSN ???? URL http://rcs.cic.ipn.mx/2017_137/WannaCry_%20Analisis%20del%20movimiento%20de%20recursos%20financieros%20en%20el%20blockchain%20de%20bitcoin.pdf; <https://dblp.org/db/journals/rcs/rcs137.html#MacedoS17>.
 - Rao:2011:UPB
Jun Rao, Eugene J. Shekita, and Sandeep Tata. Using Paxos to build a scalable, consistent, and highly available datastore. *Proceedings of the VLDB Endowment*, 4(4):243–254, January 2011. CODEN ???? ISSN 2150-8097.
 - Ramachandran:2015:BMT
Hari Krishnan Ramachandran, Sai Saketh, and Marichetty Venkata Teja Vaibhav. Bitcoin mining: Transition to cloud. *Int. J. Cloud Appl. Comput.*,

- 5(4):56–87, 2015. CODEN 2015. URL <https://dblp.org/db/journals/ijcac/ijcac5.html#RamachandranSV15>.
- Rivest:1996:TLP**
- [RSW96] Ron Rivest, Adi Shamir, and David Wagner. Time-lock puzzles and timed-release crypto. Report, MIT Laboratory for Computer Science, Cambridge, MA 02139, USA, March 10, 1996. URL <http://www.hashcash.org/papers/time-lock.pdf>.
- Raju:2020:RTP**
- [RT20] S. M. Raju and Ali Mohammad Tarif. Real-time prediction of BIT-COIN price using machine learning techniques and public sentiment analysis. *CoRR*, 2020. CODEN 2020. ISSN 2020. URL <https://arxiv.org/abs/2006.14473>; <https://dblp.org/db/journals/corr/corr2006.html#abs-2006-14473>.
- Raman:2021:CSB**
- [RV21] Ravi Kiran Raman and Lav R. Varshney. Coding for scalable blockchains via dynamic distributed storage. *IEEE/ACM Transactions on Networking*, 29(6):2588–2601, December 2021. CODEN 2021.
- Ren:2021:DBS**
- IEANEP. ISSN 1063-6692 (print), 1558-2566 (electronic). URL <https://dl.acm.org/doi/10.1109/TNET.2021.3098613>.
- Wei Ren, Xutao Wan, and Pengcheng Gan. A double-blockchain solution for agricultural sampled data security in Internet of Things network. *Future Generation Computer Systems*, 117(??):453–461, April 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X20330697>.
- Ruan:2020:URP**
- Na Ruan, Dongli Zhou, and Weijia Jia. Ursa: Robust performance for Nakamoto consensus with self-adaptive throughput. *ACM Transactions on Internet Technology (TOIT)*, 20(4):41:1–41:26, November 2020. CODEN 2020. ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3412341>.
- Song:2020:CBM**
- Yo-Der Song and Tomaso Aste. The cost of bitcoin mining has never really increased. *CoRR*, abs/2004.04605(??):??, 2020. CODEN 2020. ISSN 2020.
- [RWG21]**
- [RZJ20]**
- [SA20]**

???? URL <https://arxiv.org/abs/2004.04605>; <https://dblp.org/db/journals/corr/corr2004.html#abs-2004-04605>.

Sadeghi:2013:FCD

[Sad13]

Ahmad-Reza Sadeghi, editor. *Financial Cryptography and Data Security: 17th International Conference, FC 2013 Okinawa, Japan, April 1–5, 2013. Revised Selected Paper*, volume 7859 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 3-642-39884-7. xv + 406 pp. LCCN QA76.9.A25.

Sallal:2018:ESP

[Sal18]

Muntadher Fadhil Sallal. *Evaluation of security and performance of clustering in the bitcoin network, with the aim of improving the consistency of the blockchain*. Ph.D., University of Portsmouth, Portsmouth, UK, 2018. URL <http://search.proquest.com/pqdtglobal/docview/2230937997>.

Setty:2020:VSM

[SAL20]

Srinath Setty, Sebastian Angel, and Jonathan Lee. Verifiable state machines: Proofs that untrusted services operate correctly.

Operating Systems Review, 54(1):40–46, August 2020. CODEN OSRED8. ISSN 0163-5980 (print), 1943-586X (electronic). URL <https://dl.acm.org/doi/10.1145/3421473.3421479>.

Saltini:2022:BRO

[Sal22]

Roberto Saltini. Big-FooT: a robust optimal-latency BFT blockchain consensus protocol with dynamic validator membership. *Computer Networks (Amsterdam, Netherlands: 1999)*, 204(??):??, February 26, 2022. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S138912862100520X>.

Sun:2017:RCA

[SALY17]

Shi-Feng Sun, Man Ho Au, Joseph K. Liu, and Tsz Hon Yuen. RingCT 2.0: A compact accumulator-based (linkable ring signature) protocol for blockchain cryptocurrency monero. In *Computer Security — ESORICS 2017*, pages 456–474. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-66399-9_25.

- [San14a] **Sansonetti:2014:BVW** Riccardo Sansonetti. Bitcoin: virtuelle Währung mit Chancen und Risiken. (German) [Bitcoin: virtual currency with opportunities and risks]. *Volkswirtschaft: wirtschaftliche, sozialstatistische und arbeitsrechtliche Mitteilungen*, 87(9):44–46, 2014. ISSN 1011-386X.
- [San14b] **Sansonetti:2014:BOR** [Sat18] Riccardo Sansonetti. Le Bitcoin: opportunités et risques d’une monnaie virtuelle. (French) [Bitcoin: opportunities and risk of a virtual currency]. *La vie économique (Berne)*, 87(9):44–46, 2014. ISSN 1011-386X.
- [Sar21] **Sarier:2021:CBB** [Sat20] Neyire Deniz Sarier. Comments on biometric-based non-transferable credentials and their application in blockchain-based identity management. *Computers & Security*, 105(??):Article 102243, June 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404821000675>.
- [SAS⁺21] **Shah:2021:BBS** [SBA21] Jay Shah, Sarthak Agarwal, Arpit Shukla, Sudeep Tanwar, Sudhanshu Tyagi, and Neeraj Kumar. Blockchain-based scheme for the mobile number portability. *Journal of Information Security and Applications (JISA)*, 58(??):??, May 2021. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000144>.
- Sattath:2018:IQB** Or Sattath. On the insecurity of quantum bitcoin mining. *CoRR*, abs/1804.08118(??):??, ????. 2018. CODEN ????. ISSN ????. URL <http://arxiv.org/abs/1804.08118>; <https://dblp.org/db/journals/corr/corr1804.html#abs-1804-08118>.
- Sattath:2020:IQB** Or Sattath. On the insecurity of quantum Bitcoin mining. *International Journal of Information Security*, 19(3):291–302, June 2020. CODEN ????. ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-020-00493-9>.
- Saxena:2021:BBS** Shivam Saxena, Bharat Bhushan, and Mohd Abdul Ahad. Blockchain based solutions to secure IoT: Background, integration trends

- and a way forward. *Journal of Network and Computer Applications*, 181(??):??, May 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521000758>■
- [SBBR17] Okke Schrijvers, Joseph Bonneau, Dan Boneh, and Tim Roughgarden. Incentive compatibility of Bitcoin mining pool reward functions. In Grossklags and Preneel [GP17b], pages 477–498. ISBN 3-662-54970-0. ISSN 0302-9743. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-54970-4_28.
- [SBHD17] Hossein Shafagh, Lukas Burkharter, Anwar Hithnawi, and Simon Duquennoy. Towards blockchain-based auditable storage and sharing of IoT data. In *Proceedings of the 2017 on Cloud Computing Security Workshop, CCSW '17*, pages 45–50. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5204-9. URL <http://doi.acm.org/10.1145/3140649.3140656>.
- [SBL19] Ashish Rajendra Sai, Jim Buckley, and Andrew Le Gear. Assessing the security implication of Bitcoin exchange rates. *Computers & Security*, 86(??):206–222, September 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818312112>■
- [SBR16] Binanda Sengupta, Samiran Bag, Sushmita Ruj, and Kouichi Sakurai. Retricoin: Bitcoin based on compact proofs of retrievability. In *Proceedings of the 17th International Conference on Distributed Computing and Networking, ICDCN '16*, pages 14:1–14:10. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4032-6.
- [SC20] M. P. Singh and A. K. Chopra. Computational governance and violable contracts for blockchain applications. *Computer*, 53(1):53–62, January 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
- [SC21] Abdurrashid Ibrahim Sanka and Ray C. C. Cheung. A systematic review of blockchain scalability: Issues, solutions, analysis and

- future research. *Journal of Network and Computer Applications*, 195(??):??, December 1, 2021. CODEN JNCAF3. ISSN 1084-8045 [SCG⁺14] (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521002307>
- [SCAA13] P. Singh, B. R. Chandavarkar, S. Arora, and N. Agrawal. Performance comparison of executing fast transactions in Bitcoin network using verifiable code execution. In *2013 2nd International Conference on Advanced Computing, Networking and Security*, pages 193–198. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2013. ISSN 2377-2506 (print), 2377-2514 (electronic).
- [SCE21] Aaliya Sarfaraz, Ripon K. Chakraborty, and Daryl L. Essam. A tree structure-based improved blockchain framework for a secure online bidding system. *Computers & Security*, 102(??): Article 102147, March 2021. CODEN CPSEU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S016740482030420X>
- Singh:2013:PCE**
- Sasson:2014:ZDA**
- E. B. Sasson, A. Chiesa, C. Garman, M. Green, I. Miers, E. Tromer, and M. Virza. Zerocash: Decentralized anonymous payments from Bitcoin. In *2014 IEEE Symposium on Security and Privacy*, pages 459–474. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 2014. ISSN 1081-6011 (print), 2375-1207 (electronic).
- Schoenmakers:1998:SAE**
- Berry Schoenmakers. Security aspects of the EcashTM payment system. *Lecture Notes in Computer Science*, 1528:338–352, 1998. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL <http://link.springer-ny.com/link/service/series/0558/bibs/1528/15280338.htm>; <http://link.springer-ny.com/link/service/series/0558/papers/1528/15280338.pdf>.
- Schildbach:2013:BWR**
- Andreas Schildbach. Bitcoin wallet 2.4.1 released. Web document., February 2013. URL <https://bitcointalk.org/index.php?topic=146552.0>
- Sarfaraz:2021:TSB**
- [Sch13] [Sch98]

- [Sch14a] **Schatt:2014:VBG**
 Dan Schatt. *Virtual Banking: a Guide to Innovation and Partnering*. Wiley finance series. John Wiley, New York, NY, USA, 2014. ISBN 1-118-74247-8 (hardcover), 1-118-74254-0 (ePDF), 1-118-74236-2 (ePub). xxi + 216 pp. LCCN HG1601 .S3353 2014. Foreword by Renaud Laplanche.
- [Sch14b] **Schlichter:2014:PMC**
 Detlev S. Schlichter. *Paper money collapse: the folly of elastic money*. John Wiley, New York, NY, USA, second edition, 2014. ISBN 1-118-87732-2 (hardcover), 1-118-87733-0. xviii + 318 pp. LCCN HG353 .S35 2014.
- [Sch19a] **Schneier:2019:BT**
 Bruce Schneier. Blockchain and trust. Web blog., February 12, 2019. URL https://www.schneier.com/blog/archives/2019/02/blockchain_and_.html.
- [Sch19b] **Schweizer:2019:DFS**
 André Schweizer. *Digitalization in the Financial Services Industry: Fostering Innovation Through Fintechs and Blockchain Technology*. Dr.Econ., Universität Bayreuth, Bayreuth, Bavaria, Germany, 2019. 62 pp. URL <http://search.proquest.com/pqdtglobal/docview/2302014028>.
- [SCN⁺22] **Saad:2022:EPA**
 Muhammad Saad, Victor Cook, Lan Nguyen, My T. Thai, and David Mohaisen. Exploring partitioning attacks on the bitcoin network. *IEEE/ACM Transactions on Networking*, 30(1):202–214, February 2022. CODEN IEANEP. ISSN 1063-6692 (print), 1558-2566 (electronic). URL <https://dl.acm.org/doi/10.1109/TNET.2021.3105604>.
- [SCP⁺20] **Singh:2020:STB**
 Amritraj Singh, Kelly Click, Reza M. Parizi, Qi Zhang, Ali Dehghan-tanha, and Kim-Kwang Raymond Choo. Sidechain technologies in blockchain networks: an examination and state-of-the-art review. *Journal of Network and Computer Applications*, 149(??):??, January 1, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519303315>.
- [Scr18] **Scriber:2018:FDB**
 B. A. Scriber. A framework for determining blockchain applicability. *IEEE Software*, 35(4):70–77, July/

- August 2018. CODEN IESOEG. ISSN 0740-7459 (print), 1937-4194 (electronic).
- [SCYP17] Mehrdad Salimitari, Mainak Chatterjee, Murat Yuksel, and Eduardo Pasilliao. Profit maximization for Bitcoin pool mining: A prospect theoretic approach. In IEEE, editor, *2017 IEEE 3rd International Conference on Collaboration and Internet Computing (CIC)*, 15–17 October 2017, San Jose, CA, USA, pages 267–274. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2017.
- [SCZ⁺21] A. Qun Song, Yuhao Chen, Yan Zhong, Kun Lan, Simon Fong, and B. Rui Tang. A supply-chain system framework based on Internet of Things using blockchain technology. *ACM Transactions on Internet Technology (TOIT)*, 21(1):13:1–13:24, February 2021. CODEN ??? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3409798>.
- [SD16a] Mayra Samaniego and Ralph Deters. Using blockchain to push software-defined IoT components onto edge hosts. In *Proceedings of the International Conference on Big Data and Advanced Wireless Technologies*, BDAW '16, pages 58:1–58:9. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4779-7. URL <http://doi.acm.org/10.1145/3010089.3016027>.
- [SD16b] Mike Sharples and John Domingue. The blockchain and kudos: A distributed system for educational record, reputation and reward. In *Adaptive and Adaptable Learning*, pages 490–496. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-45153-4_48.
- [SDK⁺17] Marco Steger, Ali Dorri, Salil S. Kanhere, Kay Römer, Raja Jurdak, and Michael Karner. Secure wireless automotive software updates using blockchains: A proof of concept. In *Advanced Microsystems for Automotive Applications 2017*, pages 137–149. Springer-Verlag,

- Berlin, Germany / Heidelberg, Germany / London, UK / etc., August 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-66972-4_12.
- [SDT17] Reza Samavi, Thomas E. Doyle, and Thodoros Topologlou. The first workshop on blockchain & eHealth: Towards provable privacy & security in data intensive health research. In *Proceedings of the 27th Annual International Conference on Computer Science and Software Engineering*, CASCON '17, pages 333–336. IBM Corporation, San Jose, CA, USA, 2017. URL <http://dl.acm.org/citation.cfm?id=3172795.3172850>.
- [Seg18] Jérôme Segura. Drive-by cryptomining campaign targets millions of Android users. Web article, February 12, 2018. URL <https://blog.malwarebytes.com/threat-analysis/2018/02/drive-by-cryptomining-campaign-attracts-millions-of-android-users/>.
- [Sei20] René Seifert. Digital identities — self-sovereignty and blockchain are the keys to success. *Network Security*, 2020(11):17–19, November 2020. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485820301318>.
- [Sem22] Nemo Semret. Dynamics of bitcoin mining. *CoRR*, ??(??):??, ??? 2022. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2201.06072>; <https://dblp.org/db/journals/corr/corr2201.html#abs-2201-06072>.
- [Ser21] Will Serrano. The Blockchain Random Neural Network for cybersecure IoT and 5G infrastructure in Smart Cities. *Journal of Network and Computer Applications*, 175(??):??, February 1, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303696>.
- [Ses18] Sreenivas Sudarshan Seshadri. Blockchain-based security framework for Internet-of-Things through isolation of malicious devices. M.S., The University of Texas at San Antonio, San Antonio, TX, USA,

2018. 55 pp. URL <http://search.proquest.com/pqdtglobal/docview/2162883253>.
- [SFMC21] Jefferson E. Simoes, Eduardo Ferreira, Daniel S. Menasché, and Carlos A. V. Campos. Blockchain privacy through merge avoidance and mixing services: a hardness and an impossibility result. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):8–11, May 2021. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3466826.3466831>.
- [SG21] [Simoes:2021:BPT] Jefferson E. Simoes, Eduardo Ferreira, Daniel S. Menasché, and Carlos A. V. Campos. Blockchain privacy through merge avoidance and mixing services: a hardness and an impossibility result. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):8–11, May 2021. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3466826.3466831>.
- [SFYB21] M. Shayan, C. Fung, C. J. M. Yoon, and I. Beschastnikh. Biscotti: a blockchain system for private and secure federated learning. *IEEE Transactions on Parallel and Distributed Systems*, 32(7):1513–1525, 2021. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).
- [SG19] [Sgantzios:2019:AI] Konstantinos Sgantzios and Ian Grigg. Artificial intelligence implementations on the blockchain. Use cases and future applications. *Future Internet*, 11(8):170, August 02, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/8/170>.
- [SGDT19] [Spathoulas:2019:CBB] Georgios Spathoulas, Nikolaos Giachoudis, Georgios-Paraskevas Damiris, and Georgios Theodoridis. Collaborative blockchain-based detection of distributed denial of service attacks based on Internet of Things botnets. *Future Internet*, 11(11):226, October 25, 2019. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/11/226>.
- [SGF⁺17] [Sheehan:2017:DMP] David Sheehan, Rob Gleasure, Joe Feller, Phillip O'Reilly, Shanping Li, and Jerry Cristiforo. Does miner pooling impact Bitcoin's ability to stay decentralized? In *Pro-*

- ceedings of the 13th International Symposium on Open Collaboration*, Open-Sym '17, pages 25:1–25:4. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5187-5. URL <http://doi.acm.org/10.1145/3125433.3125462>.
- [SGK21] Ivo Stoepker, Rowel Gündlach, and Stella Kapodistria. Robustness analysis of bitcoin confirmation times. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):20–23, May 2021. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dblp.org/db/journals/sigmetrics/sigmetrics48.html#StoepkerGK21>; <https://dl.acm.org/doi/10.1145/3466826.3466834>.
- [SGM20] Rashmi Sahay, G. Geethakumari, and Barsha Mitra. A novel blockchain based framework to secure IoT-LLNs against routing attacks. *Computing*, 102(11): 2445–2470, November 2020. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic).
- [Sha17] Simon Sharwood. Elon Musk says he’s not Satoshi Nakamoto and is pretty rubbish at Bitcoin: He had some once, but lost them down the back of the sofa. *The Register*, ??(??):??, November 29, 2017. URL http://www.theregister.co.uk/2017/11/29/elon_musk_says_he_is_not_satoshi_nakamoto/.
- [Shi18] Sadia Sharmin. Music copyright management on blockchain: is it legally viable? Master’s, Uppsala Universitet, Uppsala, Sweden, 2018. URL <http://search.proquest.com/pqdtglobal/docview/2084932936>.
- [Shi19] Ning Shi. A new proof-of-work mechanism for Bitcoin. *Financial Innovation*, 2(1):99–122, December 2016. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-016-0045-6>.
- [Shi20] Ryan M. Shivers. Toward a secure and decentralized blockchain-based ride-hailing platform for autonomous vehicles. M.S., Tennessee Technological University, Cookeville, TN, USA, 2019. 95 pp. URL <http://search.proquest.com/pqdtglobal/docview/2231143871>.

- [SHL⁺20] Shuyun Shi, Debiao He, Li Li, Neeraj Kumar, Muhammad Khurram Khan, and Kim-Kwang Raymond Choo. Applications of blockchain in ensuring the security and privacy of electronic health record systems: a survey. *Computers & Security*, 97(??):Article 101966, October 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S016740482030239X>. [SI16]
- [Shu17] Safa Shubbar. Ultra-sound medical imaging systems using telemedicine and blockchain for remote monitoring of responses to neoadjuvant chemotherapy in women's breast cancer: Concept and implementation. M.S., Kent State University, Kent, OH, USA, 2017. 133 pp. URL <http://search.proquest.com/pqdtglobal/docview/2059846207>. [SI19]
- [Shu19] Rohit Shukla. Sharing and integrating electronic health records using blockchain. M.S., State University of New York at Stony Brook, Stony Brook, NY, USA, 2019. 46 pp. URL <http://search.proquest.com/pqdtglobal/docview/2217096961>. [SIDV14]
- Shi:2020:ABE**
- Sanda:2016:PNA**
- T. Sanda and H. Inaba. Proposal of new authentication method in Wi-Fi access using Bitcoin 2.0. In *2016 IEEE 5th Global Conference on Consumer Electronics*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2016.
- Saito:2019:HMD**
- Kenji Saito and Mitsuru Iwamura. How to make a digital currency on a blockchain stable. *Future Generation Computer Systems*, 100(??):58–69, November 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18300475>.
- Sidel:2014:OCS**
- Robin Sidel. Overstock CEO sees Bitcoin sales rising more than expected. *Wall Street Journal*, ??(?):??, March 4, 2014. CODEN WSJOAF. ISSN 0099-9660.
- Shoshitaishvili:2014:DYF**
- Yan Shoshitaishvili, Luca Invernizzi, Adam Doupe, and Giovanni Vigna. Do you feel lucky?: A large-

- scale analysis of risk-rewards trade-offs in cyber security. In *Proceedings of the 29th Annual ACM Symposium on Applied Computing*, SAC '14, pages 1649–1656. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-2469-X. [Six17b]
- [Sir16a] Emin Gün Sirer. Bitcoin guarantees strong, not eventual, consistency. Hacking, Distributed, 2016. URL [http://hackingdistributed.com/2016/03/01/bitcoin-guarantees-strong-not-eventual-consistency/..](http://hackingdistributed.com/2016/03/01/bitcoin-guarantees-strong-not-eventual-consistency/)
- [Sir16b] Emin Gün Sirer. Technical perspective: The state (and security) of the Bitcoin economy. *Communications of the ACM*, 59(4): 85, April 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2016/4/200172/fulltext>. [Six17c]
- [Six17a] Elfriede Sixt. Aktuelle Daten zur Bitcoin-Ökosphäre. (German) [Current data on the Bitcoin ecosphere]. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 17–28. ISBN 3-658-02844-0. LCCN HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_3. [Sixt:2017:B]
- [Six17b] Elfriede Sixt. Bitcoin 2.0. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 163–171. ISBN 3-658-02844-0. LCCN HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_13. [Sixt:2017:BZ]
- [Six17c] Elfriede Sixt. Bitcoin als Zahlungsmittel. (German) [Bitcoin as currency]. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 77–89. ISBN 3-658-02844-0. LCCN HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_7. [Sixt:2017:BF]
- [Six17d] Elfriede Sixt. Bitcoin und die Finanzindustrie. (German) [Bitcoin and the financial industry]. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 173–186. ISBN 3-658-02844-0. LCCN

HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_14.

Sixt:2017:BAD

- [Six17e] Elfriede Sixt. *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-658-02843-2 (print), 3-658-02844-0 (e-book). xiv + 195 pp. LCCN HG1710. URL <http://www.springerlink.com/content/978-3-658-02844-2>. [Six17h]

Sixt:2017:GBK

- [Six17f] Elfriede Sixt. Die Gratis-Bitcoin-Ökosphäre. (German) [The free Bitcoin ecosystem]. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 141–144. ISBN 3-658-02844-0. LCCN HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_11. [Six17i]

Sixt:2017:E

- [Six17g] Elfriede Sixt. Ethereum. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 189–194. ISBN 3-658-02844-0. LCCN

HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_16.

Sixt:2017:FBN

Elfriede Sixt. Funktionsweise des Bitcoin-Netzwerks. (German) [How the Bitcoin network works]. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 29–44. ISBN 3-658-02844-0. LCCN HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_4.

Sixt:2017:LBS

Elfriede Sixt. Limitationen des Bitcoin-Systems. (German) [limitations of Bitcoin systems]. In *Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 91–110. ISBN 3-658-02844-0. LCCN HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_8.

Sixt:2017:LFL

Elfriede Sixt. Lösungsansätze für die Limitationen des Bitcoin-Systems. (German) [Solving the limitations of the Bitcoin system]. In

- Bitcoins und andere dezentrale Transaktionssysteme: Blockchains als Basis einer Kryptoökonomie* [Six17e], pages 111–117. ISBN 3-658-02844-0. LCCN HG1710. URL http://link.springer.com/chapter/10.1007/978-3-658-02844-2_9. [SJB21]
- [SJ21] A. Helen Sharmila and N. Jaisankar. Edge intelligent agent assisted hybrid hierarchical blockchain for continuous healthcare monitoring and recommendation system in 5G WBAN-IoT. *Computer Networks (Amsterdam, Netherlands: 1999)*, 200(??):??, December 9, 2021. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004448>. [SJB22]
- [Sharma:2020:BTC] Pratima Sharma, Rajni Jindal, and Malaya Dutta Borah. Blockchain technology for cloud storage: a systematic literature review. *ACM Computing Surveys*, 53(4):89:1–89:32, September 2020. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3403954>. [SJSY21]
- [Sharma:2021:BBD] Pratima Sharma, Rajni Jindal, and Malaya Dutta Borah. Blockchain-based decentralized architecture for cloud storage system. *Journal of Information Security and Applications (JISA)*, 62(??):??, November 2021. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621001812>.
- [Sharma:2022:BBC] Pratima Sharma, Rajni Jindal, and Malaya Dutta Borah. Blockchain-based cloud storage system with CP-ABE-based access control and revocation process. *The Journal of Supercomputing*, 78(6):7700–7728, April 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04179-4>.
- [Sookhak:2021:BSC] Mehdi Sookhak, Mohammad Reza Jabbarpour, Nader Sohrabi Safa, and F. Richard Yu. Blockchain and smart contract for access control in healthcare: a survey, issues and challenges, and open issues. *Journal of Network and Computer Applications*, 178(??):??, March

- 15, 2021. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520304045> ■
- Shao:2020:ADT**
- [SJX⁺20] Wei Shao, Chunfu Jia, Yunkai Xu, Kefan Qiu, Yan Gao, and Yituo He. AttriChain: Decentralized traceable anonymous identities in privacy-preserving permissioned blockchain. *Computers & Security*, 99 (??):Article 102069, December 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820303424> ■
- Sherman:2019:OVb**
- [SJZG19] A. T. Sherman, F. Javani, H. Zhang, and E. Golaszewski. On the origins and variations of blockchain technologies. *IEEE Security & Privacy*, 17(1):72–77, January/February 2019. ISSN 1540-7993 (print), 1558-4046 (electronic).
- Sapuric:2014:BVI**
- [SK14] Svetlana Sapuric and Angelika Kokkinaki. Bitcoin is volatile! Isn't that right? In *Business Information Systems Workshops*, pages 255–265. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-319-11460-3. URL http://link.springer.com/chapter/10.1007/978-3-319-11460-6_22.
- Sas:2015:ETB**
- Corina Sas and Irni Eliana Khairuddin. Exploring trust in Bitcoin technology: A framework for HCI research. In *Proceedings of the Annual Meeting of the Australian Special Interest Group for Computer Human Interaction, OzCHI '15*, pages 338–342. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3673-6.
- Sas:2017:DTE**
- Corina Sas and Irni Eliana Khairuddin. Design for trust: An exploration of the challenges and opportunities of Bitcoin users. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, CHI '17*, pages 6499–6510. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4655-3. URL <http://doi.acm.org/10.1145/3025453.3025886>.
- Singh:2018:BBB**
- Madhusudan Singh and Shiho Kim. Branch based blockchain technology in
- [SK15] [SK17] [SK18]

- intelligent vehicle. *Computer Networks (Amsterdam, Netherlands: 1999)*, 145(??):219–231, November 9, 2018. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128618308399> ■
- [SKG12] **Shahid:2020:SDS**
- [SK20] Furqan Shahid and Abid Khan. Smart Digital Signatures (SDS): a post-quantum digital signature scheme for distributed ledgers. *Future Generation Computer Systems*, 111(??):241–253, October 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19319892> ■
- [SKG13] **Sajid:2020:SCR**
- [SKA⁺20] Adnan Sajid, Bilal Khalid, Mudassar Ali, Shahid Mumtaz, Usman Masud, and Farhan Qamar. Securing cognitive radio networks using blockchains. *Future Generation Computer Systems*, 108(??):816–826, July 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19315997> ■
- [SKG22] **Sorge:2012:BEE**
- Christoph Sorge and Artus Krohn-Grimberghe. Bitcoin: Eine erste Einordnung. (German) [Bitcoin: A first classification]. *Datenschutz und Datensicherheit — DuD*, 36(7):479–484, June 2012. CODEN ???? ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-012-0164-9>.
- [SKG22] **Sorge:2013:BZZ**
- Christoph Sorge and Artus Krohn-Grimberghe. Bitcoin — das Zahlungsmittel der Zukunft?. (German) [Bitcoin — the currency of the future?]. *Wirtschaftsdienst*, 93(10):720–722, October 2013. CODEN ???? ISSN 0043-6275 (print), 1613-978X (electronic). URL <http://link.springer.com/article/10.1007/s10273-013-1589-y>.
- [SKG22] **Sapuric:2022:RBB**
- Svetlana Sapuric, Angelika I. Kokkinaki, and Ifigenia Georgiou. The relationship between bitcoin returns, volatility and volume: asymmetric GARCH modeling. *J. Enterp. Inf. Manag.*, 35(6):1506–1521, ???? 2022. CODEN ???? ISSN ???? URL <https://dblp.>

- org/db/journals/jeim/jeim35.html#SapuricKG22. [SL18]
- [SKNM21] Muhammad Saad, Joongheon Kim, DaeHun Nyang, and David Mohaisen. Contract*: Mechanisms for countering spam attacks on blockchain's memory pools. *Journal of Network and Computer Applications*, 179(??):??, April 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520304227>. [Saad:2021:CMC]
- [Sko19] Rafał Skowroński. The open blockchain-aided multi-agent symbiotic cyber-physical systems. *Future Generation Computer Systems*, 94(??):430–443, May 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18307520>. [Skowronski:2019:OBA]
- [SL17] Gunnar Stefansson and Jamie Lentin. From Smileys to Smileycoins: Using a cryptocurrency in education. *Ledger*, 2(??):38–54, ??? 2017. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/103>. [Stefansson:2017:SSU]
- [SLG⁺21] Leyi Shi, Xiaoyu Li, Zhenbo Gao, Pengfei Duan, Na Liu, and Honglong Chen. Worm computing: a blockchain-based resource sharing and cybersecurity framework. *Journal of Network and Computer Applications*, 185. [Shi:2021:WCB]
- [Singh:2018:CRA] Irish Singh and Seok-Won Lee. Comparative requirements analysis for the feasibility of blockchain for secure cloud. In *Asia Pacific Requirements Engineering Conference: APRES 2017: Requirements Engineering for Internet of Things*, Communications in Computer and Information Science, pages 57–72. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-981-10-7796-8_5.
- [Singh:2020:RRE] Irish Singh and Seok-Won Lee. RE_BBC: Requirements engineering in a blockchain-based cloud system: Its role in service-level agreement specification. *IEEE Software*, 37(5):7–12, September/October 2020. CODEN IESOEI. ISSN 0740-7459 (print), 1937-4194 (electronic).

- (??):??, July 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S108480452100103X>.
Sandner:2020:RCI
- [SLS20] Philipp Sandner, Anna Lange, and Philipp Schulden. The role of the CFO of an industrial company: An analysis of the impact of blockchain technology. *Future Internet*, 12(8):128, July 30, 2020. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/8/128>.
Sleiman:2015:BMD
- [SLY15] M. D. Sleiman, A. P. Lauf, and R. Yampolskiy. Bitcoin message: Data insertion on a proof-of-work cryptocurrency system. In *2015 International Conference on Cyberworlds (CW)*, pages 332–336. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2015.
SM-D:2016:BRB
- [SM-16] SM-D. Book review: *Bitcoin and Cryptocurrency Technologies*, Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller and Steven Goldfeder. *Network Security*, 2016(8):4, August 2016. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485816300745>.
Silvano:2020:ITC
- Wellington Fernandes Silvano and Roderval Marcelino. Iota Tangle: a cryptocurrency to communicate Internet-of-Things data. *Future Generation Computer Systems*, 112(??):307–319, November 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19329048>.
Shojaenasab:2022:MDB
- Ardeshir Shojaenasab, Amir Pasha Motamed, and Behnam Bahrak. Mixing detection on bitcoin transactions using statistical patterns. *CoRR*, ??(??):??, ??? 2022. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/corr/corr2204.html#abs-2204-02019>.
Saxena:2014:IAB
- Amitabh Saxena, Janardan Misra, and Aritra Dhar. Increasing anonymity in Bitcoin. In Christin and Safavi-Naini [CSN14], pages 122–139. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL <http://link.springer>.

- com/chapter/10.1007/978-3-662-44774-1_9.
- [SMHK21] Parminder Singh, Mehedi Masud, M. Shamim Hos-sain, and Avinash Kaur. Cross-domain secure data sharing using blockchain for industrial IoT. *Journal of Parallel and Distributed Computing*, 156(??):176–184, October 2021. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (elec-tronic). URL <http://www.sciencedirect.com/science/article/pii/S074373152100112X>.
- [Smo18] Natalie Smolenski. The evolution of trust: The ultimate social impact of blockchain technology de-pends on who controls our digital identities. *Scien-tific American*, 318(1):38–41, January 2018. CO-DEN SCAMAC. ISSN 0036-8733 (print), 1946-7087 (electronic). URL <http://www.nature.com/scientificamerican/journal/v318/n1/full/scientificamerican0118-38.html>; <http://www.nature.com/scientificamerican/journal/v318/n1/pdf/scientificamerican0118-38.pdf>.
- [Smi18] Reginald D. Smith. Bit-coin average dormancy: A measure of turnover and trading activity. *Ledger*, 3(??):??, ??? 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/99>.
- [SMM⁺20] Salman Shamshad, Mi-nahil, Khalid Mahmood, Saru Kumari, and Chien-Ming Chen. A secure blockchain-based e-health records storage and shar-ing scheme. *Journal of Information Security and Applications (JISA)*, 55(??):??, December 2020. CODEN ??? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620307596>.
- [SMZ14] Michele Spagnuolo, Fed-erico Maggi, and Stefano Zanero. BitIodine: Ex-tracting intelligence from the Bitcoin network. In Christin and Safavi-Naini

- [CSN14], pages 457–468. ISBN 3-662-45472-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-45472-5_29.
- [SNKG20] Parminder Singh, Anand Nayyar, Avinash Kaur, and Uttam Ghosh. Blockchain and fog based architecture for Internet of Everything in smart cities. *Future Internet*, 12(4):61, March 26, 2020. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/4/61>.
- [SNM17] Yuma Sakakibara, Kohei Nakamura, and Hiroki Matsutani. An FPGA NIC based hardware caching for blockchain. In *Proceedings of the 8th International Symposium on Highly Efficient Accelerators and Reconfigurable Technologies*, HEART2017, pages 1:1–1:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5316-9. URL <http://doi.acm.org/10.1145/3120895.3120897>.
- [So19] Jaewoo So. A new attack scheme on the bitcoin reward system. *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.*, 102-A(1):300–302, ???? 2019.
- [SOA17] Muntadher Fadhil Sallal, Gareth Owenson, and Mo Adda. Proximity awareness approach to enhance propagation delay on the Bitcoin peer-to-peer network. In *2017 IEEE 37th International Conference on Distributed Computing Systems (ICDCS)*, pages 2411–2416. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2017. ISSN 1063-6927.
- [SOA⁺21] Jose Eduardo A. Sousa, Vinicius C. Oliveira, Julia Almeida Valadares, Alex Borges Vieira, Heder S. Bernardino, Saulo Moraes Villela, and Glauber Dias Goncalves. Fighting under-price DoS attack in Ethereum with machine learning techniques. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):24–27, May 2021. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3466826.3466835>.

- [Son14] Sophie Song. The rise and fall of Bitcoin in China: Central Bank shuts down all Chinese Bitcoin exchanges. *International Business Times*, ??(??):??, March 27, 2014. URL <http://www.ibtimes.com/rise-fall-bitcoin-china-central-bank-shuts-down-all-chinese-bitcoin-exchanges-1563826>. Song:2014:RFB [Sou13]
- [Son16a] Dawn Song. Formal verification for computer security: Lessons learned and future directions. In *Proceedings of the 16th Conference on Formal Methods in Computer-Aided Design*, FMCAD '16, page 1. FMCAD Inc, Austin, TX, 2016. ISBN 0-9835678-6-7. URL <http://dl.acm.org/citation.cfm?id=3077629.3077630>. Song:2016:FVC [SPB17]
- [Son16b] Yunfei Song. *A study of Bitcoin price's relationship with local currency exchange rate and stock market index in emerging economies using VECM*. Ph.D., Fordham University, New York, NY, USA, 2016. 117 pp. URL <http://search.proquest.com/pqdtglobal/docview/1878929754>. Song:2016:SBP [SPB⁺22]
- [Son18] Juah Song. Application-specific blockchain ecosystem for the Internet of Things, users, and organizations. M.S., The University of Texas at San Antonio, San Antonio, TX, USA, 2018. 42 pp. URL <http://search.proquest.com/pqdtglobal/docview/2100912819>. Southurst:2013:BBP
- Jon Southurst. Bitcoin payment processor BIPS attacked, over \$1m stolen. *CoinDesk*, ??(??):??, November 25, 2013. Solat:2017:BAZ
- Siamak Solat and Maria Potop-Butucaru. Brief announcement: ZeroBlock: Timestamp-free prevention of block-withholding attack in Bitcoin. In *Stabilization, Safety, and Security of Distributed Systems*, pages 356–360. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-69084-1. URL http://link.springer.com/chapter/10.1007/978-3-319-69084-1_25. Saraswat:2022:UBB
- Deepti Saraswat, Farnazbanu Patel, Pronaya Bhattacharya, Ashwin Verma, Sudeep Tanwar, and Ravi Sharma. *UpHaaR: Blockchain-based charity donation*
- Song:2018:ASB

- scheme to handle financial irregularities. *Journal of Information Security and Applications (JISA)*, 68(?):??, August 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622001144>. [Spr13]
- [SPJ⁺17] Omid Sadeghi, Volodymyr Paprotski, Arno Jacobsen, Vadim Berestetsky, and Phil Coulthard. Blockchain technology. In *Proceedings of the 27th Annual International Conference on Computer Science and Software Engineering*, CASCON '17, page 355. IBM Corporation, San Jose, CA, USA, 2017. URL <http://dl.acm.org/citation.cfm?id=3172795.3172860>. [SPS⁺21]
- [SPO17] Manu Sporny. LD-DL'17 Workshop keynote talk by Manu Sporny: Building better blockchains via linked data. In *Proceedings of the 26th International Conference on World Wide Web Companion*, WWW '17 Companion, page 1429. International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva, Switzerland, 2017. ISBN 1-4503-4914-5.
- [SPZ⁺20] Manu Sporny. LD-DL'17 Workshop keynote talk by Manu Sporny: Building better blockchains via linked data. In *Proceedings of the 26th International Conference on World Wide Web Companion*, WWW '17 Companion, page 1429. International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva, Switzerland, 2017. ISBN 1-4503-4914-5.
- [Spr13] Simon Sprankel. Technical basis of digital currencies. Technical report, Technische Universität Darmstadt, Darmstadt, Germany, August 2, 2013. 22 pp. URL <https://www.coderblog.de/download/716/>; <https://www.coderblog.de/technical-basis-of-digital-currencies/>.
- [Sun:2021:SSA] Haoli Sun, Bingfeng Pi, Jun Sun, Takeshi Miyamae, and Masanobu Morinaga. SASLedger: a secured, accelerated scalable storage solution for distributed ledger systems. *Future Internet*, 13(12):310, November 30, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/12/310>.
- [Singh:2020:BSC] Amritraj Singh, Reza M. Parizi, Qi Zhang, Kim-Kwang Raymond Choo, and Ali Dehghantanha. Blockchain smart contracts formalization: Approaches and challenges to address vulnerabilities. *Computers & Security*, 88(?):Article 101654, January 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://>

- www.sciencedirect.com/science/article/pii/S0167404818310927
- Singh:2022:FPP**
- [SRA⁺22] Saurabh Singh, Shailendra Rathore, Osama Alfarraj, Amr Tolba, and Byungun Yoon. A framework for privacy-preservation of IoT healthcare data using federated learning and blockchain technology. *Future Generation Computer Systems*, 129(??):380–388, April 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21004726>
- Sengupta:2020:CSA**
- [SRB20] Jayasree Sengupta, Sushmita Ruj, and Sipra Das Bit. A comprehensive survey on attacks, security issues and blockchain solutions for IoT and IIoT. *Journal of Network and Computer Applications*, 149(??):??, January 1, 2020. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804519303418>
- Singh:2020:BBE**
- [SRP20] Sushil Kumar Singh, Shailendra Rathore, and Jong Hyuk Park. BlockIoTIntelligence: a blockchain-enabled intelligent IoT architecture with artificial intelligence. *Future Generation Computer Systems*, 110(??):721–743, September 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19316474>
- Santos:2012:TPH**
- Nuno Santos and André Schiper. Tuning Paxos for high-throughput with batching and pipelining. *Lecture Notes in Computer Science*, 7129:153–167, 2012. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL http://link.springer.com/chapter/10.1007/978-3-642-25959-1_3_11/
- Santos:2013:OPB**
- Nuno Santos and André Schiper. Optimizing Paxos with batching and pipelining. *Theoretical Computer Science*, 496(??):170–183, July 22, 2013. CODEN TCSCDI. ISSN 0304-3975 (print), 1879-2294 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0304397512009097>
- Seebacher:2017:BTE**
- Stefan Seebacher and Ronny Schüritz. Blockchain technology as an enabler of

- service systems: A structured literature review. In *Exploring Services Science*, [SS20] Lecture Notes in Business Information Processing, pages 12–23. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-56925-3_2.
- [SS17b] Andrew Sutton and Reza Samavi. Blockchain enabled privacy audit logs. In *The Semantic Web — ISWC 2017*, Lecture Notes in Computer Science, pages 645–660. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-68288-4_38.
- [SS19] David Suda and Luke Spiteri. Analysis and comparison of bitcoin and S and P 500 market features using HMMs and HSMMs. *Inf.*, 10(10):322, 2019. CODEN 2019. ISSN 2019. URL <https://dblp.org/db/journals/information/information10.html#SudaS19>.
- Sutton:2017:BEP** [SSL⁺19]
- Strehle:2020:DOR**
- Elias Strehle and Fred Steinmetz. Dominating OP returns: The impact of Omni and Veriblock on bitcoin. *Journal of Grid Computing*, 18(4):575–592, 2020. CODEN 2020. ISSN 2020. URL <https://dblp.org/db/journals/grid/grid18.html#StrehleS20>.
- Si:2019:IIS**
- Haiping Si, Changxia Sun, Yanling Li, Hongbo Qiao, and Lei Shi. IoT information sharing security mechanism based on blockchain technology. *Future Generation Computer Systems*, 101(??):1028–1040, December 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19312725>.
- Sturm:2019:BBR**
- Christian Sturm, Jonas Scalanczi, Stefan Schöning, and Stefan Jablonski. A blockchain-based and resource-aware process execution engine. *Future Generation Computer Systems*, 100(??):19–34, November 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18327158>.

- [SSV22] **Singh:2022:IAM** Jaya Singh, Ayush Sinha, and Om Prakash Vyas. Insider attack mitigation in a smart metering infrastructure using reputation score and blockchain technology. *International Journal of Information Security*, 21(3):527–546, June 2022. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <https://link.springer.com/article/10.1007/s10207-021-00561-8>. [STN22]
- [SSZ17] **Sapirshtein:2017:OSM** Ayelet Sapirshtein, Yonatan Sompolsky, and Aviv Zohar. Optimal selfish mining strategies in Bitcoin. In Grossklags and Preneel [GP17b], pages 515–532. ISBN 3-662-54970-0. ISSN 0302-9743. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-54970-4_30. [Sto17]
- [Ste17] **Stevens:2017:WBS** M. M. J. Stevens. Who broke the SHA1 algorithm (and what does it mean for Bitcoin)? Web document., February 2017. URL <https://ir.cwi.nl/pub/26510>.
- [STG⁺20] **Saxena:2020:PBC** Neetesh Saxena, Ieuan Thomas, Prosante Gope, Pete Burnap, and Neeraj Kumar. PharmaCrypt: Blockchain for critical pharmaceutical industry to counterfeit drugs. *Computer*, 53(7):29–44, July 2020. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). [Sezer:2022:TTP]
- Sezer:2022:TTP** Bora Buğra Sezer, Selçuk Topal, and Urfat Nuriyev. TPPSUPPLY: a traceable and privacy-preserving blockchain system architecture for the supply chain. *Journal of Information Security and Applications (JISA)*, 66(??):??, May 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622000096>. [Stommel:2017:BOG]
- Stommel:2017:BOG** Sebastian Stommel. Blockchain-Ökosysteme. (German) [Blockchain ecosystems]. *Datenschutz und Datensicherheit — DuD*, 41(1):7–12, December 2017. CODEN ???? ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0716-0>. [Stockton:2020:CTB]
- Stockton:2020:CTB** N. Stockton. China takes blockchain national: The state-sponsored platform will launch in 100 cities.

- IEEE Spectrum*, 57(4): 11–12, 2020. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic). [Sup16]
- [Str18] Marco Streng. Blockchain — the case for market adoption of the distributed ledger. In Linnhoff-Popien et al. [LPSZ18], pages 65–70. ISBN 3-662-49274-1, 3-662-49275-X (e-book). LCCN QA75.5-76.95. URL http://link.springer.com/chapter/10.1007/978-3-662-49275-8_9. [Sut20]
- [Sub18] Hemang Subramanian. Decentralized blockchain-based electronic marketplaces. *Communications of the ACM*, 61(1):78–84, January 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2018/1/223888/fulltext>. [SV16]
- [Suk19] Harish Sukhwani. *Performance Modeling & Analysis of Hyperledger Fabric (Permissioned Blockchain Network)*. Ph.D., Duke University, Durham, NC 27708, USA, 2019. 178 pp. URL <http://search.proquest.com/pqdtglobal/docview/2172417977>. [SV19]
- Supra:2016:IHC**
J. D. Supra. Investment highlights from CoinDesk’s state of the blockchain. Web document., November 30, 2016.
- Sutra:2020:CEP**
Pierre Sutra. On the correctness of Egalitarian Paxos. *Information Processing Letters*, 156(??): Article 105901, April 2020. CODEN IFPLAT. ISSN 0020-0190 (print), 1872-6119 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S002001901930184X>.
- Shrestha:2016:TDD**
Ajay Kumar Shrestha and Julita Vassileva. Towards decentralized data storage in general cloud platform for meta-products. In *Proceedings of the International Conference on Big Data and Advanced Wireless Technologies*, BDAW ’16, pages 60:1–60:7. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4779-7. URL <http://doi.acm.org/10.1145/3010089.3016029>.
- Singh:2019:BBC**
Nikita Singh and Manu Vardhan. Blockchain based e-cheque clearing framework. *Scalable Computing: Practice and Experi-*

- ence, 20(3):511–526, 2019. CODEN 1895-1767. URL <https://www.scpe.org/index.php/scpe/article/view/1506>. [SW17]
- [Sve17] Davor Svetinovic. Blockchain engineering for the Internet of Things: Systems security perspective. In *Proceedings of the 3rd ACM International Workshop on IoT Privacy, Trust, and Security*, IoTPTS '17, page 1. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4969-2. URL <http://doi.acm.org/10.1145/3055245.3055256>. [SW21]
- [SVL17] Georgios Spathoulas, Paraskevi Vennou, and Alexandros Loukidis. Privacy preserving platform for profitable mobile crowd sensing and users' adoption. In *Proceedings of the 21st Pan-Hellenic Conference on Informatics*, PCI 2017, pages 30:1–30:6. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5355-X. [Swa15a]
- [SVS18] Andrew Sward, Ivy Vecna, and Forrest Stonedahl. Data insertion in Bitcoin's blockchain. *Ledger*, 3(??):??, 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/101>. [Sward:2018:DIB]
- [Sillaber:2017:LCS] Christian Sillaber and Bernhard Watl. Life cycle of smart contracts in blockchain ecosystems. *Datenschutz und Datensicherheit — DuD*, 41(8):497–500, August 2017. CODEN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0819-7>. [Shekhtman:2021:EBB]
- [Swan:2015:BBNa] Louis Shekhtman and Erez Waisbard. EngraveChain: a blockchain-based tamper-proof distributed log system. *Future Internet*, 13(6):143, May 29, 2021. CODEN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/6/143>. [Swan:2015:BBNa]
- Melanie Swan. *Bitcoin: A Blueprint for a New World Currency*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2015. ISBN 1-4919-2049-1. 120 pp. LCCN 2015-018611. URL <http://deposit.d-nb.de/cgi-bin/dokserv?>

id=5125084&prov=M&dok_
var=1&dok_ext=htm.

Swan:2015:BBNb

[Swa15b]

Melanie Swan. *Blockchain: blueprint for a new economy*. O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2015. ISBN 1-4919-2049-1, 1-4919-2045-9 (e-book), 1-4919-2047-5 (e-book). xviii + 130 pp. LCCN HG1710 .S93 2015. URL <http://proquest.safaribooksonline.com/?fpi=9781491920480>.

Swan:2016:BTS

[Swa16]

Melanie Swan. Blockchain temporality: Smart contract time specifiability with blocktime. In *Rule Technologies. Research, Tools, and Applications*, pages 184–196. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-42019-6_12.

Sweatman:2016:BBD

[Swe16]

Helen Sweatman. The building blocks of digital art marketing: a market analysis of the digital art market and its application to blockchain technology. M.A., Sotheby's Institute of Art — New York, New York, NY, USA,

[SWG21]

2016. 83 pp. URL <http://search.proquest.com/pqdtglobal/docview/1976101936>.

Sharma:2021:BBS

Rahul Sharma, Mohammad Wazid, and Prosanta Gope. A blockchain based secure communication framework for community interaction. *Journal of Information Security and Applications (JISA)*, 58(??):??, May 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000351>.

Shi:2021:BBT

Peichang Shi, Huaimin Wang, Shangzhi Yang, Chang Chen, and Wentao Yang. Blockchain-based trusted data sharing among trusted stakeholders in IoT. *Software—Practice and Experience*, 51(10):2051–2064, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).

Sun:2023:BVS

Yujing Sun, Hao Xiong, Siu Ming Yiu, and Kwok-Yan Lam. BitAnalysis: a visualization system for bitcoin wallet investigation. *IEEE Trans. Big Data*, 9(2):621–636, April 2023. CODEN ???? ISSN ???? URL <https://>

[SWY⁺21]

[SXYL23]

- /dblp.org/db/journals/tbd/tbd9.html#SunXYL23.
- [SXZ⁺21] You Sun, Rui Xue, Rui Zhang, Qianqian Su, and Sheng Gao. RTChain: a reputation system with transaction and consensus incentives for e-commerce blockchain. *ACM Transactions on Internet Technology (TOIT)*, 21(1):15:1–15:24, February 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3430502>. [SYCC21]
- [Sun:2021:RRS] Lijun Sun, Qian Yang, Xiao Chen, and Zhenxiang Chen. RC-chain: Reputation-based crowdsourcing blockchain for vehicular networks. *Journal of Network and Computer Applications*, 176(??): ??, February 15, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520304082>. [Sun:2021:RCR]
- [SY22] Cheng Shi and Kazuki Yoneyama. Formal verification of fair exchange based on bitcoin smart contracts. *IEICE Trans. Fundam. Electron. Commun. Comput. Sci.*, 105-A(3):242–267, ??? 2022. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/apin/apin52.html#SunYH22a>. See [SYH22a]. [Shi:2022:FVF]
- [SYB14] D. Schwartz, N. Youngs, and A. Britto. The ripple protocol consensus algorithm. Whitepaper, September 2014. URL <https://ripple.com/consensus-whitepaper/>. [Schwartz:2014:RPC]
- [Sun:2022:CLT] Xiaowen Sun, Tan Yang, and Bo Hu. Correction to: LSTM-TC: Bitcoin coin mixing detection method with a high recall. *Appl. Intell.*, 52(8):9597, ??? 2022. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/apin/apin52.html#SunYH22a>. See [SYH22b]. [Sun:2022:LTB]
- [Sun:2022:LTB] Xiaowen Sun, Tan Yang, and Bo Hu. LSTM-TC: Bitcoin coin mixing detection method with a high recall. *Appl. Intell.*, 52(1):780–793, ??? 2022. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/apin/apin52.html#SunYH22a>. See correction [SYH22a].

- [SYK17] **Sharma:2017:SDI** Vishal Sharma, Ilsun You, and Gökhan Kul. Socializing drones for inter-service operability in ultra-dense wireless networks using blockchain. In *Proceedings of the 2017 International Workshop on Managing Insider Security Threats, MIST '17*, pages 81–84. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5177-8. URL <http://doi.acm.org/10.1145/3139923.3139932>. [SZ14]
- [SYZ16] **Sun:2016:BBS** Jianjun Sun, Jiaqi Yan, and Kem Z. K. Zhang. Blockchain-based sharing services: What blockchain technology can contribute to smart cities. *Financial Innovation*, 2(1):??, December 2016. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-016-0040-y>. [SZ15]
- [SZ13] **Sompolinsky:2013:ABT** Yonatan Sompolinsky and Aviv Zohar. Accelerating Bitcoin’s transaction processing: fast money grows on trees, not chains. Semantic Scholar Web blog., 2013. URL <https://www.semanticscholar.org/paper/Accelerating-Bitcoin-s-Transaction-Processing-Fast-Sompolinsky-Zohar/401680ef12c04c247c50737b9114c169c660>. [SZ17]
- Shah:2014:BRB** D. Shah and K. Zhang. Bayesian regression and Bitcoin. In *2014 52nd Annual Allerton Conference on Communication, Control, and Computing (Allerton)*, pages 409–414. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2014.
- Sompolinsky:2015:SHR** Yonatan Sompolinsky and Aviv Zohar. Secure high-rate transaction processing in Bitcoin. In Brenner et al. [BCJR15], pages 507–527. ISBN 3-662-47854-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-47854-7_32.
- Sompolinsky:2017:BUI** Yonatan Sompolinsky and Aviv Zohar. Bitcoin’s underlying incentives. *ACM Queue: Tomorrow’s Computing Today*, 15(5):50:29–50:52, September/October 2017. CODEN AQCUAE. ISSN 1542-7730 (print), 1542-7749 (electronic). URL <http://queue.acm.org/detail.cfm?id=3168362>.

- [SZ18] **Sompolinsky:2018:BUI**
Yonatan Sompolinsky and Aviv Zohar. Bitcoin’s underlying incentives. *Communications of the ACM*, 61(3):46–53, March 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2018/3/225472/fulltext>.
- [Sza08] **Szabo:2008:BGU** [SZM22]
N. Szabo. Bit gold. Unenumerated. Web document., 2008. URL <https://unenumerated.blogspot.com/2005/12/bit-gold.html>.
- [SZdLZ22] **Shi:2022:BGE**
Zeshun Shi, Huan Zhou, Cees de Laat, and Zhiming Zhao. A Bayesian game-enhanced auction model for federated cloud services using blockchain. *Future Generation Computer Systems*, 136(??):49–66, November 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22001881> [Tac17]
- [SZJ17] **Stoykov:2017:VFB**
Lyubomir Stoykov, Kaiwen Zhang, and Hans-Arno Jacobsen. VIBES: Fast blockchain simulations for large-scale peer-to-peer networks: Demo. In *Proceedings of the 18th ACM/IFIP/USENIX Middleware Conference: Posters and Demos*, Middleware ’17, pages 19–20. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5201-4. URL <http://doi.acm.org/10.1145/3155016.3155020>.
- Su:2022:BRB**
Jian Su, Leyou Zhang, and Yi Mu. BA-RMKABSE: Blockchain-aided ranked multi-keyword attribute-based searchable encryption with hiding policy for smart health system. *Future Generation Computer Systems*, 132(??):299–309, July 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000292>
- Tackmann:2017:SET**
Björn Tackmann. Secure event tickets on a blockchain. In Garcia-Alfaro et al. [GANAHJ17], pages 437–444. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_26.

- [TADS20] **Talamo:2020:BBP**
 Maurizio Talamo, Franco Arcieri, Andrea Dimitri, and Christian H. Schunck. [Tay17]
 A blockchain based PKI validation system based on rare events management. *Future Internet*, 12(2):40, February 14, 2020. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/2/40>.
- [Tam19] **Tamang:2019:DRM**
 Sujata Tamang. Decentralized reputation model and trust framework blockchain [TB17]
 and smart contracts. Master's, Uppsala University, Uppsala, Sweden, 2019. URL <http://search.proquest.com/pqdtglobal/docview/2301552161>.
- [Tay13] **Taylor:2013:BAB**
 Michael Bedford Taylor. Bitcoin and the age of bespoke silicon. In *Proceedings of the 2013 International Conference on Compilers, Architectures and Synthesis for Embedded Systems (CASES)*, CASES '13, pages 16:1–16:10. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013. ISBN 1-4799-1400-2. URL http://cseweb.ucsd.edu/~mbtaylor/papers/bitcoin_taylor_cases_2013.pdf; <http://dl.acm.org/citation.cfm?id=2555729.2555745>.
- Taylor:2017:EBH**
 Michael Bedford Taylor. The evolution of Bitcoin hardware. *Computer*, 50(9):58–66, September 2017. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <https://www.computer.org/csdl/mags/co/2017/09/mco2017090058-abs.html>.
- Tessler:2017:BQC**
 Louis Tessler and Tim Byrnes. Bitcoin and quantum computing. *CoRR*, ??(??):??, ??? 2017. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1711.04235>; <https://dblp.org/db/journals/corr/corr1711.html#abs-1711-04235>.
- Tran:2021:IBI**
 Nguyen Khoi Tran, M. Ali Babar, and Jonathan Boan. Integrating blockchain and Internet of Things systems: a systematic review on objectives and designs. *Journal of Network and Computer Applications*, 173(??):??, January 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520303118>.

- [TBY17] Philip Treleaven, Richard Gen-
dal Brown, and Danny
Yang. Blockchain tech-
nology in finance. *Com-
puter*, 50(9):14–17, Septem-
ber 2017. CODEN CP-
TRB4. ISSN 0018-9162
(print), 1558-0814 (elec-
tronic). URL [https://
www.computer.org/csdl/
mags/co/2017/09/mco2017090014.
html](https://www.computer.org/csdl/mags/co/2017/09/mco2017090014.html). **Treleaven:2017:BTF**
- [TD17a] Allan Third and John
Domingue. Linked data
indexing of distributed
ledgers. In *Proceedings
of the 26th International
Conference on World Wide
Web Companion*, WWW
'17 Companion, pages
1431–1436. International
World Wide Web Confer-
ences Steering Committee,
Republic and Canton of
Geneva, Switzerland, 2017.
ISBN 1-4503-4914-5. **Third:2017:LDI**
- [TD17b] A. Tomescu and S. De-
vadas. Catena: Efficient
non-equivocation via Bit-
coin. In *2017 IEEE Sym-
posium on Security and
Privacy (SP)*, pages 393–
409. IEEE Computer So-
ciety Press, 1109 Spring
Street, Suite 300, Silver
Spring, MD 20910, USA,
May 2017. ISSN 1081-
6011 (print), 2375-1207
(electronic). URL [http:
//ieeexplore.ieee.org/
document/7958589/](http://ieeexplore.ieee.org/document/7958589/). **Tong:2022:BDD**
- [TDS⁺22a] Wei Tong, Xuewen Dong,
Yulong Shen, Xiaohong
Jiang, and Zhiwei Zhang.
A blockchain-driven data
exchange model in multi-
domain IoT with controlla-
bility and parallelity. *Future
Generation Computer Sys-
tems*, 135(??):85–94, Octo-
ber 2022. CODEN FG-
SEVI. ISSN 0167-739X
(print), 1872-7115 (elec-
tronic). URL [http://
www.sciencedirect.com/
science/article/pii/S0167739X22001558](http://www.sciencedirect.com/science/article/pii/S0167739X22001558). **Tong:2022:CSP**
- [TDS⁺22b] Wei Tong, Xuewen Dong,
Yulong Shen, Yuanyu
Zhang, Xiaohong Jiang,
and Wensheng Tian. CHChain:
Secure and parallel crowd-
sourcing driven by hy-
brid blockchain. *Fu-
ture Generation Computer
Systems*, 131(??):279–291,
June 2022. CODEN FG-
SEVI. ISSN 0167-739X
(print), 1872-7115 (elec-
tronic). URL [http://
www.sciencedirect.com/
science/article/pii/S0167739X22000309](http://www.sciencedirect.com/science/article/pii/S0167739X22000309). **Tao:2022:CNA**
- [TDW⁺22] Bishenghui Tao, Hong-Ning
Dai, Jiajing Wu, Ivan
Wang Hei Ho, Zibin Zheng,
and Chak-Fong Cheang.

- Complex network analysis of the bitcoin transaction network. *CoRR*, ??(??):??, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/corr/corr2203.html#abs-2203-09026>. [THF17]
- Timon:2016:FPP**
- [TF16] J. Timon and M. Friedenbach. Freicoïn: a peer-to-peer digital currency delivering freedom from usury. Web site, 2016. URL <http://freico.in/>.
- TakkalBataille:2017:BMA**
- [TFG17] Adli Takkal Bataille, Jacques Favier, and Jean-Joseph Goux. *Bitcoin, la monnaie acéphale. (French) [Bitcoin: the headless currency]*. CNRS éditions, Paris, France, 2017. ISBN 2-271-11554-X (paperback). 270 pp. LCCN HG1710 .T34 2017. [THF121]
- Tang:2021:STM**
- [TGC⁺21] Xinyu Tang, Cheng Guo, Kim-Kwang Raymond Choo, Yining Liu, and Long Li. A secure and trustworthy medical record sharing scheme based on searchable encryption and blockchain. *Computer Networks (Amsterdam, Netherlands: 1999)*, 200(??):??, December 9, 2021. CODEN ??? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S138912862100462X>.
- Tian:2017:CCT**
- Haibo Tian, Jiejie He, and Liqing Fu. Contract Coin: Toward practical contract signing on blockchain. In *Information Security Practice and Experience*, pages 43–61. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-72359-4_3.
- Tovanich:2021:VBD**
- Natkamon Tovanich, Nicolas Heulot, Jean-Daniel Fekete, and Petra Isenberg. Visualization of blockchain data: a systematic review. *IEEE Transactions on Visualization and Computer Graphics*, 27(7):3135–3152, July 2021. CODEN ITVGEA. ISSN 1077-2626.
- Thai:2022:DIN**
- Quang Tung Thai, Nam-seok Ko, Sung Hyuk Byun, and Sun-Me Kim. Design and implementation of NDN-based Ethereum blockchain. *Journal of Network and Computer Applications*, 200(??):??, April 2022. CODEN JN-CAF3. ISSN 1084-8045

- (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804521003143> [TKW15]
- Timme:2015:FNE** [TMTB19]
 Marc Timme, Ljupco Kocarev, and Dirk Witthaut. Focus on networks, energy and the economy. *New Journal of Physics*, 17(11):110201, November 2015. CODEN NJOPFM. ISSN 1367-2630.
- Truong:2021:BBT** [TLS⁺21]
 Nguyen Truong, Gyu Myoung Lee, Kai Sun, Florian Guitton, and YiKe Guo. A blockchain-based trust system for decentralised applications: When trustless needs trust. *Future Generation Computer Systems*, 124(??):68–79, November 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21001758> [TNJJ22]
- Tan:2022:SRT** [TML⁺22]
 Bryan Tan, Benjamin Mariano, Shuvendu K. Lahiri, Isil Dillig, and Yu Feng. SolType: refinement types for arithmetic overflow in Solidity. *Proceedings of the ACM on Programming Languages (PACMPL)*, 6(POPL):4:1–4:29, January 2022. CODEN ???? ISSN 2475-1421 (electronic). URL <https://dl.acm.org/doi/10.1145/3498665> [Tuli:2019:FBB]
- Shreshth Tuli, Redowan Mahmud, Shikhar Tuli, and Rajkumar Buyya. Fog-Bus: a blockchain-based lightweight framework for edge and fog computing. *The Journal of Systems and Software*, 154(??):22–36, August 2019. CODEN JSSODM. ISSN 0164-1212 (print), 1873-1228 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0164121219300822> [Tedeschi:2022:OTF]
- Enrico Tedeschi, Tor-Arne S. Nordmo, Dag Johansen, and Håvard D. Johansen. On optimizing transaction fees in bitcoin using AI: Investigation on miners inclusion pattern. *ACM Transactions on Internet Technology (TOIT)*, 22(3):77:1–77:??, August 2022. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3528669> [Tech:2017:BTO]
- Robin P. G. Tech, Konstanze E. K. Neumann, and Wendelin Michel. Blockchain-technologie und open-source-sensornetzwerke. In *Interdisziplinäre Perspektiven zur Zukunft der*

- Wertschöpfung*, pages 93–108. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., December 2017. URL http://link.springer.com/chapter/10.1007/978-3-658-20265-1_8. [TPE20]
- [TODM19] Roberto Tonelli, Marco Ortu, Stephane Ducasse, and Michele Marchesi. Workshop summary: 2019 IEEE /ACM Second International Workshop on Emerging Trends in Software Engineering for Blockchain (WETSEB 2019). *ACM SIGSOFT Software Engineering Notes*, 44(3):48–52, November 2019. CODEN SFENDP. ISSN 0163-5948 (print), 1943-5843 (electronic). URL <https://dl.acm.org/doi/10.1145/3356773.3356807>. [Tre21]
- [TOM17] Kentaroh Toyoda, Tomoaki Ohtsuki, and P. Takis Mathiopoulos. Identification of high yielding investment programs in Bitcoin via transactions pattern analysis. In IEEE, editor, *GLOBECOM 2017 — 2017 IEEE Global Communications Conference, 4–8 December 2017, Singapore*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2017. [Tre22]
- Tanwar:2020:BBE**
- Sudeep Tanwar, Karan Parekh, and Richard Evans. Blockchain-based electronic healthcare record system for healthcare 4.0 applications. *Journal of Information Security and Applications (JISA)*, 50(??):??, February 2020. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212619306155>.
- Treiblmaier:2021:ENW**
- Horst Treiblmaier. Exploring the next wave of blockchain and distributed ledger technology: The overlooked potential of scenario analysis. *Future Internet*, 13(7):183, July 19, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/7/183>.
- Treiblmaier:2022:WCA**
- Horst Treiblmaier. What is coming across the horizon and how can we handle it? Bitcoin scenarios as a starting point for rigorous and relevant research. *Future Internet*, 14(6):162, May 26, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/6/162>.
- Tonelli:2019:WSI**
- Toyoda:2017:IHY**

- [Tro14a] **Tromp:2014:CCMa** John Tromp. Cuckoo cycle: a memory-hard proof-of-work system. In *Workshop on Bitcoin Research*, page ??, February 1, 2014. URL <http://www.hashcash.org/papers/cuckoo.pdf>.
- [Tro14b] **Tromp:2014:CCMb** John Tromp. Cuckoo Cycles: a memory-hard proof-of-work system. Web site., January 2014. URL <https://github.com/tromp/cuckoo>. [TS20]
- [Tro15a] **Tromp:2015:BHP** John Tromp. Beyond the Hashcash proof-of-work (there's more to mining than hashing). Web blog, September 7, 2015. URL <http://cryptorials.io/beyond-hashcash-proof-work-theres-mining-hashing/>.
- [Tro15b] **Tromp:2015:CCMb** John Tromp. Cuckoo cycle: a memory bound graph-theoretic proof-of-work. Report, July 24, 2015. 13 pp. URL <https://github.com/tromp/cuckoo/blob/master/doc/cuckoo.pdf?raw=true>. [TSCT18]
- [TS16] **Tschorsch:2016:BBT** Florian Tschorsch and Björn Scheuermann. Bitcoin and beyond: a technical survey on decentralized digital currencies. *IEEE Communications Surveys Tutorials*, 18(3):2084–2123, Third Quarter 2016. CODEN ISSN 1553-877X. URL <https://dblp.org/db/journals/comsur/comsur18.html#TschorschS16>; <https://www.wikidata.org/entity/Q56622168>.
- Tomar:2020:MTV** Ravi Tomar and Sarishma. Maintaining trust in VANETs using blockchain. *ACM SIGADA Ada Letters*, 40(1):91–96, October 2020. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic). URL <https://dl.acm.org/doi/10.1145/3431235.3431244>.
- Tuarob:2018:DDB** Suppawong Tuarob, Ray Strong, Anca Chandra, and Conrad S. Tucker. Discovering discontinuity in big financial transaction data. *ACM Transactions on Management Information Systems (TMIS)*, 9(1):3:1–3:??, February 2018. CODEN ISSN 2158-656X (print), 2158-6578 (electronic).
- Tovanich:2022:MVA** Natkamon Tovanich, Nicolas Soulié, Nicolas Heulot,

- and Petra Isenberg. MiningVis: Visual analytics of the bitcoin mining economy. *IEEE Transactions on Visualization and Computer Graphics*, 28(1):868–878, January 2022. CODEN ITVGEA. ISSN 1077-2626. [TT16]
- [TSL⁺17] Deepak K. Tosh, Sachin Shetty, Xueping Liang, Charles A. Kamhoua, Kevin A. Kwiat, and Laurent Njilla. Security implications of blockchain cloud with analysis of block withholding attack. In *Proceedings of the 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*, CCGrid '17, pages 458–467. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5090-6610-1. [TT19]
- [TSY⁺21] Liang Tan, Na Shi, Keping Yu, Moayad Aloqaily, and Yaser Jararweh. A blockchain-empowered access control framework for smart devices in green Internet of Things. *ACM Transactions on Internet Technology (TOIT)*, 21(3):80:1–80:20, June 2021. CODEN TSYD ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3433542>. [Tun18]
- Tapscott:2016:BRHa**
Don Tapscott and Alex Tapscott. *Blockchain revolution: how the technology behind Bitcoin is changing money, business, and the world*. Portfolio / Penguin, New York, NY, USA, 2016. ISBN 1-101-98013-3 (hardcover), 1-101-98015-X (e-book), 0-399-56406-3 (International edition). xx + 348 pp. LCCN HG1710 .T385 2016.
- Tasca:2019:TBT**
Paolo Tasca and Claudio J. Tessone. A taxonomy of blockchain technologies: Principles of identification and classification. *Ledger*, 4(??):??, 2019. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/140>.
- Tapscott:2016:BRHb**
Don Tapscott, Alex Tapscott, and Jeff Cummings. *Blockchain revolution: [how the technology behind Bitcoin is changing money, business, and the world]*. Brilliance Audio, Grand Haven, MI, USA, 2016. ISBN 1-5113-5766-5. LCCN RZC 5626. 11 audio discs (14 hr., 17 min.).
- Tung:2018:WSM**
Liam Tung. Windows security: Microsoft fights

- massive cryptocurrency miner malware outbreak: Microsoft has blocked a malware outbreak that could have earned big bucks for one criminal group. ZDNet Web story., March 8, 2018. URL <http://www.zdnet.com/article/windows-security-microsoft-fights-massive-cryptocurrency-miner-malware-outbreak/>. [TTY⁺19]
- [TVK⁺20] Michael Bedford Taylor, Luis Vega, Moein Khazraee, Ikuo Magaki, Scott Davidson, and Dustin Richmond. ASIC clouds: specializing the datacenter for planet-scale applications. *Communications of the ACM*, 63(7):103–109, July 2020. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3399734>. **Taylor:2020:ACS**
- [TWFO20] Weizhao Tang, Weina Wang, Giulia Fanti, and Sewoong Oh. Privacy-utility tradeoffs in routing cryptocurrency over payment channel networks. *Proceedings of the ACM on Measurement and Analysis of Computing Systems (POMACS)*, 4(2):29:1–29:39, June 2020. CODEN ???? ISSN 2476-1249. **Tang:2020:PUT**
- [UHK⁺21] Devrim Unal, Mohammad Hammoudeh, Muhammad Asif Khan, Abdelrahman Abuarqoub, Gregory Epiphaniou, and Ridha Hamila. Integration of federated machine learning and blockchain for the provision of secure big data URL <https://dl.acm.org/doi/10.1145/3392147>. **Thai:2019:HBF**
- Quang Tung Thai, Jong-Chul Yim, Tae-Whan Yoo, Hyun-Kyung Yoo, Ji-Young Kwak, and Sun-Me Kim. Hierarchical Byzantine fault-tolerance protocol for permissioned blockchain systems. *The Journal of Supercomputing*, 75(11):7337–7365, November 2019. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). **Tziakouris:2018:CFC**
- Giannis Tziakouris. Cryptocurrencies — a forensic challenge or opportunity for law enforcement? An INTERPOL perspective. *IEEE Security & Privacy*, 16(4):92–94, July/August 2018. CODEN ???? ISSN 1540-7993 (print), 1558-4046 (electronic). URL <https://www.computer.org/csdl/mags/sp/2018/04/msp2018040092-abs.html>. **Unal:2021:IFM**

analytics for Internet of Things. *Computers & Security*, 109(??):Article 102393, October 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404821002170> ■

Upadhyaya:2016:CEC

[UJ16]

R. Upadhyaya and A. Jain. Cyber ethics and cyber crime: A deep dwelled study into legality, ransomware, underground web and Bitcoin wallet. In *2016 International Conference on Computing, Communication and Automation (ICCCA)*, pages 143–148. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2016.

Ulieru:2016:BBA

[Uli16]

Mihaela Ulieru. Blockchain 2.0 and beyond: Adhocracies. In *Banking Beyond Banks and Money*, pages 297–303. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-42448-4_15 ■

Underwood:2016:NBB

[Und16]

Sarah Underwood. News:

Blockchain beyond Bitcoin. *Communications of the ACM*, 59(11):15–17, November 2016. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2016/11/209132/fulltext> ■

USCHCSM:2014:BEB

United States Congress House Committee on Small Business, editor. *Bitcoin: examining the benefits and risks for small business: hearing before the Committee on Small Business, United States House of Representatives, One Hundred Thirteenth Congress, second session, hearing held April 2, 2014*. United States Government Printing Office, Washington, DC, USA, 2014. LCCN KF27 .S6 2014.

Unvan:2021:IBU

[Ünv21]

Yüksel Akay Ünvan. Impacts of Bitcoin on USA, Japan, China and Turkey stock market indexes: Causality analysis with value at risk method (VAR). *Communications in Statistics: Theory and Methods*, 50(7):1599–1614, 2021. CODEN CSTMDC. ISSN 0361-0926 (print), 1532-415X (electronic). URL <http://www.tandfonline.com/doi/full/10.1080/03610926.2019.1678644> ■

- [URC19] **UIHassan:2019:PPB**
 Muneeb Ul Hassan, Mubashir Husain Rehmani, and Jinjun Chen. Privacy preservation in blockchain based IoT systems: Integration issues, prospects, challenges, and future research directions. *Future Generation Computer Systems*, 97(?): 512–529, August 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18326542>.
- [URC20] **UIHassan:2020:DPB**
 Muneeb Ul Hassan, Mubashir Husain Rehmani, and Jinjun Chen. Differential privacy in blockchain technology: a futuristic approach. *Journal of Parallel and Distributed Computing*, 145(?):50–74, November 2020. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520303105>.
- [Uri17] **Urien:2017:TSB**
 P. Urien. Towards secure Bitcoin fast trading: Designing secure elements for digital currency. In *2017 Third International Conference on Mobile and Secure Services (MobiSecServ)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, February 2017. URL <http://ieeexplore.ieee.org/document/7886560/>.
- [Urq17] **Urquhart:2017:PCB**
 Andrew Urquhart. Price clustering in Bitcoin. *Economics Letters*, 159(?): 145–148, October 2017. CODEN ECLEDS. ISSN 0165-1765 (print), 1873-7374 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0165176517303233>.
- [US23] **Ulla:2023:REC**
 Mohammed Mujeer Ulla and Deepak S. Sakkari. Research on elliptic curve crypto system with bitcoin curves — SECP256k1, NIST256p, NIST521p and LLL. *J. Cyber Secur. Mobil.*, 12(1):103–128, 2023. CODEN 2023. ISSN 2023. URL <https://dblp.org/db/journals/jcsm/jcsm12.html#UllaS23>.
- [VA15] **VanRenesse:2015:PMM**
 Robbert Van Renesse and Deniz Altinbuken. Paxos made moderately complex. *ACM Computing Surveys*, 47(3):42:1–42:36, April 2015. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic).

- [Van14a] **VanAlstyne:2014:WBV**
Marshall Van Alstyne. Why Bitcoin has value. *Communications of the ACM*, 57(5):30–32, May 2014. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).
- [Van14b] **Vandervort:2014:COA** [VBC⁺17]
David Vandervort. Challenges and opportunities associated with a Bitcoin-based transaction rating system. In Christin and Safavi-Naini [CSN14], pages 33–42. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_3.
- [van20] **vanOorschot:2020:BST**
P. C. van Oorschot. Blockchains and stealth tactics for teaching security. *IEEE Security & Privacy*, 18(5):3–5, September/October 2020. ISSN 1540-7993 (print), 1558-4046 (electronic).
- [Vas17] **Vasek:2017:MBB**
Marie Vasek. *Measuring Bitcoin-Based Cybercrime*. Ph.D., The University of Tulsa, Tulsa, OK, USA, 2017. 99 pp. URL <http://search.proquest.com/pqdtglobal/docview/1896552050>.
- [VB08] **Vieira:2008:CRF** [VC15a]
Gustavo M. D. Vieira and Luiz E. Buzato. On the coordinator’s rule for Fast Paxos. *Information Processing Letters*, 107(5):183–187, August 16, 2008. CODEN IFPLAT. ISSN 0020-0190 (print), 1872-6119 (electronic).
- Vasek:2017:BBD**
Marie Vasek, Joseph Bonneau, Ryan Castellucci, Cameron Keith, and Tyler Moore. The Bitcoin brain drain: Examining the use and abuse of Bitcoin brain wallets. In Jakobsson et al. [JRB⁺17], pages 609–618. ISBN 3-662-54970-0. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-54970-4_36.
- Verma:2021:NBB**
Ashwin Verma, Pronaya Bhattacharya, Deepti Saraswat, and Sudeep Tanwar. *Nya Ya: Blockchain-based electronic law record management scheme for judicial investigations*. *Journal of Information Security and Applications (JISA)*, 63(??):??, December 2021. CODEN ????? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621001873>.
- Vigna:2015:ACH**
Paul Vigna and Michael J. Casey. *The age of cryptocurrency: how Bitcoin*

- and digital money are challenging the global economic order.* St. Martin's Press, New York, NY, USA, 2015. ISBN 1-250-06563-1 (hardcover), 1-4668-7306-X (e-book). 357 pp. LCCN HF5548.32 .V54 2015.
- Vigna:2015:CHB**
- [VC15b] Paul Vigna and Michael J. Casey. *Cryptocurrency: how Bitcoin and digital money are challenging the global economic order.* The Bodley Head, London, UK, 2015. ISBN 1-84792-344-5 (hardcover). 357 pp. LCCN HF5548.32 .V54 2015b.
- VanDerHorst:2017:PMI**
- [VCLK17] L. Van Der Horst, K. K. R. Choo, and N. A. LeKhac. Process memory investigation of the Bitcoin clients Electrum and Bitcoin Core. *IEEE Access*, 5: 22385–22398, 2017. ISSN 2169-3536.
- Velasco:2020:NDL**
- [VCPC20] Carlos Velasco, Ricardo Colomo-Palacios, and Ramon Cano. Neural distributed ledger. *IEEE Software*, 37(5):43–48, September/October 2020. CODEN IESOEG. ISSN 0740-7459 (print), 1937-4194 (electronic).
- Vishnumurthy:2003:KSE**
- [VCS03] Vivek Vishnumurthy, Sangeetha Chandrakumar, and Emin Gun Sirer. KARMA: A secure economic framework for peer-to-peer resource sharing. In ????, editor, *Proceedings of the Workshop on Economics of Peer-to-Peer Systems, Berkeley, California, June 2003*, page ?? ACM Press, New York, NY 10036, USA, 2003. URL <https://www.cs.cornell.edu/people/egs/papers/karma.pdf>.
- Viswam:2017:EBF**
- [VD17] A. Viswam and G. Darsan. An efficient Bitcoin fraud detection in social media networks. In *2017 International Conference on Circuit, Power and Computing Technologies (IC-CPCT)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, April 2017.
- Vishwakarma:2021:SIS**
- Lokendra Vishwakarma and Debasis Das. SCAB-IoTA: Secure communication and authentication for IoT applications using blockchain. *Journal of Parallel and Distributed Computing*, 154(??):94–105, August 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000800>.

- [VDG19] **Viswanathan:2019:BSR**
R. Viswanathan, D. Dasgupta, and S. R. Govindaswamy. Blockchain Solution Reference Architecture (BSRA). *IBM Journal of Research and Development*, 63(2–3):1:1–1:12, March/May 2019. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic).
- [vdHEM⁺17] **vanderHeijden:2017:BSR**
Rens W. van der Heijden, Felix Engelmann, David Mödinger, Franziska Schöning, and Frank Kargl. Blockchain: Scalability for resource-constrained accountable vehicle-to-x communication. In *Proceedings of the 1st Workshop on Scalable and Resilient Infrastructures for Distributed Ledgers*, SERIAL '17, pages 4:1–4:5. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5173-5. URL <http://doi.acm.org/10.1145/3152824.3152828>.
- [vdHKZ14] **vandenHooff:2014:VVC**
Jelle van den Hooff, M. Frans Kaashoek, and Nickolai Zeldovich. VerSum: Verifiable computations over large public logs. In *Proceedings of the 2014 ACM SIGSAC Conference on Computer and Communications Security*, CCS '14, pages 1304–1316. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-2957-8. URL <http://doi.acm.org/10.1145/2660267.2660327>.
- [Vilim:2016:ABM] **Vilim:2016:ABM**
Matthew Vilim, Henry Duwe, and Rakesh Kumar. Approximate Bitcoin mining. In *Proceedings of the 53rd Annual Design Automation Conference*, pages 97:1–97:6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2016. ISBN 1-4503-4236-1.
- [Vacca:2021:SLR] **Vacca:2021:SLR**
Anna Vacca, Andrea Di Sorbo, Corrado A. Visaggio, and Gerardo Canfora. A systematic literature review of blockchain and smart contract development: Techniques, tools, and open challenges. *The Journal of Systems and Software*, 174(??):??, April 2021. CODEN JS-SODM. ISSN 0164-1212 (print), 1873-1228 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0164121220302818>.
- [Velasco:2016:SBE] **Velasco:2016:SBE**
Pablo R. Velasco. Sketching Bitcoin: Empirical research of digital affordances. In *Innovative Meth-*
- [VDK16]
- [VDVC21]
- [Vel16]

- ods in Media and Communication Research*, pages 99–122. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-40700-7. URL http://link.springer.com/chapter/10.1007/978-3-319-40700-5_6. [VFV17b]
- [VFN91] Phong Vo, Glenn Fowler, and Landon Curt Noll. FowlerNollVo hash function. Web document., 1991. URL https://en.wikipedia.org/wiki/Fowler%E2%80%93Noll%E2%80%93Vo_hash_function#cite_note-2. [Vo:1991:FHF]
- [VFS⁺19] Spyros Voulgaris, Nikos Fotiou, Vasilios A. Siris, George C. Polyzos, Mikael Jaatinen, and Yannis Oikonomidis. Blockchain technology for intelligent environments. *Future Internet*, 11(10):213, October 11, 2019. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/11/10/213>. [VFSV17c]
- [VFV17a] Shaileshh Bojja Venkatakrishnan, Giulia Fanti, and Pramod Viswanath. Dandelion: Redesigning the bitcoin network for anonymity. *CoRR*, abs/1701.04439(??):??, 2017. CODEN ????. ISSN 2476-1249. URL <http://arxiv.org/abs/1701.04439>; <https://dblp.org/db/journals/corr/corr1701.html#Venkatakrishnan17>. [Venkatakrishnan:2017:DRBb]
- [VFV17c] Shaileshh Bojja Venkatakrishnan, Giulia Fanti, and Pramod Viswanath. Dandelion: Redesigning the Bitcoin network for anonymity. *ACM SIGMETRICS Performance Evaluation Review*, 45(1):57, June 2017. CODEN ????. ISSN 1-4503-5032-1. ISSN 0163-5999 (print), 1557-9484 (electronic). [Venkatakrishnan:2017:DRBc]
- [VFV17a] Shaileshh Bojja Venkatakrishnan, Giulia Fanti, and Pramod Viswanath. Dandelion: Redesigning the bitcoin network for anonymity. *Proceedings of the ACM on Measurement and Analysis of Computing Systems (POMACS)*, 1(1):22:1–22:34, June 2017. CODEN ????. ISSN 2476-1249. URL <http://dl.acm.org/citation.cfm?id=3084459>. [Vallois:2017:BTC]
- [VG17] Valentin Vallois and Fouad Amine Guenane. Bitcoin transaction: From the creation to validation, a protocol
- [Venkatakrishnan:2017:DRBa] Shaileshh Bojja Venkatakrishnan, Giulia Fanti, and Pramod Viswanath. Dandelion: Redesigning the bitcoin network for anonymity. *CoRR*, abs/1701.04439(??):??, 2017. CODEN ????. ISSN 2476-1249. URL <http://arxiv.org/abs/1701.04439>; <https://dblp.org/db/journals/corr/corr1701.html#Venkatakrishnan17>. [Venkatakrishnan:2017:DRBb]

- overview. In IEEE, editor, *2017 1st Cyber Security in Networking Conference (CSNet), 18–20 October 2017, Rio de Janeiro, Brazil*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2017.
- [VG20] **Vizier:2020:CBB**
Guillaume Vizier and Vincent Gramoli. ComChain: a blockchain with Byzantine fault-tolerant reconfiguration. *Concurrency and Computation: Practice and Experience*, 32(12):e5494:1–e5494:??, June 25, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [VGJ15] **Vandervort:2015:IDB**
David Vandervort, Dale Gaucas, and Robert St Jacques. Issues in designing a Bitcoin-like community currency. In Brenner et al. [BCJR15], pages 78–91. ISBN 3-662-48051-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_6.
- [Via16] **Viana:2016:TTI**
Diego Viana. Two technical images: Blockchain and high-frequency trading. *Philosophy & Technology*, ??(??), December 2016. CODEN ????. ISSN 2210-5433 (print), 2210-5441 (electronic). URL <http://link.springer.com/article/10.1007/s13347-016-0247-x>.
- [Vig15] **Vigna:2015:BCT**
Paul Vigna. BitBeat: CoinDesk trims down but Bitcoin rises at SXSW. *Wall Street Journal*, ??(??):??, March 17, 2015. CODEN WSJOAF. ISSN 0099-9660.
- [VLAF21] **Vasiliauskaite:2021:IDP**
Vaiva Vasiliauskaite, Fabrizio Lillo, and Nino Antulov-Fantulin. Information dynamics of price and liquidity around the 2017 bitcoin markets crash. *CoRR*, abs/2111.09057(??):??, ????. 2021. CODEN ????. ISSN ????. URL <https://arxiv.org/abs/2111.09057>; <https://dblp.org/db/journals/corr/corr2111.html#abs-2111-09057>.
- [VM15] **Vasek:2015:TNF**
Marie Vasek and Tyler Moore. There’s no free lunch, even using Bitcoin: Tracking the popularity and profits of virtual currency scams. In Brenner et al. [BCJR15], pages 44–61. ISBN 3-662-47854-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-47854-4_4.

- com/chapter/10.1007/978-3-662-47854-7_4.
- vanMoorsel:2018:BMB**
- [vM18] Aad van Moorsel. Benchmarks and models for blockchain: Consensus algorithms. *ACM SIGMETRICS Performance Evaluation Review*, 46(3):113, December 2018. CODEN ????. ISSN 0163-5999 (print), 1557-9484 (electronic).
- Vo:2017:BBD**
- [VMMA17] Hoang Tam Vo, Lenin Mehedy, Mukesh Mohania, and Ermyas Abebe. Blockchain-based data management and analytics for micro-insurance applications. In *Proceedings of the 2017 ACM on Conference on Information and Knowledge Management, CIKM '17*, pages 2539–2542. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4918-8. URL <http://doi.acm.org/10.1145/3132847.3133172>.
- vanOorschot:2020:CSI**
- [vO20] Paul C. van Oorschot. *Computer Security and the Internet: Tools and Jewels*. Information Security and Cryptography Series. Springer, Cham, Switzerland, 2020. ISBN 3-030-33648-4 (hardcover), 3-030-33649-2 (e-book), 3-030-33650-6. xxi + 365 pp. LCCN QA76.9.A25. URL <https://people.scs.carleton.ca/~paulv/toolsjewels.html>.
- vanOorschot:2021:CSI**
- Paul C. van Oorschot. *Computer security and the Internet: tools and jewels from malware to Bitcoin*. Information security and cryptography. Springer, Cham, Switzerland, second edition, 2021. ISBN 3-030-83410-7 (hardcover), 3-030-83411-5 (e-book). xxix + 446 pp. LCCN QA76.9.A25 V66 2021.
- Voight:2011:PDR**
- F. Voight. p2pool: Decentralized, DoS-resistant, hop-proof pool. Web document., June 2011. URL <https://bitcointalk.org/index.php?topic=18313.0>.
- Valenta:2015:BBA**
- Luke Valenta and Brendan Rowan. Blindcoin: Blinded, accountable mixes for Bitcoin. In Brenner et al. [BCJR15], pages 112–126. ISBN 3-662-48051-4. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-48051-9_9.
- Vranken:2017:SBB**
- Harald Vranken. Sustainability of Bitcoin and
- [vO21]
- [Voi11]
- [VR15]
- [Vra17]

- blockchains. *Current Opinion in Environmental Sustainability*, 28(??):1–9, October 2017. CODEN ???? ISSN 1877-3435 (print), 1877-3443 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1877343517300015>.
Victor:2021:TDL
- [VRK21] F. Victor, P. Ruppel, and A. Kupper. A taxonomy for distributed ledger analytics. *Computer*, 54(2):30–38, 2021. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).
vanSomeren:2002:PPI
- [vS02] Nicko van Someren. The practical problems of implementing MicroMint. *Lecture Notes in Computer Science*, 2339:41–??, 2002. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL <http://link.springer-ny.com/link/service/series/0558/bibs/2339/23390041.htm>; <http://link.springer-ny.com/link/service/series/0558/papers/2339/23390041.pdf>.
Vladyko:2021:TPA
- [VSE21] Andrei Vladyko, Anastasia Spirkina, and Vasilii Elagin. Towards practical applications in modeling blockchain system. *Future Internet*, 13(5):125, May 12, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/5/125>.
Volety:2019:CBW
- Tejaswi Volety, Shalabh Saini, Thomas McGhin, Charles Zhechao Liu, and Kim-Kwang Raymond Choo. Cracking Bitcoin wallets: I want what you have in the wallets. *Future Generation Computer Systems*, 91(??):136–143, February 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167739X18302929>.
Velner:2017:SCM
- [VTL17] Yaron Velner, Jason Teutsch, and Loi Luu. Smart contracts make Bitcoin mining pools vulnerable. In Jakobsson et al. [JRB⁺17], pages 298–316. ISBN 3-319-70278-5. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-70278-0_19.
Vasek:2014:EAD
- [VTM14] Marie Vasek, Micah Thornton, and Tyler Moore. Empirical analysis of denial-of-service attacks in the Bitcoin ecosystem. In Christin and Safavi-Naini

- [CSN14], pages 57–71. ISBN 3-662-44774-6. LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-662-44774-1_5.
- [Vuk16] Marko Vukolić. The quest for scalable blockchain fabric: Proof-of-work vs. BFT replication. In *Open Problems in Network Security*, pages 112–125. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-39028-4_9.
- [Vuk17] Marko Vukolić. Rethinking permissioned blockchains. In *Proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts*, BCC '17, pages 3–7. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4974-9. URL <http://doi.acm.org/10.1145/3055518.3055526>.
- [VX17] Nhi N. Y. Vo and Guangdong Xu. The volatility of Bitcoin returns and its correlation to financial markets. In IEEE, editor, *2017 International Conference on Behavioral, Economic, Socio-cultural Computing (BESOC)*, 16–18 October 2017, Krakow, Poland, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2017.
- [Wad18] David J. Wadas. Bitcoin and blockchain forensics. M.S., Utica College, Utica, NY, USA,
- [WA15a] Duane Wilson and Giuseppe Ateniese. From pretty good to great: Enhancing PGP using bitcoin and the blockchain. *CoRR*, abs/1508.04868(??):??, ??? 2015. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1508.04868>; <https://dblp.org/db/journals/corr/corr1508.html#WilsonA15>.
- [WA15b] Duane Wilson and Giuseppe Ateniese. From pretty good to great: Enhancing PGP using Bitcoin and the blockchain. In *Network and System Security*, pages 368–375. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-25645-9. URL http://link.springer.com/chapter/10.1007/978-3-319-25645-0_25.

2018. 48 pp. URL <http://search.proquest.com/pqdtglobal/docview/2038815679>■

Waldo:2018:HGB

[Wal18]

Jim Waldo. A Hitchhiker’s guide to the blockchain universe. *ACM Queue: Tomorrow’s Computing Today*, 16(6):10, November 2018. CODEN AQCUAE. ISSN 1542-7730 (print), 1542-7749 (electronic). URL <http://queue.acm.org/detail.cfm?id=3305265>. [WBK⁺17]

Waldo:2019:HGB

[Wal19]

Jim Waldo. A hitchhiker’s guide to the blockchain universe. *Communications of the ACM*, 62(3):38–42, March 2019. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2019/3/234926/fulltext>.■

Wattenhofer:2017:DLT

[Wat17]

Roger Wattenhofer. *Distributed ledger technology: the science of the blockchain*. Inverted Forest Publishing, Aalborg, Denmark, second revised edition, 2017. ISBN 1-5442-3210-1. vi + 162 pp. LCCN ????. [WCL17]

Warszawski:2017:ACR

[WB17]

Todd Warszawski and Peter Bailis. ACIDRain:

Concurrency-related attacks on database-backed Web applications. In *Proceedings of the 2017 ACM International Conference on Management of Data*, SIGMOD ’17, pages 5–20. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4197-7.

Wagner:2017:PDT

Paul Wagner, Pascal Birnstill, Erik Krempel, Sebastian Bretthauer, and Jürgen Beyerer. Privacy dashcam — towards lawful use of dashcams through enforcement of external anonymization. In Garcia-Alfaro et al. [GANAHHJ17], pages 183–201. ISBN 3-319-67815-9 (print), 3-319-67816-7 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.9.A25. URL http://link.springer.com/chapter/10.1007/978-3-319-67816-0_11.■

Wang:2017:BRC

Hui Wang, Yuanyuan Cen, and Xuefeng Li. Blockchain router: A cross-chain communication protocol. In *Proceedings of the 6th International Conference on Informatics, Environment, Energy and Applications*, IEEE ’17, pages 94–97. ACM Press, New York, NY 10036, USA, 2017. ISBN

- 1-4503-5230-8. URL <http://doi.acm.org/10.1145/3070617.3070634>. [WCZ21]
- [WCX16] **Wang:2016:MMB**
 Huaqing Wang, Kun Chen, and Dongming Xu. A maturity model for blockchain adoption. *Financial Innovation*, 2(1), November 2016. CODEN ??? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-016-0031-z>.
- [WCX21] **Wang:2021:ABB**
 Qin Wang, Shiping Chen, and Yang Xiang. Anonymous blockchain-based system for consortium. *ACM Transactions on Management Information Systems (TMIS)*, 12(3):26:1–26:25, July 2021. CODEN ??? ISSN 2158-656X (print), 2158-6578 (electronic). URL <https://dl.acm.org/doi/10.1145/3459087>.
- [WCY19] **Wang:2019:MAB**
 Canhui Wang, Xiaowen Chu, and Qin Yang. Measurement and analysis of the bitcoin networks: a view from mining pools. *CoRR*, ??(??):??, ??? 2019. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1902.07549>; <https://dblp.org/db/journals/corr/corr1902.html#abs-1902-07549>.
- Wang:2021:ICR**
 Xu Wang, Yanjiao Chen, and Qian Zhang. Incentivizing cooperative relay in UTXO-based blockchain network. *Computer Networks (Amsterdam, Netherlands: 1999)*, 185(?): Article 107631, February 11, 2021. CODEN ??? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128620312573>.
- Wang:2018:FES**
 Sheng Wang, Tien Tuan Anh Dinh, Qian Lin, Zhongle Xie, Meihui Zhang, Qingchao Cai, Gang Chen, Beng Chin Ooi, and Pingcheng Ruan. Forkbase: an efficient storage engine for blockchain and forkable applications. *Proceedings of the VLDB Endowment*, 11(10):1137–1150, June 2018. CODEN ??? ISSN 2150-8097.
- Wan:2019:MEF**
 Zhiguo Wan, Robert H. Deng, David Lee, and Ying Li. MicroBTC: Efficient, flexible and fair micropayment for bitcoin using hash chains. *J. Comput. Sci. Technol.*, 34(2):403–415, ??? 2019. CODEN ??? ISSN ??? URL <https://dblp.org>.
- [WDL⁺18]
- [WDLL19]

- org/db/journals/jcst/jcst34.html#WanDLL19.
- [WDLS17] Michael A. Walker, Abhishek Dubey, Aron Laszka, and Douglas C. Schmidt. PlaTIBART: A platform for transactive IoT blockchain applications with repeatable testing. In *Proceedings of the 4th Workshop on Middleware and Applications for the Internet of Things*, M4IoT '17, pages 17–22. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5170-0. URL <http://doi.acm.org/10.1145/3152141.3152392>.
- [WdLY⁺19] Di Wu, Xiang dong Liu, Xiangbin Yan, Rui Peng, and Gang Li. Equilibrium analysis of bitcoin block withholding attack: a generalized model. *Reliab. Eng. Syst. Saf.*, 185(??):318–328, 2019. CODEN 2019. ISSN 0028-0166. URL <https://dblp.org/db/journals/ress/ress185.html#WuLYPL19>.
- [WDS21] Hongjiao Wu, Ashutosh Dhar Dwivedi, and Gautam Srivastava. Security and privacy of patient information in medical systems based on blockchain technology. *ACM Transactions on Multimedia Computing, Communications, and Applications*, 17(2s):60:1–60:17, June 2021. CODEN 2021. ISSN 1551-6857 (print), 1551-6865 (electronic). URL <https://dl.acm.org/doi/10.1145/3408321>.
- [Wea18] Nicholas Weaver. Inside risks: Risks of cryptocurrencies. *Communications of the ACM*, 61(6):20–24, June 2018. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <https://cacm.acm.org/magazines/2018/6/228046/fulltext>.
- [Web21] Ingo Weber. Keynote: Analysing data from blockchains. *ACM SIGMETRICS Performance Evaluation Review*, 48(4):3, May 2021. CODEN 2021. ISSN 0163-5999 (print), 1557-9484 (electronic). URL <https://dl.acm.org/doi/10.1145/3466826.3466829>.
- [Wel18] Jennifer L. Welch. Distributed computing column 70: Formalizing and implementing distributed ledger objects. *ACM SIGACT News*, 49(2):57, June 2018. CODEN SIGNDM. ISSN 0163-5700 (print), 1943-5827 (electronic).

- [Wer18] Kevin Werbach. *The Blockchain and the New Architecture of Digital Trust*. Information policy series. MIT Press, Cambridge, MA, USA, 2018. ISBN 0-262-03893-5 (print), 0-262-34977-9 (e-book). xvi + 322 pp. LCCN HG1710 .W47 2018. URL <http://mitpress.mit.edu/9780262038935>.
- [WGL19] Liyan Wang, Juntao Gao, and Xuelian Li. Efficient bitcoin password-protected wallet scheme with key-dependent message security. *Int. J. Netw. Secur.*, 21(5):774–784, 2019. CODEN IJNS 2019. ISSN 1548-3717. URL <http://ijns.jalaxy.com.tw/contents/ijns-v21-n5/ijns-2019-v21-n5-p774-784.pdf>; <https://dblp.org/db/journals/ijnsec/ijnsec21.html#WangGL19>.
- [Wey19] Rachel R. Weygand. Refining the Kimberley Process: an analysis of the certification scheme’s failings and exploration of blockchain technology as a solution. M.S., Utica College, Utica, NY, USA, 2019. 59 pp. URL <http://search.proquest.com/pqdtglobal/docview/2226166518>.
- [WGL⁺21] Yu Wang, Gaopeng Gou, Chang Liu, Mingxin Cui, Zhen Li, and Gang Xiong. Survey of security supervision on blockchain from the perspective of technology. *Journal of Information Security and Applications (JISA)*, 60(??):??, August 2021. CODEN JISA 2021. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000922>.
- [WGC19] Hao Wang, Chaonian Guo, and Shuhan Cheng. LoC — a new financial loan management system based on smart contracts. *Future Generation Computer Systems*, 100(??):648–655, November 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18324233>.
- [WHA⁺20] Junchao Wang, Kaining Han, Anastasios Alexandridis, Zhiyu Chen, Zeljko Zilic, Yu Pang, Gwanggil Jeon, and Francesco Piccialli. A blockchain-based eHealthcare system interoperating with WBANs. *Future Generation Computer Systems*, 110(??):675–685,

- September 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19321247> ■
- Waheed:2021:SPI**
- [WHI⁺21] Nazar Waheed, Xiangjian He, Muhammad Ikram, Muhammad Usman, Saad Sajid Hashmi, and Muhammad Usman. Security and privacy in IoT using machine learning and blockchain: Threats and countermeasures. *ACM Computing Surveys*, 53(6):122:1–122:37, February 2021. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3417987>.
- Wang:2017:DVP**
- [WHJ17] Huaqun Wang, Debiao He, and Yimu Ji. Designated-verifier proof of assets for Bitcoin exchange using elliptic curve cryptography. *Future Generation Computer Systems*, ??(??):??, ??? 2017. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X1731350X> ■
- Wang:2020:DVP**
- [WHJ20] Huaqun Wang, Debiao He, and Yimu Ji. Designated-verifier proof of assets for [Wij16]
- bitcoin exchange using elliptic curve cryptography. *Future Generation Computer Systems*, 107(??):854–862, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X1731350X> ■
- Wang:2022:LCG**
- Zhihao Wang, Ru Huo, and Shuo Wang. A lightweight certificateless group key agreement method without pairing based on blockchain for smart grid. *Future Internet*, 14(4):119–??, April 14, 2022. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/4/119>.
- Wang:2021:RBB**
- Huaqun Wang, Debiao He, Jia Yu, Neal N. Xiong, and Bin Wu. RDIC: a blockchain-based remote data integrity checking scheme for IoT in 5G networks. *Journal of Parallel and Distributed Computing*, 152(??):1–10, June 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000332> ■
- Wijaya:2016:EAM**
- D. A. Wijaya. Extend-

- ing asset management system functionality in Bitcoin platform. In *2016 International Conference on Computer, Control, Informatics and its Applications (IC3INA)*, pages 97–101. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, October 2016. [WKD22]
- [Wil13] J. R. Willett. MasterCoin complete specification. Unknown, 2013. URL https://fgallaire.github.io/IC0/white_papers/Omni/MasterCoin%20Specification%201.1.pdf; <https://github.com/mastercoin-MSC/spec>. Version 1.1. [WKEM20]
- [Wil17] Christopher E. Wilmer. Note from the Editor. *Ledger*, 2(??):??, 2017. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/115/89>. [Winnicka:2019:IUB]
- [WK19] Alicja Winnicka and Karolina Kesik. Idea of using blockchain technique for choosing the best configuration of weights in neural networks. *Algorithms (Basel)*, 12(8), August 2019. CODEN ALGOCH. ISSN 1999-4893 (electronic). URL <https://www.mdpi.com/1999-4893/12/8/163>. [Watorek:2022:MCC]
- Marcin Watorek, Jarosław Kwapien, and Stanisław Drozd. Multifractal cross-correlations of bitcoin and ether trading characteristics in the post-COVID-19 time. *Future Internet*, 14(7):215, July 21, 2022. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/7/215>. [Wingreen:2020:SCV]
- Stephen C. Wingreen, Doncha Kavanagh, Paul John Ennis, and Gianluca Miscone. Sources of cryptocurrency value systems: The case of bitcoin. *Int. J. Electron. Commer.*, 24(4):474–496, 2020. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/ijecommerce/ijecommerce24.html#WingreenKEM20>. [Wang:2015:EME]
- Luqin Wang and Yong Liu. Exploring miner evolution in Bitcoin network. In *Passive and Active Measurement*, pages 290–302. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-15509-1. URL <http://link.springer>.

- com/chapter/10.1007/978-3-319-15509-8_22.
- Wang:2021:HPP**
- [WL21] Baocheng Wang and Zetao Li. Healthchain: a privacy protection system for medical data based on blockchain. *Future Internet*, 13(10):247, September 24, 2021. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/10/247>. [WLC⁺22b]
- Wang:2020:PRI**
- [WLC⁺20] Eric Ke Wang, Zuodong Liang, Chien-Ming Chen, Saru Kumari, and Muhammad Khurram Khan. PoRX: a reputation incentive scheme for blockchain consensus of IIoT. *Future Generation Computer Systems*, 102(?):140–151, January 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19310581>. [WGL19]
- Wang:2022:DBB**
- [WLC⁺22a] Shangping Wang, Huan Li, Juanjuan Chen, Jifang Wang, and Yingjuan Deng. DAG blockchain-based lightweight authentication and authorization scheme for IoT devices. *Journal of Information Security and Applications (JISA)*, 66(?):??, May 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622000242>. [Wei:2022:SBD]
- Wei:2022:SBD**
- Qian Wei, Bingzhe Li, Wanli Chang, Zhiping Jia, Zhaoyan Shen, and Zili Shao. A survey of blockchain data management systems. *ACM Transactions on Embedded Computing Systems*, 21(3):25:1–25:28, May 2022. CODEN ???? ISSN 1539-9087 (print), 1558-3465 (electronic). URL <https://dl.acm.org/doi/10.1145/3502741>.
- Wang:2019:MKS**
- Haiyu Wang, Xuelian Li, Juntao Gao, and Wei Li. MOBT: a kleptographically-secure hierarchical-deterministic wallet for multiple offline Bitcoin transactions. *Future Generation Computer Systems*, 101(?):315–326, December 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X1733011X>. [Wen:2013:MPA]
- Wen:2013:MPA**
- Yuanfeng Wen, JongHyuk Lee, Ziyi Liu, Qingji Zheng, Weidong Shi, Shouhuai Xu, and Taeweon Suh. Multi-processor architectural support for protecting vir-

- tual machine privacy in untrusted cloud environment. In Hubertus Franke, editor, *Proceedings of the ACM International Conference on Computing Frontiers, CF'13, Ischia, Italy. 14–16 May 2013*, pages 25:1–25:10. ACM Press, New York, NY 10036, USA, 2013. ISBN 1-4503-2053-8. LCCN QA75.5. URL <https://dl.acm.org/citation.cfm?id=2482799>. [WLN⁺21]
- [WLL21] Liang Wang, Jiayan Liu, and Wenyan Liu. Staged data delivery protocol: a blockchain-based two-stage protocol for non-repudiation data delivery. *Concurrency and Computation: Practice and Experience*, 33(13):e6240:1–e6240:??, July 10, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [WLS⁺16]
- [WLLH21] Yujuan Wen, Fengyuan Lu, Yufei Liu, and Xinli Huang. Attacks and countermeasures on blockchains: a survey from layering perspective. *Computer Networks (Amsterdam, Netherlands: 1999)*, 191(??):??, May 22, 2021. CODEN WLS17 ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621001080>. [Wang:2021:BEV]
- Jian Wang, Yongxin Liu, Shuteng Niu, Houbing Song, Weipeng Jing, and Jiawei Yuan. Blockchain enabled verification for cellular-connected unmanned aircraft system networking. *Future Generation Computer Systems*, 123(??):233–244, October 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21001461>. [Wijaya:2016:ABT]
- Dimaz Ankaa Wijaya, Joseph K. Liu, Ron Steinfeld, Shi-Feng Sun, and Xinyi Huang. Anonymizing Bitcoin transaction. In *Information Security Practice and Experience*, pages 271–283. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-49151-2. URL http://link.springer.com/chapter/10.1007/978-3-319-49151-6_19. [Wiefeling:2017:ABA]
- Stephan Wiefeling, Luigi Lo Iacono, and Frederik Sandbrink. Anwendung der Blockchain außerhalb von

- Geldwährungen. (German) [Application of blockchain outside cash currencies]. [WLW⁺19] *Datenschutz und Datensicherheit — DuD*, 41 (8):482–486, August 2017. CODEN ????. ISSN 1614-0702 (print), 1862-2607 (electronic). URL <http://link.springer.com/article/10.1007/s11623-017-0816-x>.
- [WLS22] JunLu Wang, Qiang Liu, and Baoyan Song. Blockchain-based multi-malicious double-spending attack blacklist management model. *The Journal of Supercomputing*, 78(12):14726–14755, August 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-022-04370-1>.
- [WLSZ17] Dimaz Ankaa Wijaya, Joseph K. Liu, Dony Ariadi Suwarsono, and Peng Zhang. A new blockchain-based value-added tax system. In *Provable Security*, pages 471–486. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-68637-0_28.
- [Wang:2019:AEI] Ziyu Wang, Jianwei Liu, Qianhong Wu, Yanting Zhang, Hui Yu, and Ziyu Zhou. An analytic evaluation for the impact of uncle blocks by selfish and stubborn mining in an imperfect Ethereum network. *Computers & Security*, 87(??):Article 101581, November 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818314172>.
- [Wang:2022:DLB] Panpan Wang, Xiaoxing Liu, and Sixu Wu. Dynamic linkage between bitcoin and traditional financial assets: a comparative analysis of different time frequencies. *Entropy*, 24(11):1565, ??? 2022. CODEN ENTRFG. ISSN ????. URL <https://dblp.org/db/journals/entropy/entropy24.html#WangLW22>.
- [Wan:2017:BCB] Zhiyuan Wan, David Lo, Xin Xia, and Liang Cai. Bug characteristics in blockchain systems: A large-scale empirical study. In *Proceedings of the 14th International Conference on Mining Software Repositories*, MSR '17, pages 413–424. IEEE Computer Society Press, 1109

- Spring Street, Suite 300,
Silver Spring, MD 20910,
USA, 2017. ISBN 1-5386-
1544-4.
- [WLY17] Qi Wang, Xiangxue Li, and
Yu Yu. Anonymity for Bit-
coin from secure escrow ad-
dress. *IEEE Access*, ??(?):
1, ??? 2017. ISSN 2169-
3536.
- [WLZ20] Ziyu Wang, Nanqing Luo,
and Pan Zhou. Guard-
Health: Blockchain em-
powered secure data man-
agement and graph con-
volutional network enabled
anomaly detection in smart
healthcare. *Journal of Par-
allel and Distributed Com-
puting*, 142(?):1–12, Au-
gust 2020. CODEN JPD-
CER. ISSN 0743-7315
(print), 1096-0848 (elec-
tronic). URL [http://
www.sciencedirect.com/
science/article/pii/S0743731519308470](http://www.sciencedirect.com/science/article/pii/S0743731519308470)
- [WM18] Nils Winkler and Björn
Matthies. FinTech and
blockchain — keep bub-
bling? Or better get
real? In *Digital Mar-
ketplaces Unleashed*, pages
371–383. Springer-Verlag,
Berlin, Germany / Hei-
delberg, Germany / Lon-
don, UK / etc., September
2018. URL [http://link.
springer.com/chapter/](http://link.springer.com/chapter/)
- [WM19] **Wang:2017:ABS**
- [WMD⁺20] **Wang:2020:GBE**
- [WMD⁺21] **Winkler:2018:FBK**
- 10.1007/978-3-662-49275-
8_35.
- Wang:2019:LBI**
- Yongge Wang and Qutaibah M.
Malluhi. The limit of
blockchains: infeasibility
of a smart Obama–Trump
contract. *Communica-
tions of the ACM*, 62(5):
64–69, May 2019. CO-
DEN CACMA2. ISSN
0001-0782 (print), 1557-
7317 (electronic). URL
[https://cacm.acm.org/
magazines/2019/5/236410/
fulltext](https://cacm.acm.org/magazines/2019/5/236410/fulltext).
- Wang:2020:BBD**
- Hao Wang, Shenglan Ma,
Hong-Ning Dai, Muham-
mad Imran, and Tongsen
Wang. Blockchain-based
data privacy management
with Nudge theory in open
banking. *Future Gener-
ation Computer Systems*,
110(?):812–823, Septem-
ber 2020. CODEN FG-
SEVI. ISSN 0167-739X
(print), 1872-7115 (elec-
tronic). URL [http://
www.sciencedirect.com/
science/article/pii/S0167739X18322702](http://www.sciencedirect.com/science/article/pii/S0167739X18322702)
- Wang:2021:DTE**
- Huili Wang, Wenping Ma,
Fuyang Deng, Haibin Zheng,
and Qianhong Wu. Dy-
namic threshold ECDSA
signature and applica-
tion to asset custody in
blockchain. *Journal of*

- Information Security and Applications (JISA)*, 61 (??):??, September 2021. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000466>
- Wang:2021:BBP**
- [WMG⁺21] Hao Wang, Shenglan Ma, Chaonian Guo, Yulei Wu, Hong-Ning Dai, and Di Wu. Blockchain-based power energy trading management. *ACM Transactions on Internet Technology (TOIT)*, 21(2):43:1–43:16, June 2021. CODEN ????. ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3409771>
- Wu:2021:FLB**
- [WMHL21] Kaidong Wu, Yun Ma, Gang Huang, and Xuanzhe Liu. A first look at blockchain-based decentralized applications. *Software—Practice and Experience*, 51(10):2033–2050, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- Wolfram:2018:RAB**
- [Wol18] Stephen Wolfram. Roaring into 2018 with another big release: Launching version 11.3 of the Wolfram language & Mathematica. Web site., March 8, 2018. URL <http://blog.wolfram.com/2018/03/08/roaring-into-2018-with-another-big-release-launching-version-11-3-of-the-wolfram-language-mathematica/>. There is a section about new Blockchain features, with support for Bitcoin and Ethereum.
- Wood:2014:ESD**
- [Woo14] Gavin Wood. Ethereum: A secure decentralized transaction ledger: EIP-150 revision. Web document., 2014. URL <http://gavwood.com/paper.pdf>.
- Wrner:2016:DRT**
- [Wör16] Dominic Wörner. Design of a real-time data market based on the 21 Bitcoin computer. In *Tackling Society’s Grand Challenges with Design Science*, pages 228–232. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-39294-8. URL http://link.springer.com/chapter/10.1007/978-3-319-39294-3_20.
- Wang:2022:LSE**
- [WPC⁺22] Kai Wang, Jun Pang, Dingjie Chen, Yu Zhao, Dapeng Huang, Chen Chen, and Weili Han. A large-scale empirical analysis of ransomware activities in

- bitcoin. *ACM Transactions on the Web (TWEB)*, 16(2): 7:1–7:29, May 2022. CODEN ???? ISSN 1559-1131 (print), 1559-114X (electronic). URL <https://dl.acm.org/doi/10.1145/3494557>.
Wu:2022:VEV
- [WPG⁺22] Haotian Wu, Zhe Peng, Songtao Guo, Yuanyuan Yang, and Bin Xiao. VQL: Efficient and verifiable cloud query services for blockchain systems. *IEEE Transactions on Parallel and Distributed Systems*, 33(6):1393–1406, June 2022. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).
Wu:2020:CVM
- [WPXZ20] Keke Wu, Bo Peng, Hua Xie, and Shaobin Zhan. A coefficient of variation method to measure the extents of decentralization for bitcoin and Ethereum networks. *Int. J. Netw. Secur.*, 22(2):191–200, ???? 2020. CODEN ???? ISSN ???? URL <http://ijns.jalaxy.com.tw/contents/ijns-v22-n2/ijns-2020-v22-n2-p191-200.pdf>; <https://dblp.org/db/journals/ijnsec/ijnsec22.html#WuPXZ20>.
Wan:2022:PPB
- [WQGX22] Yichen Wan, Youyang Qu, Longxiang Gao, and Yong Xiang. Privacy-preserving blockchain-enabled federated learning for B5G-driven edge computing. *Computer Networks (Amsterdam, Netherlands: 1999)*, 204(??):??, February 26, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621005454>.
Wang:2017:PTP
- [WQHX17] Qin Wang, Bo Qin, Jiankun Hu, and Fu Xiao. Preserving transaction privacy in Bitcoin. *Future Generation Computer Systems*, ??(??):??, ???? 2017. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17318393>.
Wang:2020:PTP
- [WQHX20] Qin Wang, Bo Qin, Jiankun Hu, and Fu Xiao. Preserving transaction privacy in bitcoin. *Future Generation Computer Systems*, 107(??): 793–804, June 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17318393>.
Wilmer:2016:NE
- [WR16] Christopher E. Wilmer and Peter R. Rizun. Note from

- the Editor. *Ledger*, 1(??): ??, 2016. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/82/62>. [WSC⁺20]
- Wilmer:2018:NE**
- [WR18] Christopher E. Wilmer and Peter Rizun. Note from the Editor. *Ledger*, 3(??): ??, 2018. ISSN 2379-5980. URL <http://www.ledgerjournal.org/ojs/index.php/ledger/article/view/162>.
- Watkins:2015:UNT**
- [WRB15] Lanier Watkins, William H. Robinson, and Raheem Beyah. Using network traffic to infer hardware state: a kernel-level investigation. *ACM Transactions on Embedded Computing Systems*, 14(3):55:1–55:??, May 2015. CODEN 2015 ISSN 1539-9087 (print), 1558-3465 (electronic).
- Wilkes:2018:ECH**
- [WREK18] Tommy Wilkes, Sujata Rao, Catherine Evans, and Larry King. Exclusive: Coincheck hackers trying to move stolen cryptocurrency-executive. *New York Times*, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/reuters/2018/01/30/business/30reuters-japan-cryptocurrency-cybercrime.html>.
- Wang:2020:PXR**
- Eric Ke Wang, RuiPei Sun, Chien-Ming Chen, Zuodong Liang, Saru Kumari, and Muhammad Khurram Khan. Proof of X-repute blockchain consensus protocol for IoT systems. *Computers & Security*, 95(??):Article 101871, August 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820301449>.
- Shen:2021:RDB**
- Chien wen Shen, Li chin Chang, and Tzu chuan Su. Research development of bitcoin: a network and concept linking analysis. *Libr. Hi Tech*, 39(2):488–505, 2021. CODEN 2021 ISSN 2021 URL <https://dblp.org/db/journals/lht/lht39.html#ShenCS21>.
- Wang:2019:CPB**
- Licheng Wang, Xiaoying Shen, Jing Li, Jun Shao, and Yixian Yang. Cryptographic primitives in blockchains. *Journal of Network and Computer Applications*, 127(??):43–58, February 1, 2019. CODEN JNCAF3. ISSN 1084-8045
- Wang:2019:CPB**
- Licheng Wang, Xiaoying Shen, Jing Li, Jun Shao, and Yixian Yang. Cryptographic primitives in blockchains. *Journal of Network and Computer Applications*, 127(??):43–58, February 1, 2019. CODEN JNCAF3. ISSN 1084-8045

- (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S108480451830362X> [Wu17]
- Wilson:2018:CHI**
- [WSZN18] Thomas Wilson, Hideyuki Sano, Marius Zaharia, and Shri Navaratnam. The Coincheck hack and the issue with crypto assets on centralized exchanges. *New York Times*, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/reuters/2018/01/29/business/29reuters-japan-cryptocurrency-q-a.html> [Wu19]
- Wang:2024:CCE**
- [WTC24] Xite Wang, Senping Tian, and Wei Cui. ContractCheck: Checking Ethereum smart contracts in fine-grained level. *IEEE Transactions on Software Engineering*, 50(7):1789–1806, July 2024. CODEN IESEDJ. ISSN 0098-5589 (print), 1939-3520 (electronic). [WvB14]
- Wang:2023:EUT**
- [WTW⁺23] Kai Wang, Maike Tong, Changhao Wu, Jun Pang, Chen Chen, Xiapu Luo, and Weili Han. Exploring unconfirmed transactions for effective bitcoin address clustering. *CoRR*, 2023. URL <https://arxiv.org/abs/2303.10036>. CODEN WTTW. ISSN 2474-6418 (print), 2474-6426 (electronic). URL <http://arxiv.org/abs/2303.10036> [Wu17]
- Wu:2017:DBL**
- Haoyan Wu. A distributed blockchain ledger for supply chain. M.S.E.C.E., Purdue University, West Lafayette, IN, USA, 2017. 68 pp. URL <http://search.proquest.com/pqdtglobal/docview/1980717693> [Wu19]
- Wu:2019:MTA**
- Qiong Wu. *Microstructure Theory Applied in RMB Exchange Rate and Bitcoin Market Price*. Ph.D., Iowa State University, Ames, IA, USA, 2019. 190 pp. URL <http://search.proquest.com/pqdtglobal/docview/2289586454> [Wu19]
- Worner:2014:WYS**
- Dominic Wörner and Thomas von Bomhard. When your sensor earns money: Exchanging data for cash with Bitcoin. In *Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct Publication*, UbiComp '14 Adjunct, pages 295–298. ACM Press, New York, NY 10036, USA, 2014. ISBN 1-4503-3047-9.

- [WWML21] **Wu:2021:DRL**
Yulei Wu, Zehua Wang, Yuxiang Ma, and Victor C. M. Leung. Deep reinforcement learning for blockchain in industrial IoT: a survey. *Computer Networks (Amsterdam, Netherlands: 1999)*, 191(??):??, May 22, 2021. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621001213>.
- [WWQ+18] **Wang:2018:LMD**
Mingming Wang, Qianhong Wu, Bo Qin, Qin Wang, Jianwei Liu, and Zhenyu Guan. Lightweight and manageable digital evidence preservation system on bitcoin. *J. Comput. Sci. Technol.*, 33(3):568–586, ??? 2018. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/jcst/jcst33.html#WangWQWLG18>.
- [WWZ+20] **Wei:2020:BDB**
PengCheng Wei, Dahu Wang, Yu Zhao, Sumarga Kumar Sah Tyagi, and Neeraj Kumar. Blockchain data-based cloud data integrity protection mechanism. *Future Generation Computer Systems*, 102(??):902–911, January 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19313494>.
- [WWZ+21] **Wang:2021:PPS**
Wei Wang, Lianhai Wang, Peijun Zhang, Shujiang Xu, Kunlun Fu, Lianxin Song, and Shanshan Hu. A privacy protection scheme for telemedicine diagnosis based on double blockchain. *Journal of Information Security and Applications (JISA)*, 61(??):??, September 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621000818>.
- [WWZ+22] **Wu:2022:TTI**
Siwei Wu, Lei Wu, Yajin Zhou, Runhuai Li, Zhi Wang, Xiapu Luo, Cong Wang, and Kui Ren. Time-travel investigation: Toward building a scalable attack detection framework on Ethereum. *ACM Transactions on Software Engineering and Methodology*, 31(3):54:1–54:33, July 2022. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic). URL <https://dl.acm.org/doi/10.1145/3505263>.
- [WXH21] **Wan:2021:WDP**
Zhiyuan Wan, Xin Xia, and Ahmed E. Hassan. What do

programmers discuss about blockchain? A case study on the use of balanced LDA and the reference architecture of a domain to capture online discussions about blockchain platforms across stack exchange communities. *IEEE Transactions on Software Engineering*, 47(7):1331–1349, 2021. CODEN IESEDJ. ISSN 0098-5589 (print), 1939-3520 (electronic).

[WZ21]

Weber:2016:UBP[WXR⁺16]

Ingo Weber, Xiwei Xu, Régis Riveret, Guido Governatori, Alexander Ponomarev, and Jan Mendling. Untrusted business process monitoring and execution using blockchain. In *Business Process Management*, Lecture Notes in Computer Science, pages 329–347. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. URL http://link.springer.com/chapter/10.1007/978-3-319-45348-4_19.

[WZQ⁺17]**Wang:2020:EWR**[WYZ⁺20]

Ziyu Wang, Hui Yu, Zongyang Zhang, Jiaming Piao, and Jianwei Liu. ECDSA weak randomness in bitcoin. *Future Generation Computer Systems*, 102(??):507–513, January 2020. CODEN FG-

[WZS19]

SEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17330030>.

Wang:2021:BSJ

Yu Wang and Liangbin Zhao. Blockchain for scholarly journal evaluation: Potential and prospects. *Learned Publishing*, 34(4):682–687, October 2021. CODEN LPUFJ. ISSN 0953-1513 (print), 1741-4857 (electronic).

Wu:2017:SJB

Qianhong Wu, Xiuwen Zhou, Bo Qin, Jiankun Hu, Jianwei Liu, and Yong Ding. Secure joint Bitcoin trading with partially blind fuzzy signatures. *Soft computing: newsletter of the Canadian Society for Fuzzy Information and Neural Systems*, 21(11):3123–3134, December 2017. CODEN ???? ISSN 1195-3934. URL <http://link.springer.com/article/10.1007/s00500-015-1997-6>.

Wang:2019:DNP

Shuai Wang, Chengyu Zhang, and Zhendong Su. Detecting non-deterministic payment bugs in Ethereum smart contracts. *Proceedings of the ACM on Programming*

- Languages (PACMPL)*, 3 (OOPSLA):189:1–189:29, October 2019. URL <https://dl.acm.org/doi/abs/10.1145/3360615>.
- Wang:2020:ESW**
- [WZW⁺20] Qin Wang, Haitao Zhao, Qianqian Wang, Haotong Cao, Gagangeet Singh Aujla, and Hongbo Zhu. Enabling secure wireless multimedia resource pricing using consortium blockchains. *Future Generation Computer Systems*, 110(??):696–707, September 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19315791>.
- Xu:2017:BBS**
- [XAZY17] Quanqing Xu, Khin Mi Mi Aung, Yongqing Zhu, and Khai Leong Yong. A blockchain-based storage system for data analytics in the Internet of Things. In *New Advances in the Internet of Things*, pages 119–138. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., June 2017.
- Xu:2018:BBS**
- [XAZY18] Quanqing Xu, Khin Mi Mi Aung, Yongqing Zhu, and Khai Leong Yong. A blockchain-based storage system for data analytics in the Internet of Things. In *New Advances in the Internet of Things*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-3-319-58190-3_8.
- Xu:2022:SPS**
- [XBX⁺22] Guangquan Xu, Hongpeng Bai, Jun Xing, Tao Luo, Neal N. Xiong, Xiaochun Cheng, Shaoying Liu, and Xi Zheng. SG-PBFT: a secure and highly efficient distributed blockchain PBFT consensus algorithm for intelligent Internet of Vehicles. *Journal of Parallel and Distributed Computing*, 164(??):1–11, June 2022. CODEN JPD CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731522000363>.
- Xu:2017:ELU**
- [XCG⁺17] Lei Xu, Lin Chen, Zhimin Gao, Shouhuai Xu, and Weidong Shi. EPBC: Efficient public blockchain client for lightweight users. In *Proceedings of the 1st Workshop on Scalable and Resilient Infrastructures for Distributed Ledgers*, SERIAL '17, pages 1:1–1:6. ACM Press, New York, NY 10036, USA, 2017. ISBN

1-4503-5173-5. URL <http://doi.acm.org/10.1145/3152824.3152825>.

Xiong:2022:RPB

[XCW⁺22]

Huanliang Xiong, Muxi Chen, Canghai Wu, Yingding Zhao, and Wenlong Yi. Research on progress of blockchain consensus algorithm: a review on recent progress of blockchain consensus algorithms. *Future Internet*, 14(2):47, January 30, 2022. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/2/47>.

Xu:2021:BBC

[XCZ⁺21]

Xiaolong Xu, Yi Chen, Xuyun Zhang, Qingxiang Liu, Xihua Liu, and Lianyong Qi. A blockchain-based computation offloading method for edge computing in 5G networks. *Software—Practice and Experience*, 51(10):2015–2032, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).

Xu:2022:ZTM

[XCZ⁺22]

Shiwei Xu, Xiaowen Cai, Yizhi Zhao, Zhengwei Ren, Le Du, Qin Wang, and Jianying Zhou. zk-rpChain: Towards multi-party privacy-preserving data auditing for consortium blockchains based

on zero-knowledge range proofs. *Future Generation Computer Systems*, 128(?): 490–504, March 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21003800>.

Xu:2020:ESD

[XGS⁺20]

Guangquan Xu, Bingjiang Guo, Chunhua Su, Xi Zheng, Kaitai Liang, Duncan S. Wong, and Hao Wang. Am I eclipsed? A smart detector of eclipse attacks for Ethereum. *Computers & Security*, 88(?):Article 101604, January 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818313798>.

Xiang:2021:JDB

[XHP⁺21]

Fu Xiang, Wang Huaimin, Shi Peichang, Ouyang Xue, and Zhang Xunhui. Joint-graph: a DAG-based efficient consensus algorithm for consortium blockchains. *Software—Practice and Experience*, 51(10):1987–1999, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).

Xu:2020:FAN

[XHST20]

Yibin Xu, Yangyu Huang, Jianhua Shao, and George

- Theodorakopoulos. A flexible $n/2$ adversary node resistant and halting recoverable blockchain sharding protocol. *Concurrency and Computation: Practice and Experience*, 32(19):e5773:1–e5773:??, October 10, 2020. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic). [XLL⁺19]
- [XJB⁺17] Quanqing Xu, Chao Jin, Mohamed Faruq Bin Mohamed Rasid, Bharadwaj Veeravalli, and Khin Mi Mi Aung. Blockchain-based decentralized content trust for Docker images. *Multimedia Tools and Applications*, ??(?), October 2017. CODEN MTAPFB. ISSN 1380-7501 (print), 1573-7721 (electronic). URL <http://link.springer.com/article/10.1007/s11042-017-5224-6>. [XLL⁺21]
- [XJY17] Bingqing Xia, Dongyao Ji, and Gang Yao. Enhanced TLS handshake authentication with blockchain and smart contract (short paper). In *Advances in Information and Computer Security*, pages 56–66. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL <http://link.springer.com/chapter/> 10.1007/978-3-319-64200-0_4. [XLM⁺17]
- Xu:2019:DBB** Xiwei Xu, Qinghua Lu, Yue Liu, Liming Zhu, Haonan Yao, and Athanasios V. Vasilakos. Designing blockchain-based applications: a case study for imported product traceability. *Future Generation Computer Systems*, 92(?):399–406, March 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167739X18314298>.
- Xu:2021:BBR** Zisang Xu, Wei Liang, Kuan-Ching Li, Jianbo Xu, and Hai Jin. A blockchain-based roadside unit-assisted authentication and key agreement protocol for Internet of Vehicles. *Journal of Parallel and Distributed Computing*, 149(?):29–39, March 2021. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520304044>.
- Xu:2017:ETH** Yuqin Xu, Qingzhong Li, Xingpin Min, Lizhen Cui, Zongshui Xiao, and Lanju Kong. E-commerce blockchain consensus mech-

- anism for supporting high-throughput and real-time transaction. In *Collaborate Computing: Networking, Applications and Worksharing*, pages 490–496. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL http://link.springer.com/chapter/10.1007/978-3-319-59288-6_46. [XRS⁺19]
- [XLZ20] Meihua Xie, Haiyan Li, and Yuanjun Zhao. Blockchain financial investment based on deep learning network algorithm. *Journal of Computational and Applied Mathematics*, 372(??): Article 112723, July 2020. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0377042720300145>. [XSC⁺17]
- [XNC21] Ronghua Xu, Deeraj Nagothu, and Yu Chen. Econ-Ledger: a proof-of-ENF consensus based lightweight distributed ledger for IoVT networks. *Future Internet*, 13(10):248, September 24, 2021. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/10/248>. [Xu16]
- Xu:2019:ESC** Xiaolin Xu, Fahim Rahman, Bicky Shakya, Apostol Vassilev, Domenic Forte, and Mark Tehranipoor. Electronics supply chain integrity enabled by blockchain. *ACM Transactions on Design Automation of Electronic Systems*, 24(3):31:1–31:25, June 2019. CODEN ATASFO. ISSN 1084-4309 (print), 1557-7309 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3315571>.
- Xu:2017:ESE** Lei Xu, Nolan Shah, Lin Chen, Nour Diallo, Zhimin Gao, Yang Lu, and Weidong Shi. Enabling the sharing economy: Privacy respecting contract based on public blockchain. In *Proceedings of the ACM Workshop on Blockchain, Cryptocurrencies and Contracts*, BCC '17, pages 15–21. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4974-9. URL <http://doi.acm.org/10.1145/3055518.3055527>.
- Xu:2021:EPE** Ronghua Xu, Deeraj Nagothu, and Yu Chen. Econ-Ledger: a proof-of-ENF consensus based lightweight distributed ledger for IoVT networks. *Future Internet*, 13(10):248, September 24, 2021. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/10/248>. [Xu16]
- Xu:2016:BIA** Jennifer J. Xu. Are blockchains immune to all malicious attacks? *Financial Innovation*, 2(1), December 2016. CODEN ????. ISSN 2199-4730. URL <http://link.springer.com/10.1007/s41267-016-0011-1>.

- springer.com/article/10.1186/s40854-016-0046-5.
- Xu:2019:MBD**
- [XWL⁺19] Chenhan Xu, Kun Wang, Peng Li, Song Guo, Jiangtao Luo, Baoliu Ye, and Minyi Guo. Making big data open in edges: A resource-efficient blockchain-based approach. *IEEE Transactions on Parallel and Distributed Systems*, 30(4):870–882, April 2019. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic)ITDSEO. URL <https://ieeexplore.ieee.org/document/8469010/>.
- Xing:2017:PBT**
- [XWW17] Qianqian Xing, Baosheng Wang, and Xiaofeng Wang. Poster: BGPCoin: A trustworthy blockchain-based resource management solution for BGP security. In *Proceedings of the 2017 ACM SIGSAC Conference on Computer and Communications Security, CCS '17*, pages 2591–2593. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4946-3. URL <http://doi.acm.org/10.1145/3133956.3138828>.
- Xie:2021:AAW**
- [XWY⁺21] Xueshuo Xie, Jiming Wang, Junyi Ye, Yaozheng Fang, Ye Lu, Tao Li, and Guilin Wang. AWAP: Adaptive weighted attribute propagation enhanced community detection model for bitcoin de-anonymization. *Appl. Soft Comput.*, 109(??):107507, ????. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/asc/asc109.html#XieWYFLLW21>.
- Xiao:2021:NDS**
- [XWZ21] Shuai Xiao, Han Wang, and Jindan Zhang. New digital signature algorithm based on ECC and its application in bitcoin and IoT. *Int. J. High Perform. Syst. Archit.*, 10(1):20–31, ????. 2021. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/ijhpsa/ijhpsa10.html#XiaoWZ21>.
- Xu:2017:EHP**
- [XZK⁺17] Yuqin Xu, Shangli Zhao, Lanju Kong, Yongqing Zheng, Shidong Zhang, and Qingzhong Li. ECBC: A high performance educational certificate blockchain with efficient query. In *Theoretical Aspects of Computing — ICTAC 2017*, pages 288–304. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. URL <http://link.springer.com/chapter/>

- 10.1007/978-3-319-67729-3_17.
- Xiong:2022:BBP**
- [XZL⁺22] Ting Xiong, Ran Zhang, Jiang Liu, Tao Huang, Yunjie Liu, and F. Richard Yu. A blockchain-based and privacy-preserved authentication scheme for inter-constellation collaboration in Space-Ground Integrated Networks. *Computer Networks (Amsterdam, Netherlands: 1999)*, 206(??):??, April 7, 2022. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S138912862200024X>.
- Xu:2021:SSB**
- [XZXP21] Cheng Xu, Ce Zhang, Jianliang Xu, and Jian Pei. SlimChain: scaling blockchain transactions through off-chain storage and parallel processing. *Proceedings of the VLDB Endowment*, 14(11):2314–2326, July 2021. CODEN ????. ISSN 2150-8097. URL <https://dl.acm.org/doi/10.14778/3476249.3476283>.
- Xu:2021:CPB**
- [XZY⁺21] Xiaolong Xu, Dawei Zhu, Xiaoxian Yang, Shuo Wang, Lianyong Qi, and Wanchun Dou. Concurrent practical Byzantine fault tolerance for integration of
- blockchain and supply chain. *ACM Transactions on Internet Technology (TOIT)*, 21(1):7:1–7:17, February 2021. CODEN ????. ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3395331>.
- Xu:2021:SIB**
- [XZZ21] Zhijun Xu, Jun Zhang, and Jihua Zhou. A scheme for intelligent blockchain-based manufacturing industry supply chain management. *Computing*, 103(8):1771–1790, August 2021. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic). URL <https://link.springer.com/article/10.1007/s00607-020-00880-z>.
- Yang:2021:AAB**
- Zhi-Peng Yang. An accelerating approach for blockchain information transmission based on NDN. *Future Internet*, 13(2):47, February 14, 2021. CODEN ????. ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/2/47>.
- Yang:2020:ABS**
- [YCMM20] Runkai Yang, Xiaolin Chang, Jelena Misić, and Vojislav B. Misić. Assessing blockchain selfish mining in an imperfect network: Honest and selfish miner

- views. *Computers & Security*, 97(??):Article 101956, October 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820302327>. ■
- [YCP⁺21] Edward Henry Young, Christos Chrysoulas, Nikolaos Pitropakis, Pavlos Papadopoulos, and William J. Buchanan. Evaluating tooling and methodology when analysing bitcoin mixing services after forensic seizure. *CoRR*, ??(??):??, ??? 2021. CODEN ??? ISSN ??? URL <https://arxiv.org/abs/2110.01970>; <https://dblp.org/db/journals/corr/corr2110.html#abs-2110-01970>.
- [YCX18] Changsong Yang, Xiaofeng Chen, and Yang Xiang. Blockchain-based publicly verifiable data deletion scheme for cloud storage. *Journal of Network and Computer Applications*, 103(??):185–193, February 1, 2018. CODEN JN-CAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804517303910>. ■
- [Yeo15] Andy Yeow. Global Bitcoin nodes distribution. Web document, 2015. URL <https://getaddr.bitnodes.io/>.
- [Yer17] David Yermack. Corporate governance and blockchains. *Review of Finance*, 21(1):7–31, March 2017. ISSN 1572-3097 (print), 1875-824X (electronic). URL <https://academic.oup.com/rof/article/21/1/7/2888422>.
- [Yew18] Aniket Yewale. Study of blockchain-as-a-service systems with a case study of hyperledger fabric implementation on Kubernetes. M.S.C.S., University of Nevada, Las Vegas, Las Vegas, NV, USA, 2018. 92 pp. URL <http://search.proquest.com/pqdtglobal/docview/2181699563>. ■
- [YF22] Zixiu Yang and Dean Fantazzini. Using crypto-asset pricing methods to build technical oscillators for short-term bitcoin trading. *Inf.*, 13(12):560, ??? 2022. CODEN ??? ISSN ??? URL <https://dblp.org/db/journals/information/information13.html#YangF22>. ■

- [YK15] **Yang:2015:BMR**
S. Y. Yang and J. Kim. Bitcoin market return and volatility forecasting using transaction network flow properties. In *2015 IEEE Symposium Series on Computational Intelligence*, pages 1778–1785. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2015. [YL20b]
- [YKDEV19] **Yu:2019:RYR**
J. Yu, D. Kozhaya, J. Decouchant, and P. Esteves-Verissimo. RepuCoin: Your reputation is your power. *IEEE Transactions on Computers*, 68(8):1225–1237, August 2019. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).
- [YKJK21] **Yakubu:2021:BBS**
Bello Musa Yakubu, Majid I. Khan, Nadeem Javaid, and Abid Khan. Blockchain-based secure multi-resource trading model for smart marketplace. *Computing*, 103(3):379–400, March 2021. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic). [YLM21]
- [YL20a] **Yang:2020:ZKP**
Xiaohui Yang and Wenjie Li. A zero-knowledge proof-based digital identity management scheme in blockchain. *Computers & Security*, 99(??):Article 102050, December 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820303230>. [YLN⁺19]
- Yohan:2020:FSB**
Alexander Yohan and Nai-Wei Lo. FOTB: a secure blockchain-based firmware update framework for IoT environment. *International Journal of Information Security*, 19(3):257–278, June 2020. CODEN ????? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-019-00467-6>.
- Yang:2021:BBA**
Guang Yang, Chunlei Li, and Kjell E. Marstein. A blockchain-based architecture for securing electronic health record systems. *Concurrency and Computation: Practice and Experience*, 33(14):e5479:1–e5479:??, July 25, 2021. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- Yu:2019:PQQ**
Bin Yu, Joseph Liu, Surya Nepal, Jiangshan Yu, and

- Paul Rimba. Proof-of-QoS: QoS based blockchain consensus protocol. *Computers & Security*, 87(??):Article 101580, November 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818313774>. **Yu:2021:BBC**
- Bin Yu, Xiaofeng Li, and He Zhao. Virtual block group: a scalable blockchain model with partial node storage and distributed hash table. *The Computer Journal*, 63(10):1524–1536, October 2020. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL <http://academic.oup.com/comjnl/article/63/10/1524/5828295>. **Yu:2020:VBG**
- Dongdong Yue, Ruixuan Li, Yan Zhang, Wenlong Tian, and Yongfeng Huang. Blockchain-based verification framework for data integrity in edge-cloud storage. *Journal of Parallel and Distributed Computing*, 146(??):1–14, December 2020. CODEN JPD-CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731520303142>. **Yue:2020:BBV**
- Haiyang Yu, Shuai Ma, Qi Hu, and Zhen Yang. Blockchain-based continuous auditing for dynamic data sharing in autonomous vehicular networks. *Computer*, 54(8):33–45, August 2021. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). **Ye:2022:VDV**
- Jiaming Ye, Mingliang Ma, Yun Lin, Lei Ma, Yinxing Xue, and Jianjun Zhao. Vulpedia: Detecting vulnerable Ethereum smart contracts via abstracted vulnerability signatures. *The Journal of Systems and Software*, 192(??):??, October 2022. CODEN JS-SODM. ISSN 0164-1212 (print), 1873-1228 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0164121222001236>. **Yaga:2018:BTO**
- Dylan Yaga, Peter Mell, Nik Roby, and Karen Scarfone. Blockchain technology overview. Draft Report NISTIR 8202, National Institute for Standards and Technology, Gaithersburg, MD, USA, January 2018. 2 + viii + 9–57 pp. URL <https://csrc.nist.gov/CSRC/media/Publications/nistir/>

- 8202/draft/documents/nistir8202-draft.pdf.
- Yamada:2016:BLS**
- [YNS16] Yuki Yamada, Tatsuo Nakajima, and Mizuki Sakamoto. Blockchain-LI: A study on implementing activity-based micropricing using cryptocurrency technologies. In *Proceedings of the 14th International Conference on Advances in Mobile Computing and Multi Media*, MoMM '16, pages 203–207. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4806-8. URL <http://doi.acm.org/10.1145/3007120.3007151>.
- Yu:2021:TMP**
- [YP21] Dejian Yu and Tianxing Pan. Tracing the main path of interdisciplinary research considering citation preference: a case from blockchain domain. *Journal of Informetrics*, 15(2): Article 101136, May 2021. CODEN ???? ISSN 1751-1577 (print), 1875-5879 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1751157721000079>.
- Yazdinejad:2020:PBS**
- [YPDC20] Abbas Yazdinejad, Reza M. Parizi, Ali Dehghantanha, and Kim-Kwang Raymond Choo. P4-to-blockchain: a secure blockchain-enabled packet parser for software defined networking. *Computers & Security*, 88(??):Article 101629, January 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404819301762>.
- Yan:2021:SCD**
- [YPFY21] Zheng Yan, Li Peng, Wei Feng, and Laurence T. Yang. Social-chain: Decentralized trust evaluation based on blockchain in pervasive social networking. *ACM Transactions on Internet Technology (TOIT)*, 21(1):17:1–17:28, February 2021. CODEN ???? ISSN 1533-5399 (print), 1557-6051 (electronic). URL <https://dl.acm.org/doi/10.1145/3419102>.
- Yu:2020:KDP**
- [YS20] Dejian Yu and Libo Sheng. Knowledge diffusion paths of blockchain domain: the main path analysis. *Scientometrics*, 125(1):471–497, October 2020. CODEN SCNTDX. ISSN 0138-9130 (print), 1588-2861 (electronic). URL <http://link.springer.com/article/10.1007/s11192-020-03650-y>.
- Yu:2021:IDM**
- [YS21] Dejian Yu and Libo Sheng.

- Influence difference main path analysis: Evidence from DNA and blockchain domain citation networks. *Journal of Informetrics*, 15 (4):Article 101186, November 2021. CODEN ???? ISSN 1751-1577 (print), 1875-5879 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1751157721000572>. [YSZ⁺19]
- [YSD⁺20] Kuo-Hui Yeh, Chunhua Su, Robert H. Deng, Moti Yung, and Mirosław Kutylowski. Special issue on security and privacy of blockchain technologies. *International Journal of Information Security*, 19 (3):243–244, June 2020. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-020-00496-6>; <http://link.springer.com/content/pdf/10.1007/s10207-020-00496-6.pdf>. [YTLD19]
- [YSLH17] X. Yu, M. T. Shiwen, Y. Li, and R. Deng Huijie. Fair deposits against double-spending for Bitcoin transactions. In *2017 IEEE Conference on Dependable and Secure Computing*, pages 44–51. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, August 2017.
- Yue:2019:BIV**
- Xuanwu Yue, Xinhuan Shu, Xinyu Zhu, Xinnan Du, Zheqing Yu, Dimitrios Papadopoulos, and Siyuan Liu. BitExTract: Interactive visualization for extracting Bitcoin exchange intelligence. *IEEE Transactions on Visualization and Computer Graphics*, 25 (1):162–171, January 2019. CODEN ITVGEA. ISSN 1077-2626 (print), 1941-0506 (electronic), 2160-9306. URL <https://www.computer.org/csdl/trans/tg/2019/01/08440044-abs.html>.
- Yu:2019:CAF**
- Xingjie Yu, Michael Shiwen Thang, Yingjiu Li, and Robert Huijie Deng. Collusion attacks and fair time-locked deposits for fast-payment transactions in Bitcoin. *Journal of Computer Security*, 27(3):375–403, ???? 2019. CODEN JCSIET. ISSN 0926-227X (print), 1875-8924 (electronic).
- Yuen:2020:PPA**
- Tsz Hon Yuen. PACchain: Private, authenticated & auditable consortium blockchain and its implementation. *Future Generation Computer*

- Systems*, 112(??):913–929, November 2020. CODEN FGSEVI. ISSN 0167-739X [YWJ⁺16] (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19328547>
- [YV17] Haohua Sun Yin and Ravi Vatrpu. A first estimation of the proportion of cybercriminal entities in the Bitcoin ecosystem using supervised machine learning. In IEEE, editor, *2017 IEEE International Conference on Big Data (Big Data)*, 11–14 December 2017, Boston, MA, USA, pages 3690–3699. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2017.
- [YW18] Minjae Yoo and Yoo-jae Won. Study on smart automated sales system with blockchain-based data storage and management. In *Advances in Computer Science and Ubiquitous Computing*, pages 734–740. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018. URL http://link.springer.com/chapter/10.1007/978-981-10-7605-3_118
- Yue:2016:HDG**
- Xiao Yue, Huiju Wang, Dawei Jin, Mingqiang Li, and Wei Jiang. Healthcare data gateways: Found healthcare intelligence on blockchain with novel privacy risk control. *Journal of Medical Systems*, 40(10), August 2016. CODEN JM-SYDA. URL <http://link.springer.com/article/10.1007/s10916-016-0574-6>
- Yamazaki:2018:JRC**
- Makiko Yamazaki, Takahiko Wada, Hideyuki Sano, Chang-Ran Kim, Ayai Tomisawa, Megumi Lim, Tetsushi Kajimoto, Vidya Ranganathan, Chang-Ran Kim, Shri Navaratnam, and Sam Holmes. Japan raps Coincheck, orders broader checks after \$530 million cryptocurrency theft. *New York Times*, ??(??):??, January 29, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/reuters/2018/01/29/business/29reuters-japan-cryptocurrency.html>
- Yamazaki:2018:JPC**
- Makiko Yamazaki, Takahiko Wada, Thomas Wilson, Chang-Ran Kim, Vidya Ranganathan, and Chang-Ran Kim. Japan punishes

Coincheck after \$530 million cryptocurrency theft. *New York Times*, ??(??):??, [YYN⁺20] January 28, 2018. CODEN NYTIAO. ISSN 0362-4331 (print), 1542-667X, 1553-8095. URL <https://www.nytimes.com/reuters/2018/01/28/technology/28reuters-japan-cryptocurrency.html>.

Yang:2022:BBK

[YWX⁺22] Xiaodong Yang, Jiaqi Wang, Wanting Xi, Tian Tian, and Caifen Wang. A blockchain-based keyword search scheme with dual authorization for electronic health record sharing. *Journal of Information Security and Applications (JISA)*, 66(??):??, May 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622000448>. [YZC22]

Yang:2021:SBS

[YYDC21] Dana Yang, Seohee Yoo, Inshil Doh, and Kijoon Chae. Selective blockchain system for secure and efficient D2D communication. *Journal of Network and Computer Applications*, 173(??):??, January 1, 2021. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1084804520302885>. [YZL⁺19]

Yang:2020:BVP

Xuechao Yang, Xun Yi, Surya Nepal, Andrei Kellarev, and Fengling Han. Blockchain voting: Publicly verifiable online voting protocol without trusted tallying authorities. *Future Generation Computer Systems*, 112(??):859–874, November 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X17327656>.

Yuan:2022:EMR

Jianwen Yuan, Qinglin Zhao, and Yu-Teng Chang. Edge mining resources allocation among normal and gap blockchains using game theory. *The Journal of Supercomputing*, 78(7):9934–9951, May 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04249-7>.

Yang:2019:BBL

Mengmeng Yang, Tianqing Zhu, Kaitai Liang, Wanlei Zhou, and Robert H. Deng. A blockchain-based location privacy-preserving crowdsensing system. *Future Generation Computer Systems*, 94(??):408–418, May 2019. CODEN FG-

- SEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18320909> [ZBF22]
- [YZL22] Yilin Yuan, Jianbiao Zhang, and Zheng Li. Identity-based public data integrity verification scheme in cloud storage system via blockchain. *The Journal of Supercomputing*, 78(6):8509–8530, April 2022. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-04193-6>. [ZC16]
- [ZAE20] Victor Zakhary, Divyakant Agrawal, and Amr El Abbadi. Atomic commitment across blockchains. *Proceedings of the VLDB Endowment*, 13(9):1319–1331, May 2020. CODEN ???? ISSN 2150-8097. URL <https://dl.acm.org/doi/abs/10.14778/3397230.3397231>.
- [Zam19] Linir Zamir. Application of blockchain network for the use of information sharing. M.S., Florida Atlantic University, Boca Raton, FL, USA, 2019. 65 pp. URL <http://search.proquest.com/pqdtglobal/docview/2305945825>. [ZCC⁺16]
- [Zhang:2022:TBE] Wenbo Zhang, Yayu Bai, and Jingyu Feng. THIA: a blockchain-enabled Threat Intelligence Integrity Audit scheme for IIoT. *Future Generation Computer Systems*, 132(??):254–265, July 2022. CODEN FG-SEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000723>.
- [Zhao:2016:HVP] Zhichao Zhao and T.-H. Hubert Chan. How to vote privately using Bitcoin. In *Information and Communications Security*, volume 9543 of *Lecture Notes in Computer Science*, pages 82–96. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-29814-3. URL http://link.springer.com/chapter/10.1007/978-3-319-29814-6_8.
- [Zhang:2016:TCA] Fan Zhang, Ethan Cecchetti, Kyle Croman, Ari Juels, and Elaine Shi. Town Crier: An authenticated data feed for smart contracts. In *Proceedings of the*

- 2016 ACM SIGSAC Conference on Computer and Communications Security, CCS '16, pages 270–282. ACM Press, New York, NY 10036, USA, 2016. ISBN 1-4503-4139-X. URL <http://doi.acm.org/10.1145/2976749.2978326>.
- Zaabar:2021:HSB**
- [ZCJ⁺21] Bessem Zaabar, Omar Cheikhrouhou, Faisal Jamil, Meryem Ammi, and Mohamed Abid. Health-Block: a secure blockchain-based healthcare data management system. *Computer Networks (Amsterdam, Netherlands: 1999)*, 200(??):??, December 9, 2021. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004382>.
- Zhu:2017:AIF**
- [ZDL17a] Yechen Zhu, David Dickinson, and Jianjun Li. Analysis on the influence factors of Bitcoin’s price based on VEC model. *Financial Innovation*, 3(1):21–39, March 2017. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-017-0054-0>. See erratum [ZDL17b].
- Zhu:2017:EAI**
- [ZDL17b] Yechen Zhu, David Dickinson, and Jianjun Li. Erratum to: Analysis on the influence factors of Bitcoin’s price based on VEC model. *Financial Innovation*, 3(1):??, April 2017. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-017-0057-x>. See [ZDL17a].
- Zhang:2021:RRI**
- [ZDM⁺21] Zhebin Zhang, Dajie Dong, Yuhang Ma, Yilong Ying, Dawei Jiang, Ke Chen, Lidan Shou, and Gang Chen. Refiner: a reliable incentive-driven federated learning system powered by blockchain. *Proceedings of the VLDB Endowment*, 14(12):2659–2662, July 2021. CODEN ???? ISSN 2150-8097. URL <https://dl.acm.org/doi/10.14778/3476311.3476313>.
- Zheng:2022:DRB**
- [ZDP⁺22] Jason Zheng, Chidinma Dike, Stefan Pancari, Yi Wang, George C. Giakos, Wafa Elmannai, and Bingyang Wei. An in-depth review on blockchain simulators for IoT environments. *Future Internet*, 14(6):182, June 10, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/6/182>.
- Zheng:2021:BIM**
- [ZDW21] Zibin Zheng, Hong-Ning

Dai, and Jiajing Wu, editors. *Blockchain Intelligence: Methods, Applications and Challenges*. Springer Singapore, Singapore, 2021. ISBN 981-16-0126-7 (print), 981-16-0127-5 (e-book), 981-16-0128-3 (print), 981-16-0129-1 (print). ix + 166 pp. [ZFY16] LCCN Q335 .B56 2021.

Zeilinger:2016:DAM

[Zei16] Martin Zeilinger. Digital art as ‘monetised graphics’: Enforcing intellectual property on the blockchain. *Philosophy & Technology*, ??(?), November 2016. CODEN ???? ISSN 2210-5433 (print), 2210-5441 (electronic). URL <http://link.springer.com/article/10.1007/s13347-016-0243-1>. [ZFY17]

Zetter:2013:HFT

[Zet13] Kim Zetter. How the feds took down the Silk Road drug wonderland. *Wired*, ??(?):??, November 18, 2013. CODEN WREDEM. ISSN 1059-1028 (print), 1078-3148 (electronic).

Zhang:2024:BUB

[ZFW24] Hongwei Zhang, Wei Fan, and Jinsong Wang. Bidirectional utilization of blockchain and privacy computing: Issues, progress, and challenges. *Journal of Network and Computer* [ZG15]

Applications, 222(?):??, February 2024. CODEN JNCAF3. ISSN 1084-8045 (print), 1095-8592 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S108480452300214X>.

Zhao:2016:OBI

J. Leon Zhao, Shaokun Fan, and Jiaqi Yan. Overview of business innovations and research opportunities in blockchain and introduction to the special issue. *Financial Innovation*, 2(1), December 2016. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-016-0049-2>. 2. See erratum [ZFY17].

Zhao:2017:EOB

J. Leon Zhao, Shaokun Fan, and Jiaqi Yan. Erratum to: Overview of business innovations and research opportunities in blockchain and introduction to the special issue. *Financial Innovation*, 3(1), May 2017. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-017-0059-8>. 8. See [ZFY16].

Zhao:2015:GBI

Chen Zhao and Yong Guan. A graph-based investigation of Bitcoin transactions. In *Ad-*

- vances in *Digital Forensics XI*, pages 79–95. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015. ISBN 3-319-24123-0. URL http://link.springer.com/chapter/10.1007/978-3-319-24123-4_5. [ZGR17]
- [ZGGT16] Y. Zhu, R. Guo, G. Gan, and W. T. Tsai. Interactive incontestable signature for transactions confirmation in Bitcoin blockchain. In *2016 IEEE 40th Annual Computer Software and Applications Conference (COMPSAC)*, volume 1, pages 443–448. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2016. [ZGR+22]
- [ZGH+15] Jan Henrik Ziegeldorf, Fred Grossmann, Martin Henze, Nicolas Inden, and Klaus Wehrle. CoinParty: Secure multi-party mixing of Bitcoins. In *Proceedings of the 5th ACM Conference on Data and Application Security and Privacy, CO-DASPY '15*, pages 75–86. ACM Press, New York, NY 10036, USA, 2015. ISBN 1-4503-3191-2. URL <http://doi.acm.org/10.1145/2699026.2699100>. [ZGY+21]
- Zolotavkin:2017:ICP**
Yevhen Zolotavkin, Julian García, and Carsten Rudolph. Incentive compatibility of pay per last N shares in Bitcoin mining pools. In *Decision and Game Theory for Security*, pages 21–39. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-68710-7 (paperback), 3-319-68711-5 (e-book). URL http://link.springer.com/chapter/10.1007/978-3-319-68711-7_2.
- Zhang:2022:OPB**
Kaiyuan Zhang, Xiaolin Gui, Dewang Ren, Tianjiao Du, and Xin He. Optimal pricing-based computation offloading and resource allocation for blockchain-enabled beyond 5G networks. *Computer Networks (Amsterdam, Netherlands: 1999)*, 203(??):??, February 11, 2022. CODEN ????. ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621005478>.
- Zhu:2021:BBS**
Yan Zhu, Qian Guo, Hongjian Yin, Kaitai Liang, and Stephen S. Yau. Blockchain-based software architecture development

- for service requirements with smart contracts. *Computer*, 54(12):72–80, December 2021. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). [ZHZ⁺22]
- [ZGZ21] Hegui Zhu, Yujia Guo, and Libo Zhang. An improved convolution Merkle tree-based blockchain electronic medical record secure storage scheme. *Journal of Information Security and Applications (JISA)*, 61(??):??, September 2021. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212621001642>. [ZKU⁺23]
- [Zha19] Yuxi Zhang. Scaling blockchain applications with Pub/Sub. M.A.S., University of Toronto, Toronto, ON, Canada, 2019. 85 pp. URL <http://search.proquest.com/pqdtglobal/docview/2202997651>.
- [ZHC⁺20] F. Zhang, W. He, R. Cheng, J. Kos, N. Hynes, N. Johnson, A. Juels, A. Miller, and D. Song. The Ekiden platform for confidentiality-preserving, trustworthy, and performant smart contracts. *IEEE Security & Privacy*, 18(3):17–27, May/June 2020. ISSN 1558-4046.
- [Zhu:2021:ICM] Jinglin Zou, Debiao He, Sherali Zeadally, Neeraj Kumar, Huaqun Wang, and Kkwang Raymond Choo. Integrated blockchain and cloud computing systems: a systematic survey, solutions, and challenges. *ACM Computing Surveys*, 54(8):160:1–160:36, November 2022. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL <https://dl.acm.org/doi/10.1145/3456628>.
- [Zitis:2023:IDC] Pavlos I. Zitis, Shinji Kakinaka, Ken Umeno, Michael P. Halias, Stavros G. Stavrinos, and Stelios M. Potirakis. Investigating dynamical complexity and fractal characteristics of bitcoin/US dollar and euro/US dollar exchange rates around the COVID-19 outbreak. *Entropy*, 25(2):214, February 2023. CODEN ENTRFG. ISSN ???? URL <https://dblp.org/db/journals/entropy/entropy25.html#ZitisKUHSP23>.
- [Zhang:2019:DSS] Shijie Zhang and Jong-Hyouk Lee. Double-spending with a sybil attack in the bitcoin decen-

tralized network. *IEEE Trans. Ind. Informatics*, 15 (10):5715–5722, 2019. CODEN 2019. ISSN 2019. URL <https://dblp.org/db/journals/tii/tii15.html#ZhangL19>.

Zhang:2020:SGD

[ZLH⁺20]

Lihua Zhang, Jingjing Li, Fangzhou Hu, Yang Huang, and Jiayi Bai. Smart grid data access control scheme based on blockchain. *Computational Intelligence*, 36 (4):1773–1784, November 2020. CODEN COMIE6. ISSN 0824-7935 (print), 1467-8640 (electronic).

Zhou:2020:IFV

[ZLJW20]

Yuanjian Zhou, Yining Liu, Chengshun Jiang, and Shulan Wang. An improved FOO voting scheme using blockchain. *International Journal of Information Security*, 19(3):303–310, June 2020. CODEN 2020. ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-019-00457-8>.

Zhu:2018:SRD

[ZLL⁺18]

Saide Zhu, Wei Li, Hong Li, Chunqiang Hu, and Zhipeng Cai. A survey: Reward distribution mechanisms and withholding attacks in bitcoin pool mining. *Math. Found. Comput.*,

[ZLL⁺19a]

1(4):393–414, 2018. CODEN 2018. ISSN 2018. URL <https://dblp.org/db/journals/mfc/mfc1.html#ZhuLLHC18>; <https://www.wikidata.org/entity/Q111689464>.

Zhang:2019:ELG

Lingyue Zhang, Huilin Li, Yannan Li, Yong Yu, Man Ho Au, and Baocang Wang. An efficient linkable group signature for payer tracing in anonymous cryptocurrencies. *Future Generation Computer Systems*, 101(??):29–38, December 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19303115>.

Zhang:2019:ZCS

[ZLL⁺19b]

Yuncong Zhang, Yu Long, Zhen Liu, Zhiqiang Liu, and Dawu Gu. Z-Channel: Scalable and efficient scheme in Zerocash. *Computers & Security*, 86(??):112–131, September 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818313737>.

Zaghloul:2019:BBS

[ZLMR19]

Ehab Zaghloul, Tongtong Li, Matt W. Mutka, and Jian Ren. Bitcoin

- and blockchain: Security and privacy. *CoRR*, abs/1904.11435(??):??, ??? [ZLW19] 2019. CODEN ??? ISSN ??? URL <http://arxiv.org/abs/1904.11435>; <https://dblp.org/db/journals/corr/corr1904.html#abs-1904-11435>.
- [ZLS⁺22] Jixian Zhang, Wenlu Lou, Hao Sun, Qian Su, and Weidong Li. Truthful auction mechanisms for resource allocation in the Internet of Vehicles with public blockchain networks. *Future Generation Computer Systems*, 132(??):11–24, July 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000450>.
- [ZLX⁺17] Jixian Zhang, Wenlu Lou, Hao Sun, Qian Su, and Weidong Li. Truthful auction mechanisms for resource allocation in the Internet of Vehicles with public blockchain networks. *Future Generation Computer Systems*, 132(??):11–24, July 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X22000450>.
- [ZLT⁺19] Yanqi Zhao, Yiming Liu, Aikui Tian, Yong Yu, and Xiaojiang Du. Blockchain based privacy-preserving software updates with proof-of-delivery for Internet of Things. *Journal of Parallel and Distributed Computing*, 132(??):141–149, October 2019. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S074373151930098X>.
- [ZMH⁺17] Yanqi Zhao, Yiming Liu, Aikui Tian, Yong Yu, and Xiaojiang Du. Blockchain based privacy-preserving software updates with proof-of-delivery for Internet of Things. *Journal of Parallel and Distributed Computing*, 132(??):141–149, October 2019. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S074373151930098X>.
- Zou:2019:BBP** Renpeng Zou, Xixiang Lv, and Baocang Wang. Blockchain-based photo forensics with permissible transformations. *Computers & Security*, 87(??): Article 101567, November 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167404818313981>.
- Zheng:2017:PHA** Jianjun Zheng, Qian Lin, Jiatao Xu, Cheng Wei, Chuwei Zeng, Pingan Yang, and Yunfan Zhang. PaxosStore: high-availability storage made practical in WeChat. *Proceedings of the VLDB Endowment*, 10(12): 1730–1741, August 2017. CODEN ??? ISSN 2150-8097.
- Ziegeldorf:2017:SAD** Jan Henrik Ziegeldorf, Roman Matzutt, Martin Henze, Fred Grossmann, and Klaus Wehrle. Secure and anonymous decentralized Bitcoin mixing. *Future Generation Computer Systems*, ??(??):??, ??? 2017. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X16301297>.

- [ZMH⁺18] **Ziegeldorf:2018:SAD**
 Jan Henrik Ziegeldorf, Roman Matzutt, Martin Henze, Fred Grossmann, and Klaus Wehrle. Secure and anonymous decentralized Bitcoin mixing. *Future Generation Computer Systems*, 80(??):448–466, March 2018. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X16301297>. [Zoh15]
- [ZMKR22] **ZareRavasan:2022:ESI**
 Ahad ZareRavasan, Taha Mansouri, Michal Krcál, and Saeed Rouhani. Editorial for the special issue on blockchain: Applications, challenges, and solutions. *Future Internet*, 14(5):155, May 19, 2022. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/14/5/155>. [ZP17a]
- [ZNX⁺21] **Zhang:2021:TID**
 Cheng Zhang, Zhifei Ni, Yang Xu, Entao Luo, Linweiya Chen, and Yaoxue Zhang. A trustworthy industrial data management scheme based on redactable blockchain. *Journal of Parallel and Distributed Computing*, 152(??):167–176, June 2021. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731521000472>. [Zoh17]
- Zohar:2015:BUH**
 Aviv Zohar. Bitcoin: under the hood. *Communications of the ACM*, 58(9):104–113, September 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2015/9/191170/fulltext>.
- Zohar:2017:RTD**
 Aviv Zohar. Recent trends in decentralized cryptocurrencies (invited talk). In *Proceedings of the 49th Annual ACM SIGACT Symposium on Theory of Computing*, STOC 2017, page 1. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-4528-X.
- Zhang:2017:NPB**
 Ren Zhang and Bart Preneel. On the necessity of a prescribed block validity consensus: Analyzing Bitcoin unlimited mining protocol. In *Proceedings of the 13th International Conference on Emerging Networking EXperiments and Technologies*, CoNEXT '17, pages 108–119. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5422-X.
- Zhang:2017:PPB**
 Ren Zhang and Bart Preneel. Publish or perish:

- A backward-compatible defense against selfish mining in Bitcoin. In *Topics in cryptology — CT-RSA 2017*, volume 10159 of *Lecture Notes in Computer Science*, pages 277–292. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2017. ISBN 3-319-52152-7 (paperback), 3-319-52153-5 (e-book). URL http://link.springer.com/chapter/10.1007/978-3-319-52153-4_16. [ZSLY20]
- Zola:2022:ABA**
- [ZSGB⁺22] Francesco Zola, Lander Seguro-Gil, Jan L. Bruse, Mikel Galar, and Raul Orduna Urrutia. Attacking bitcoin anonymity: generative adversarial networks for improving bitcoin entity classification. *Appl. Intell.*, 52(15):17289–17314, 2022. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/apin/apin52.html#ZolaSBGU22>. [ZSM22]
- Zhou:2021:BBB**
- [ZSL21] Ao Zhou, Qibo Sun, and Jinglin Li. BCEdge: Blockchain-based resource management in D2D-assisted mobile edge computing. *Software—Practice and Experience*, 51(10):2085–2102, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- Zhou:2020:KCC**
- Yusheng Zhou, Ying Shan Soh, Hui Shan Loh, and Kum Fai Yuen. The key challenges and critical success factors of blockchain implementation: Policy implications for Singapore’s maritime industry. *Marine Policy*, 122(?):Article 104265, December 2020. CODEN ???? ISSN 0308-597X (print), 1872-9460 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0308597X20309118>.
- Zhai:2022:BSS**
- Zhonghao Zhai, Subin Shen, and Yanqin Mao. BPKI: a secure and scalable blockchain-based public key infrastructure system for web services. *Journal of Information Security and Applications (JISA)*, 68(?):??, August 2022. CODEN ???? ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212622000990>.
- Zulfiqar:2021:EEB**
- Maryam Zulfiqar, Filza Tariq, Muhammad Umar Janjua, Adnan Noor Mian, Adnan Qayyum, Junaid Qadir, Falak Sher, and Muhammad Hassan. EthReview: an Ethereum-based

product review system for mitigating rating frauds. *Computers & Security*, 100 (??):Article 102094, January 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404820303679>

Zhang:2020:DAP

[ZTSS20]

Jing Zhang, Rong Tan, Chunhua Su, and Wen Si. Design and application of a personal credit information sharing platform based on consortium blockchain. *Journal of Information Security and Applications (JISA)*, 55 (??):??, December 2020. CODEN ????. ISSN 2214-2126. URL <http://www.sciencedirect.com/science/article/pii/S2214212620308139>

Zhang:2015:IEB

[ZW15]

Y. Zhang and J. Wen. An IoT electric business model based on the protocol of Bitcoin. In *2015 18th International Conference on Intelligence in Next Generation Networks*, pages 184–191. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, February 2015.

Zhang:2017:IEB

[ZW17]

Yu Zhang and Jiangtao

Wen. The IoT electric business model: Using blockchain technology for the Internet of Things. *Peer-to-Peer Networking and Applications*, 10(4):983–994, July 2017. CODEN ????. ISSN 1936-6442 (print), 1936-6450 (electronic). URL <http://link.springer.com/article/10.1007/s12083-016-0456-1>.

Zheng:2021:GES

[ZWC21]

Zibin Zheng, Shangguang Wang, and Rodrigo N. Calheiros. Guest editorial: Special issue on blockchain and decentralized applications. *Software—Practice and Experience*, 51(10):1985–1986, October 2021. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).

Zhu:2019:CTB

[ZWGC19]

Liehuang Zhu, Yulu Wu, Keke Gai, and Kim-Kwang Raymond Choo. Controllable and trustworthy blockchain-based cloud data management. *Future Generation Computer Systems*, 91(??):527–535, February 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167739X18311993>

- [ZWH18] Manuel Zander, Tom Waite, and Dominik Harz. DAGsim: Simulation of DAG-based distributed ledger protocols. *ACM SIGMETRICS Performance Evaluation Review*, 46(3):118–121, December 2018. CODEN ???? ISSN 0163-5999 (print), 1557-9484 (electronic).
- [ZWH⁺20] Wenbo Zhang, Zonglin Wu, Guangjie Han, Yongxin Feng, and Lei Shu. LDC: a lightweight dada consensus algorithm based on the blockchain for the industrial Internet of Things for smart city applications. *Future Generation Computer Systems*, 108(?):574–582, July 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X19333503>.
- [ZWL22] Lihao Zhang, Taotao Wang, and Soung Chang Liew. Speeding up block propagation in Bitcoin network: Uncoded and coded designs. *Computer Networks (Amsterdam, Netherlands: 1999)*, 206(?):??, April 7, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128622000238>.
- [ZWLS18] Wei Zhang, Pengfei Wang, Xiao Li, and Dehua Shen. Multifractal detrended cross-correlation analysis of the return-volume relationship of bitcoin market. *Complex.*, 2018(?):8691420:1–8691420:20, ???? 2018. CODEN ???? ISSN ???? URL <https://dblp.org/db/journals/complexity/complexity2018.html#ZhangWLS18>.
- [ZWQ⁺16] X. Zhou, Q. Wu, B. Qin, X. Huang, and J. Liu. Distributed Bitcoin account management. In *2016 IEEE Trustcom/BigDataSE/ISPA*, pages 105–112. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, August 2016.
- [ZWS⁺20] Junwei Zhang, Zhuzhu Wang, Lei Shang, Di Lu, and Jianfeng Ma. BTNC: a blockchain based trusted network connection protocol in IoT. *Journal of Parallel and Distributed Computing*, 143(?):1–16, September 2020. CODEN JPD-

- CER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0743731519308457> [ZWX⁺19b]
- [ZWW⁺17] A. Zamyatin, K. Wolter, S. Werner, P. G. Harrison, C. E. A. Mulligan, and W. J. Knottenbelt. Swimming with fishes and sharks: Beneath the surface of queue-based Ethereum mining pools. In *2017 IEEE 25th International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MAS-COTS)*, pages 99–109. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2017. ISSN 1526-7539 (print), 2375-0227 (electronic). URL <http://ieeexplore.ieee.org/document/8107436/>.
- [ZWX⁺19a] Lin Zhong, Qianhong Wu, Jan Xie, Zhenyu Guan, and Bo Qin. A secure large-scale instant payment system based on blockchain. *Computers & Security*, 84(??): 349–364, July 2019. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S016740481831407X>
- [ZWX⁺19b] Lin Zhong, Qianhong Wu, Jan Xie, Jin Li, and Bo Qin. A secure versatile light payment system based on blockchain. *Future Generation Computer Systems*, 93(??):327–337, April 2019. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0167739X18302656>
- [ZWX⁺20a] Shufan Zhang, Lili Wang, and Hu Xiong. Chain-tegrity: blockchain-enabled large-scale e-voting system with robustness and universal verifiability. *International Journal of Information Security*, 19(3):323–341, June 2020. CODEN ???? ISSN 1615-5262 (print), 1615-5270 (electronic). URL <http://link.springer.com/article/10.1007/s10207-019-00465-8>.
- [ZWX⁺20b] Haibin Zheng, Qianhong Wu, Jan Xie, Zhenyu Guan, Bo Qin, and Zhiqiang Gu. An organization-friendly blockchain system. *Computers & Security*, 88(??):Article 101598,

- January 2020. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404818314111>.
Zhou:2021:BBD
- [ZWY⁺21] Zhili Zhou, Meimin Wang, Ching-Nung Yang, Zhangjie Fu, Xingming Sun, and Q. M. Jonathan Wu. Blockchain-based decentralized reputation system in e-commerce environment. *Future Generation Computer Systems*, 124(??):155–167, November 2021. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21001850>.
Zhang:2019:SPB
- [ZXL19] Rui Zhang, Rui Xue, and Ling Liu. Security and privacy on blockchain. *ACM Computing Surveys*, 52(3):51:1–51:??, July 2019. CODEN CMSVAN. ISSN 0360-0300 (print), 1557-7341 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3316481.
Zhang:2021:RSX
- [ZY21] Yuhui Zhang and Dejun Yang. RobustPay⁺: Robust payment routing with approximation guarantee in blockchain-based payment channel networks. *IEEE/ACM Transactions on Net-*
working, 29(4):1676–1686, August 2021. CODEN IEANEP. ISSN 1063-6692 (print), 1558-2566 (electronic). URL <https://dl.acm.org/doi/10.1109/TNET.2021.3069725>.
Zhang:2022:BBP
- Guipeng Zhang, Zhenguo Yang, and Wenyin Liu. Blockchain-based privacy preserving e-health system for healthcare data in cloud. *Computer Networks (Amsterdam, Netherlands: 1999)*, 203(??):??, February 11, 2022. CODEN ???? ISSN 1389-1286 (print), 1872-7069 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1389128621004916>.
Zhu:2016:AOA
- Huasheng Zhu and Zach Zhizhong Zhou. Analysis and outlook of applications of blockchain technology to equity crowdfunding in China. *Financial Innovation*, 2(1), December 2016. CODEN ???? ISSN 2199-4730. URL <http://link.springer.com/article/10.1186/s40854-016-0044-7>.
Zhang:2022:IFM
- Guoming Zhang, Xuyun Zhang, Muhammad Bilal, Wanchun Dou, Xiaolong

- Xu, and Joel J. P. C. Rodrigues. Identifying fraud in medical insurance based on blockchain and deep learning. *Future Generation Computer Systems*, 130(??): 140–154, May 2022. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X21004878>. Zhu:2020:DSP
- [ZzH21] Jing Zhang and Qi zhi He. Dynamic cross-market volatility spillover based on MSV model: Evidence from bitcoin, gold, crude oil, and stock markets. *Complex.*, 2021(??):9912418:1–9912418:8, ????. 2021. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/complexity/complexity2021.html#ZhangH21>. Zhang:2021:DCM
- [ZZJ17] Nejc Zupan, Kaiwen Zhang, and Hans-Arno Jacobsen. Hyperpubsub: A decentralized, permissioned, publish/subscribe service using blockchains: Demo. In *Proceedings of the 18th ACM/IFIP/USENIX Middleware Conference: Posters and Demos*, Middleware '17, pages 15–16. ACM Press, New York, NY 10036, USA, 2017. ISBN 1-4503-5201-4. URL <http://doi.acm.org/10.1145/3155016.3155018>. Zhang:2021:RAT
- Liehuang Zhu, Baokun Zheng, Meng Shen, Feng Gao, Hongyu Li, and Kexin Shi. Data security and privacy in bitcoin system: a survey. *J. Comput. Sci. Technol.*, 35(4):843–862, ????. 2020. CODEN ????. ISSN ????. URL <https://dblp.org/db/journals/jcst/jcst35.html#ZhuZSGLS20>. Zhang:2021:RAT
- Lejun Zhang, Yanfei Zou, Weizheng Wang, Zilong Jin, Yansen Su, and Huiling Chen. Resource allocation and trust computing for blockchain-enabled edge computing system. *Computers & Security*, 105(??):Article 102249, June 2021. CODEN CPSEDU. ISSN 0167-4048 (print), 1872-6208 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167404821000730>.