

# A Bibliography of Publications of Lester Ingber

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## Abstract

This bibliography records publications of Lester Ingber.

## Title word cross-reference

$7 \pm 2$  [Ing85d]. *g* [Ing99b].

1987 [Ing88d].

40 [Ing95e].

9th [AL86].

**Abilities** [DL88]. **Activities** [BIM74].  
**Adaptive** [Ing93a, Ing96a, Ing01a, API03, Ing96f, eOJIP<sup>+</sup>12]. **adiabatic** [Ing65a].  
**Advanced** [Ing85a]. **aids** [Ing87a, Ing90, Ing92b]. **Algebra** [BI74].  
**algorithm** [Ing85b, ICM<sup>+</sup>01]. **Algorithms** [Ing01a, IR92a, IR93]. **analog**

[ISN95, ISN96]. **analog** [IN11]. **Analysis** [DV96]. **Angeles** [Ano85]. **Annealing** [Ing93a, Ing01a, API03, Ing89d, Ing93b, Ing96a, Ing96f, eOJIP<sup>+</sup>12]. **Application** [IN90, IWJB91, Ing87a, Ing87b].

### Applications

[Ing88a, Ing95h, Ing96e, Ing97a, Ing98b, Ing01c, BI71, Ing85e, eOJIP<sup>+</sup>12]. **applied** [Ing91b]. **approach** [Ing86b]. **Artificial** [Ano85]. **ASA** [Ing93a, Ing96a, Ing01a]. **associative** [IM87]. **Attention** [Ing81a]. **August** [Ano85, Cot88, Ing88d]. **Automated** [IM03].

### Baltimore [Pac91]. based

[API03, HIJT03, Ing92a, IM03]. **Basic** [Ing82b]. **battle** [Ing87b]. **battle-manager** [Ing87b]. **between** [Ing66a]. **big** [Ing92b]. **biological** [Ing87a, Ing87b, Ing88a]. **Black** [IW00]. **bond** [IWJB91]. **bond-pricing** [IWJB91]. **Brain** [Cot88, Ing81c, Ing95a]. **brain-mind** [Ing95a].

**C3** [Ano87, AL86, Ing86b, Ing87a, Ing87b, IM87, Ing88c, Ing88d]. **calculating** [Ing90]. **calculation** [Ing95b, IN95]. **California** [AL86]. **Canonical** [BI97, Ing96b, Ing96f, Ing97a, Ing98d]. **capacity** [Ing84b, Ing85d]. **Center** [Ing88b, Ing89c]. **chaos** [ISN95, ISN96]. **Chemistry** [CI74]. **clinical** [Ing85e]. **Collective** [Ing66a]. **College** [BI74]. **Combat** [Ing01b, BI97, IU87, IFW91, IS91, Ing91a, Ing93c]. **Command** [Ing88a, JL89, Jon93, Ing88c, Ing88d]. **Commentary** [Ing95a]. **Communications** [Ing88a, Jon93, Ing88c, Ing88d]. **Comparison** [Ing01b, Ing88b, Ing89a, Ing89b, Ing89c, IFW91, IR92a, IR93]. **Complex** [Ing01a]. **Complexity** [JL89]. **Computer** [Cot88, Ing01b, Pac91, CIY87, Ing88b, Ing89a, Ing89b, IFW91]. **Conference** [Ing88d, Pac91]. **conscious** [NSI13]. **Constraints** [Ing95e]. **Continuous** [DV96]. **contributions** [Ing84a, Ing86c, Ing86d]. **Control** [Ing88a, JL89, Jon93, Ing88c, Ing88d]. **Copenhagen** [Cot88]. **Coping** [JL89]. **cornerstone** [Ing82a]. **corrections** [Ing65a, Ing83b]. **correlates** [Ing99b, Ing00b, NSI13].

**Data** [Ing98a, Ing01b, Ing88b, Ing89a, Ing89b, IFW91]. **DC** [Ano87]. **decision** [Ing87a]. **Defense** [Ano87]. **densities** [BBI72]. **dependent** [Ing65b, Ing83b, Ing86a, Ing86c, Ing86d]. **Derivation** [Ing84b]. **development** [Ing00d]. **diffusion** [ICM+01]. **discovery** [Ing98a]. **dispersion** [Ing85c]. **domains** [Ing83a]. **Duffing** [ISN95, ISN96]. **duration** [Ing85d]. **dynamic** [NSI13]. **Dynamics** [BIRS83, Ing81b, Ing83c, Nun95, IN11].

**Editorial** [Ing72]. **EEG** [DV96, Ing85c, Ing95f, Ing96b, Ing96d, Ing98d, Ing00b, Ing00c, Ing01d, IN11, Ing16, Nun95].

**eigenfunctions** [Ing00c]. **electroencephalography** [IN90, Ing91b, Ing97a]. **electrophysiology** [NSI13]. **Elements** [Ing85a]. **embedded** [ISN95, ISN96]. **energetics** [IP70]. **Energy** [FIM+72]. **Equation** [BBI72, Ing84a]. **evolution** [Ing94, Ing95c, ISN95, ISN96]. **exchange** [Ing66b]. **Exercise** [Ing01b, Ing88b, Ing89a, Ing89b, IFW91]. **experience** [NSI13]. **experimental** [NSI13]. **exponential** [IW00]. **extensions** [Ing93c]. **extrema** [Ing86a].

**factor** [Ing99b]. **factors** [IS91]. **Fast** [IR92b, Ing89d, IR92a, IR93]. **Financial** [Ing98b, Ing01c, Ing84c, Ing95h, Ing96b, Ing96e, Ing98c, IW99, Ing00d, IW00]. **Fokker** [Ing95b]. **forces** [Ing67, Ing68a, IP70, Ing83b]. **formulation** [Ing82b]. **Foundations** [CI74]. **Frontier** [DV96]. **frustrated** [Ing83a]. **fuzzy** [eOJIP+12].

**gas** [BI71]. **general** [ICM+01]. **Generic** [Ing92a, Ing01a]. **Genetic** [IR92a, IR93]. **Ginsburg** [Ing86a]. **global** [eOJIP+12]. **GNU** [Ing92b].

**Handbook** [Ing76]. **held** [AL86]. **High** [FIM+72, IN95, Ing00d]. **High-Energy** [FIM+72]. **High-resolution** [Ing00d]. **Hilton** [AL86]. **Hotel** [AL86]. **Human** [Nun95, IS91, NSI13]. **Hyatt** [Pac91]. **Hz** [Ing95e].

**II** [JL89]. **Images** [Ing95a]. **Indicators** [Ing01c, Ing96b, Ing97a, Ing98d, Ing09]. **induced** [Ing86a]. **influences** [Ing16]. **Information** [iAXC+96, HIJT03]. **Inn** [AL86]. **Instructor** [Ing76]. **Integral** [Ing01a, Ing84a, Ing94, Ing95b, Ing95c, ISN95, IN95, ISN96, Ing00d]. **Intelligence** [Ano85, Ing87a, Ing87b, Ing88a]. **intelligent** [HLJT03]. **interaction** [Ing86d, Ing95a].

**Interactions**

[Ing01d, Ing66a, Ing82b, Ing83c, Ing84b, Ing85c, Ing85d, Ing85e, Ing86c, Ing86e, Ing91b, Ing92a, Ing94, Ing95d, Ing95g, Ing95e, Ing95f, IN95, Ing96c, Ing96d, Ing97b, Ing97a, Ing98d, Ing99b, Ing00b, Ing00c, Ing09, Ing16]. **International** [Ing88d]. **Internet** [HIJT03, IM03]. **Internet-based** [HIJT03].

**JANUS** [Ing88b, Ing89c]. **July** [Pac91]. **June** [Ano87, AL86, DL88].

**Karate** [Ing76, Ing81b, Ing85a, Ing68b].

**Kata** [Ing00a]. **Keri** [Ing00a]. **Kinematics** [Ing81b]. **knowledge** [Ing98a].

**Landau** [Ing86a]. **large** [Ing16]. **large-scale** [Ing16]. **learn** [Ing72]. **learned** [Ing96a]. **Learning** [DL88, Ing72, API03]. **Lessons** [Ing96a]. **light** [Ing66a]. **Louis** [Ing88d].

**M.** [Ing95a]. **magnetic** [Ing83a]. **manager** [Ing87b]. **Markets** [Ing98b, Ing01c, Ing84c, Ing95h, Ing96b, Ing96e, Ing96f, Ing98c, IW99, IW00, IM01, IM03]. **Maryland** [Pac91]. **Mathematical** [Ing88b, Ing89a, Ing89b, Ing89c, IFW91, Ing01b]. **matter** [BBI72, Ing66a, Ing66b]. **measures** [Ing91a]. **mechanical** [CIY87, Ing91a]. **Mechanics** [Ing98b, Ing01b, Ing01c, Ing01d, Ing82b, Ing83c, Ing84b, Ing84c, Ing85b, Ing85c, Ing85d, Ing85e, Ing86b, Ing86e, Ing87a, Ing87b, Ing88d, IWJB91, IS91, Ing91b, Ing92a, Ing93c, Ing94, Ing95d, Ing95g, Ing95e, Ing95f, Ing95h, IN95, Ing96c, Ing96d, Ing96e, Ing97b, Ing97a, Ing98a, Ing98c, Ing98d, Ing99b, IW00, Ing00b, Ing00c, Ing02, Ing09, IN11, Ing16]. **memories** [IM87]. **Memory** [DL88, Ing01d, Ing84b, Ing85d, Ing94, Ing95e, IN95, Ing00c]. **meson** [Ing66b]. **Mesoscales** [Ing88c, Ing88d]. **mesoscopic** [Ing92a]. **method** [API03, Ing65a]. **methodology** [IWJB91]. **mind** [Ing95a]. **mining** [Ing98a].

**MIT/ONR** [AL86]. **MO** [Ing88d]. **model** [IU87, Ing99a]. **Modeling** [Ing87b]. **Models** [Ing01b, IM87, Ing88b, Ing89a, Ing89b, Ing90, IWJB91, IFW91, Ing95e, IM01, IM03]. **moderate** [Ing95c]. **modification** [Ing83c]. **modifications** [IW00]. **molecular** [Ing16]. **momenta** [BI97, Ing96b, Ing96f, Ing97a, Ing98d]. **Monterey** [AL86]. **Multiparticle** [FIM+72]. **Multiple** [IN90, Ing95a, Ing95f, Ing96d, Ing01d, Ing95d, IN11]. **multiscale** [NSI13]. **multivariate** [Ing95b, Ing95c].

**National** [Ano87, Ing88b, Ing89c]. **Naval** [AL86]. **Nearest** [Ing83a].

**Nearest-neighbor** [Ing83a]. **neighbor** [Ing83a]. **neocortex** [Ing88c, Ing88d, IN90, NSI13]. **Neocortical** [Ing01d, IN11, Nun95, Ing82b, Ing83c, Ing84b, Ing85c, Ing85d, Ing85e, Ing86e, Ing91b, Ing92a, Ing94, ISN95, Ing95d, Ing95g, Ing95e, Ing95f, IN95, Ing96b, Ing96c, ISN96, Ing96d, Ing97b, Ing97a, Ing98d, Ing99b, Ing00b, Ing00c, Ing09, Ing16]. **networks** [Ing92a]. **Neural** [iAXC+96, CIY87, Ing92a]. **neutron** [BBI72, BI71]. **No** [Ing00a]. **Noise** [Ing86a, Ing95c, ISN95, ISN96]. **Noise-induced** [Ing86a]. **Non** [Ing65a]. **Non-adiabatic** [Ing65a]. **nonchaotic** [Ing96c]. **nonequilibrium** [Ing84c, Ing86b, Ing95h, Ing96c, Ing96e]. **Nonlinear** [Ing86b, Ing96c, BI97, Ing84c, Ing95h, Ing96e, Ing98a]. **nonquantum** [Ing96c]. **Nuclear** [Ing68a, IP70, Ing66b, Ing67, Ing83b, Ing84a]. **nucleon** [Ing66b, Ing86c, Ing86d]. **nucleon-nucleon** [Ing66b, Ing86c, Ing86d].

**One** [Ing66b]. **One-meson-exchange** [Ing66b]. **ONR** [AL86]. **optical** [IM87]. **Optimization** [IM01, eOJIP+12]. **optimized** [Ing95h, Ing96e, IM03]. **Options** [Ing01c, Ing99a, Ing00d, Ing02]. **OXY** [Ing82a].

**paradigm** [Ing91b]. **Paris** [DL88]. **Part** [JL89]. **Path** [Ing84a, Ing94, Ing95b, Ing95c, ISN95, ISN96, Ing01a, IN95, Ing00d]. **Path-Integral** [Ing01a, Ing84a, Ing94, Ing95b, Ing95c, ISN95, ISN96, IN95, Ing00d]. **PATHINT** [Ing01a]. **performance** [Ing91a]. **Phenomena** [Ing01d]. **Physical** [ABB<sup>+</sup>73, IN11]. **Physics** [Ing68b, Ing81a, IN90, IM01, IM03]. **physiological** [Ing09]. **Planck** [Ing95b]. **portfolio** [Ing09]. **portfolios** [Ing02]. **Posner** [Ing95a]. **Postgraduate** [AL86]. **potentials** [Ing65b, Ing66b]. **Practice** [Ing93b]. **pricing** [IWJB91]. **Probability** [Ano85, BIM74, ICM<sup>+</sup>01]. **Problem** [BI74, CI74]. **Proceedings** [AL86, Cot88, DL88, Pac91, Ing88d]. **processes** [ICM<sup>+</sup>01, Ing16]. **Processing** [iAXC<sup>+</sup>96, HIJT03]. **Progress** [iAXC<sup>+</sup>96]. **Properties** [BI71, Ing66b]. **Proposal** [IM87].

**Raichle** [Ing95a]. **ranged** [Ing86c]. **re** [Ing89d]. **re-annealing** [Ing89d]. **Reaction** [Ing99b, Ing00b]. **Reactions** [FIM<sup>+</sup>72]. **real** [IM87]. **real-time** [IM87]. **Realistic** [Ing67]. **Reannealing** [IR92b, IR92a, IR93]. **Regency** [Pac91]. **regional** [Ing87b]. **reinforcement** [API03]. **relations** [Ing85c]. **Research** [Ano87]. **resolution** [IN95, Ing00d]. **Resort** [AL86]. **response** [Ing85b]. **Rhythms** [Nun95]. **Riemannian** [Ing83b, Ing84a, Ing86c, Ing86d]. **rule** [Ing85d].

**scale** [Ing16]. **Scales** [Ing01d, IN90, Ing95a, Ing95d, Ing95f, Ing96d, IN11]. **scaling** [Ing91b]. **scattering** [Ing66b]. **Scholes** [IW00]. **School** [AL86]. **Schrödinger** [Ing84a]. **Science** [ABB<sup>+</sup>73, Cot88, DV96, JL89, Jon93, Ing92b]. **Short** [Ing01d, Ing84b, Ing85d, Ing86c, Ing94, Ing95e, IN95, Ing00c]. **short-ranged** [Ing86c]. **Short-Term** [Ing01d, Ing94, Ing95e, IN95, Ing00c].

**short-term-memory** [Ing84b, Ing85d]. **simple** [Ing99a]. **Simulated** [IR92b, Ing93a, Ing93b, Ing01a, API03, Ing89d, IR92a, IR93, Ing96a, Ing96f, eOJIP<sup>+</sup>12]. **Simulation** [Cot88, Pac91, Ing89c]. **Sixth** [Ing88d]. **small** [Ing92b]. **SMART** [Ing85b]. **SMC** [Ing01b]. **SMFM** [Ing98c, Ing01c]. **SMNI** [Ing95g, Ing97b, Ing01d]. **Some** [Ing98b]. **St** [Ing88d]. **Stability** [Ing85d]. **standing** [IN11]. **star** [BBI72]. **stars** [BI71]. **state** [BBI72]. **states** [Ing65a]. **stationary** [Ing65a]. **Statistical** [CIY87, Ing82b, Ing83c, Ing84b, Ing84c, Ing85b, Ing85c, Ing85d, Ing86e, Ing87a, Ing87b, Ing88d, Ing90, IS91, Ing91a, Ing91b, Ing93c, Ing94, Ing95d, Ing95g, Ing95e, Ing95f, Ing95h, IN95, Ing96d, Ing96e, Ing97b, Ing97a, Ing98b, Ing98c, Ing98d, Ing99b, IW00, Ing00b, Ing00c, Ing01b, Ing01c, Ing01d, Ing02, Ing09, Ing16, Ing85e, Ing86b, IN90, IWJB91, Ing92a, Ing96c, Ing98a, IN11]. **Stochastic** [IU87, eOJIP<sup>+</sup>12, Ing98a]. **structure** [Ing90, IWJB91]. **subnuclear** [BBI72]. **Summer** [Pac91]. **Supplement** [BI74, CI74]. **Symposium** [Ano87]. **synaptic** [Ing83c]. **Systems** [AL86, DL88, Ing01a, HIJT03, Ing86a, Ing86b, Ing88c, Ing95b, Ing95c, Ing98a].

**T** [Ing88b, Ing89c]. **targets** [Ing85b]. **teaching** [Ing81a]. **techniques** [Ing68b]. **Tennis** [BIRS83]. **Term** [Ing01d, Ing84b, Ing85d, Ing90, IWJB91, Ing94, Ing95e, IN95, Ing00c]. **term-structure** [IWJB91]. **testing** [Ing98d]. **Theoretical** [NSI13]. **theory** [Ing81c, Ing93b]. **time** [Ing86a, IM87, Ing99b]. **time-dependent** [Ing86a]. **times** [Ing00b]. **Today** [ABB<sup>+</sup>73]. **Tools** [Ing01a]. **Trading** [Ing96f, Ing01c, Ing95h, Ing96e, IM01, IM03]. **Training** [Ing88b, Ing89c, Ing98d, Ing99a]. **tree** [ICM<sup>+</sup>01].

**UC** [Ano85]. **Uncertainty** [Ano85]. **unified** [Ing81c]. **Universe** [Ing77]. **University** [Ano87, Cot88, DL88]. **Urn** [Ing77]. **use** [IM87]. **using** [IM87].

**Velocity** [Ing65b, Ing83b, Ing86c, Ing86d].

**Velocity-dependent**

[Ing65b, Ing83b, Ing86c, Ing86d]. **versus** [Ing93b]. **Very** [Ing89d, IR92b, IR92a, IR93]. **VFSR** [IR92b]. **via** [Ing98a]. **virtual** [CIY87]. **Volatility** [IW99].

**Washington** [Ano87]. **Waveform** [DV96]. **waves** [IN11]. **way** [Ing92b]. **Workshop** [Ano85, AL86].

## References

**Asimov:1973:PST**

[ABB<sup>+</sup>73] I. Asimov, A. Baker, M. Bickford, G. Burbidge, G. Choppin, M. Chriss, D. Eisenberg, J. Fowler, H. Gray, A. Holden, L. Ingber, R. Kolenkow, C. Lee, P. Lonsdale, G. Morgan, M. Rotenberg, M. Sands, A. Schawlow, V. Weisskopf, and G. Wetherill. *Physical Science Today*. CRM Books, Del Mar, CA, USA, 1973. ISBN 0-87665-136-8, 0-394-30281-8. 637 pp. LCCN QC23 .P578.

**Athans:1986:POW**

[AL86] Michael Athans and Alexander H. Levis, editors. *Proceedings of the 9th MIT/ONR workshop on C3 Systems, held at Naval Postgraduate School and Hilton Inn Resort Hotel, Monterey, California June 2 through June 5, 1986*, volume 1624 of *LIDS-R*. MIT Press, Cambridge, MA, USA, Decem-

ber 1986. ISBN ????. LCCN ????. URL <http://hdl.handle.net/1721.1/3491>; <https://dspace.mit.edu/retrieve/3110/R-1624-28186501.pdf>.

**Anonymous:1985:WUP**

Anonymous, editor. *Workshop on Uncertainty and Probability in Artificial Intelligence: UC Los Angeles, 14-16 August 1985*. American Association for Artificial Intelligence, Menlo Park, CA, USA, 1985. ISBN ????. LCCN ????

**Anonymous:1987:SCR**

Anonymous, editor. *1987 Symposium on C3 Research: National Defense University, Washington, DC, 16-18 June 1987*. National Defense University, Washington, DC, USA, 1987. ISBN ????. LCCN ????

**Atiya:2003:RLM**

A. F. Atiya, A. G. Parlos, and L. Ingber. A reinforcement learning method based on adaptive simulated annealing. In *Proceedings International Midwest Symposium on Circuits and Systems (MWCAS '03), Cairo, Egypt*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003. ISBN ????. LCCN ????. URL [http://www.ingber.com/asa03\\_reinforce.pdf](http://www.ingber.com/asa03_reinforce.pdf).

**Barkat:1972:ESN**

Z. Barkat, J. R. Buchler, and L. Ingber. Equation of state

[Ano85]

[Ano87]

[API03]

[BBI72]

- of neutron star matter at sub-nuclear densities. *Astrophysical Journal*, 176:723–738, 1972. CODEN ASJOAB. ISSN 0004-637X (print), 1538-4357 (electronic).
- [BI71] J. R. Buchler and L. Ingber. Properties of the neutron gas and applications to neutron stars. *Nuclear Physics A*, 170:1–11, 1971. CODEN NUPABL. ISSN 0375-9474 (print), 1873-1554 (electronic).
- [BI74] S. Bryant and L. Ingber. College algebra problem supplement. Technical report, Physical Studies Institute, Solana Beach, CA, USA, 1974.
- [BI97] M. Bowman and L. Ingber. Canonical momenta of nonlinear combat. In *Proceedings of the 1997 Simulation Multi-Conference, 6–10 April 1997, Atlanta, GA*. Society for Computer Simulation, San Diego, CA, USA, 1997. ISBN ????. LCCN ????. URL [http://www.ingber.com/combat97\\_cmi.pdf](http://www.ingber.com/combat97_cmi.pdf).
- [BIR83] J. Bryant, L. Ingber, K. Rosi, and L. Seitchik. Tennis dynamics. Technical report, Physical Studies Institute, Solana Beach, CA, USA, 1983.
- [CI74] E. Clark and L. Ingber. Foundations in chemistry problem supplement. Technical report, Physical Studies Institute, Solana Beach, CA, USA, 1974.
- [CIY87] J. Connell, L. Ingber, and C. Yost. Statistical mechanical virtual neural computer. In Anonymous [Ano87], pages 65–68. ISBN ????. LCCN ????
- [Cot88] Rodney M. J. Cotterill, editor. *Computer Simulation in Brain Science: Proceedings, University of Copenhagen, 20–22 August 1986*. Cambridge University Press, Cambridge, UK, 1988. ISBN 0-521-34179-5. LCCN QP376 .C6341 1988; WL300 C642 1988.
- [DL88] Jean Delacour and Jean-Claude Levy, editors. *Systems with Learning and Memory Abilities: Proceedings, University of Paris 15–19 June 1987*. Elsevier, Amsterdam, The Netherlands, 1988. ISBN 0-444-70522-8. ix + 618 pp. LCCN QP408 .S971 1988; WL 104 S994 1988.

- [DV96] **Dasheiff:1996:FSE**  
R. M. Dasheiff and D. J. Vincent, editors. *Frontier Science in EEG: Continuous Waveform Analysis*, volume 45 of *Electroencephalography clinical neurophysiology supplement*. Elsevier, Amsterdam, The Netherlands, 1996. ISBN 0-444-82429-4. ISSN 0424-8155. LCCN QP376.5.C67 1996. Symposium held October 9, 1993, in New Orleans, Louisiana.
- [eOJIP<sup>+</sup>12] **Junior:2012:SGO**  
Hime Aguiar e Oliveira Junior, Lester Ingber, Antonio Petraglia, Mariane Rembold Petraglia, and Maria Augusta Soares Machado. *Stochastic global optimization and its applications with fuzzy adaptive simulated annealing*, volume 35 of *Intelligent Systems Reference Library*. Springer, Heidelberg, 2012. ISBN 978-36422-7-4-7-8-7; 978-36422-7-4-7-9-4. xii+207 pp.
- [FIM<sup>+</sup>72] **Frazer:1972:HEM**  
W. R. Frazer, L. Ingber, C. H. Mehta, C. H. Poon, D. Silverman, K. Stowe, P. D. Ting, and H. J. Yesian. High-energy multiparticle reactions. *Reviews of Modern Physics*, 44 (2):284–319, April 1972. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL <http://link.aps.org/doi/10.1103/RevModPhys.44.284>; [http://rmp.aps.org/abstract/RMP/v44/i2/p284\\_1](http://rmp.aps.org/abstract/RMP/v44/i2/p284_1).
- [HIJT03] **Howlett:2003:IBI**  
R. J. Howlett, N. S. Ichalkaranje, L. C. Jain, and G. Tonfoni, editors. *Internet-based intelligent information processing systems*, volume 3. World Scientific Publishing Co. Pte. Ltd., P. O. Box 128, Farrer Road, Singapore 9128, 2003. ISBN 981-238-281-X. LCCN QA76.9.E96 I56 2003.
- [iAXC<sup>+</sup>96] **Amari:1996:PNI**  
Shun ichi Amari, Lei Xu, Lai-Wan Chan, et al., editors. *Progress in Neural Information Processing*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1996. ISBN 981-3083-05-0 (set), 981-3083-03-4 (softcover: vol. 1), 981-3083-04-2 (softcover: vol. 2). xxxi + 678 (vol. 1), xxix + 681–1420 (vol. 2) pp. LCCN QA76.87. .I573 1996. Two volumes.
- [ICM<sup>+</sup>01] **Ingber:2001:PTA**  
L. Ingber, C. Chen, R. P. Mondescu, D. Muzzall, and M. Renedo. Probability tree algorithm for general diffusion processes. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 64(5):056702–056707, 2001. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL [http://www.ingber.com/path01\\_pathtree.pdf](http://www.ingber.com/path01_pathtree.pdf).
- [IFW91] **Ingber:1991:MCC**  
L. Ingber, H. Fujio, and M. F. Wehner. Mathematical comparison of combat computer mod-

- els to exercise data. *Mathematical and computer modelling*, 15 (1):65–90, 1991. CODEN MC-MOEG. ISSN 0895-7177 (print), 1872-9479 (electronic).
- [IM87] L. Ingber and T. R. Moore. Proposal for real-time use of C3 models using optical associative memories. Technical report, Naval Postgraduate School, Monterey, CA, USA, 1987.
- [IM01] L. Ingber and R. P. Mondescu. Optimization of trading physics models of markets. *IEEE Transactions on Neural Networks*, 12(4):776–790, 2001. CODEN ITNNEP. ISSN 1045-9227 (print), 1941-0093 (electronic). URL [http://www.ingber.com/markets01\\_optim\\_trading.pdf](http://www.ingber.com/markets01_optim_trading.pdf).
- [IM03] L. Ingber and R. P. Mondescu. Automated Internet trading based on optimized physics models of markets. In Howlett et al. [HIJT03], pages 305–356. ISBN 981-238-281-X. LCCN QA76.9.E96 I56 2003. URL [http://www.ingber.com/markets03\\_automated.pdf](http://www.ingber.com/markets03_automated.pdf).
- [IN90] L. Ingber and P. L. Nunez. Multiple scales of statistical physics of neocortex: Application to electroencephalography. *Mathematical and computer modelling*, 13 (7):83–95, 1990. CODEN MC-MOEG. ISSN 0895-7177 (print), 1872-9479 (electronic).
- [IN95] L. Ingber and P. L. Nunez. Statistical mechanics of neocortical interactions: High resolution path-integral calculation of short-term memory. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 51(5):5074–5083, 1995. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni95\\_stm.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni95_stm.ps.Z).
- [IN11] Lester Ingber and Paul L. Nunez. Neocortical dynamics at multiple scales: EEG standing waves, statistical mechanics, and physical analogs. *Mathematical Biosciences*, 229(2):160–173, 2011. CODEN MABIAR. ISSN 0025-5564 (print), 1879-3134 (electronic).
- [Ing65a] L. Ingber. Non-adiabatic corrections to the method of stationary states. *Phys. Rev. A*, 139:35–39, 1965. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519.
- [Ing65b] L. Ingber. Velocity-dependent potentials. *Bulletin of the American Physical Society*, 10:737, 1965.



- CODEN BAPSA6. ISSN 0003-0503.
- [Ing66a] L. Ingber. Collective interactions between light and matter. Technical report, RAND, Santa Monica, CA, USA, 1966.
- [Ing66b] L. Ingber. One-meson-exchange potentials and properties of nucleon-nucleon scattering and of nuclear matter. Technical report, UC San Diego, La Jolla, CA, USA, 1966.
- [Ing67] L. Ingber. Realistic nuclear forces. *Reviews of Modern Physics*, 39(3):648, July 1967. CODEN RMPHAT. ISSN 0034-6861 (print), 1538-4527 (electronic), 1539-0756. URL <http://link.aps.org/doi/10.1103/RevModPhys.39.648>; [http://rmp.aps.org/abstract/RMP/v39/i3/p648\\_1](http://rmp.aps.org/abstract/RMP/v39/i3/p648_1).
- [Ing68a] L. Ingber. Nuclear forces. *Phys. Rev.*, 174(4):1250–1263, October 1968. CODEN PHRVAO. ISSN 0031-899X (print), 1536-6065 (electronic). URL [http://prola.aps.org/abstract/PR/v174/i4/p1250\\_1](http://prola.aps.org/abstract/PR/v174/i4/p1250_1).
- [Ing68b] L. Ingber. Physics of karate techniques. Technical report, Japan Karate Association, Tokyo, Japan, 1968.
- [Ing72] L. Ingber. Editorial: Learning to learn. *Explore*, 7:5–8, 1972. CODEN ???? ISSN ????
- [Ing76] L. Ingber. *The Karate Instructor's Handbook*. Physical Studies Institute — Institute for the Study of Attention, Solana Beach, CA, USA, 1976. ISBN ???? various pp. LCCN GV1114.3 .I54 1976.
- [Ing77] L. Ingber. Urn of the universe. Technical report, Physical Studies Institute, Solana Beach, CA, USA, 1977.
- [Ing81a] L. Ingber. Attention, physics and teaching. *Journal of Social and Biological Structures*, 4: 225–235, 1981. CODEN ???? ISSN 0140-1750 (print), 1878-2787 (electronic).
- [Ing81b] L. Ingber. *Karate: Kinematics and Dynamics*. Unique, Hollywood, CA, USA, 1981. ISBN 0-86568-025-6. 177 pp. LCCN GV1114.3 .I544 1981.
- [Ing81c] L. Ingber. Towards a unified brain theory. *Journal of Social and Biological Structures*, 4: 211–224, 1981. CODEN ???? ISSN 0140-1750 (print), 1878-2787 (electronic).

- [Ing82a] **Ingber:1982:OC**  
L. Ingber. The OXY cornerstone. In W. A. Dodge, Jr., R. B. Moulton, H. W. Sigworth, and A. C. Smith, Jr., editors, *Legends of Caltech*, page 28. Alumni Association, California Institute of Technology, Pasadena, CA, USA, 1982. ISBN ??? LCCN ???
- [Ing82b] **Ingber:1982:SMN**  
L. Ingber. Statistical mechanics of neocortical interactions. I. basic formulation. *Physica. D, Nonlinear phenomena*, 5:83–107, 1982. CODEN PDNPDT. ISSN 0167-2789 (print), 1872-8022 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni82\\_basic.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni82_basic.ps.Z).
- [Ing83a] **Ingber:1983:NNF**  
L. Ingber. Nearest-neighbor frustrated magnetic domains. Technical report, Physical Studies Institute, Solana Beach, CA, USA, 1983.
- [Ing83b] **Ingber:1983:RCV**  
L. Ingber. Riemannian corrections to velocity-dependent nuclear forces. *Phys. Rev. C*, 28:2536–2539, 1983. CODEN PRVCAN. ISSN 0556-2813, 1089-4918.
- [Ing83c] **Ingber:1983:SMN**  
L. Ingber. Statistical mechanics of neocortical interactions. dynamics of synaptic modification. *Phys. Rev. A*, 28:395–416, 1983. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni83\\_dynamics.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni83_dynamics.ps.Z).
- [Ing84a] **Ingber:1984:PIR**  
L. Ingber. Path-integral Riemannian contributions to nuclear Schrödinger equation. *Physical Review D (Particles and Fields)*, 29:1171–1174, 1984. CODEN PRVDAQ. ISSN 0556-2821 (print), 1089-4918 (electronic), 1538-4500. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/nuclear84\\_riemann.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/nuclear84_riemann.ps.Z); [http://www.ingber.com/nuclear84\\_riemann.pdf](http://www.ingber.com/nuclear84_riemann.pdf).
- [Ing84b] **Ingber:1984:SMNa**  
L. Ingber. Statistical mechanics of neocortical interactions. derivation of short-term-memory capacity. *Phys. Rev. A*, 29:3346–3358, 1984. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni84\\_stm.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni84_stm.ps.Z).
- [Ing84c] **Ingber:1984:SMNb**  
L. Ingber. Statistical mechanics of nonlinear nonequilibrium financial markets. *Mathematical Modeling*, 5(6):343–361, 1984. CODEN MMDEEB. ISSN 1048-5082. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/markets84\\_statmech.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/markets84_statmech.ps.Z).

**Ingber:1985:EAK**

- [Ing85a] L. Ingber. *Elements of Advanced Karate*. Ohara, Burbank, CA, USA, 1985. ISBN 0-89750-127-6. 192 pp. LCCN GV1114.3 .J538 1985.

**Ingber:1985:SMA**

- [Ing85b] L. Ingber. Statistical mechanics algorithm for response to targets (SMART). In P. Cheeseman, editor, *Workshop on Uncertainty and Probability in Artificial Intelligence: UC Los Angeles, 14-16 August 1985*, pages 258-264. American Association for Artificial Intelligence, Menlo Park, CA, USA, 1985. URL [http://www.ingber.com/combat85\\_smart.pdf](http://www.ingber.com/combat85_smart.pdf).

**Ingber:1985:SMNa**

- [Ing85c] L. Ingber. Statistical mechanics of neocortical interactions. EEG dispersion relations. *IEEE Transactions on Biomedical Engineering*, 32:91-94, 1985. CODEN IEBEAX. ISSN 0018-9294 (print), 1558-2531 (electronic).

**Ingber:1985:SMNb**

- [Ing85d] L. Ingber. Statistical mechanics of neocortical interactions: Stability and duration of the  $7 \pm 2$  rule of short-term-memory capacity. *Phys. Rev. A*, 31:1183-1186, 1985. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni85\\_stm.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni85_stm.ps.Z).

**Ingber:1985:TCA**

- [Ing85e] L. Ingber. Towards clinical applications of statistical mechanics of neocortical interactions. *Innovation et technologie en biologie et médecine: ITBM = Innovation and Technology in Biology and Medicine*, 6:753-758, 1985. CODEN ???? ISSN 0243-7228.

**Ingber:1986:NIE**

- [Ing86a] L. Ingber. Noise-induced extrema in time-dependent Ginsburg-Landau systems. *Mathematical Modeling*, 7:525-528, 1986. CODEN MMDEEB. ISSN 1048-5082.

**Ingber:1986:NNS**

- [Ing86b] L. Ingber. Nonlinear nonequilibrium statistical mechanics approach to C3 systems. In Athans and Levis [AL86], pages 237-244. ISBN ???? LCCN ???? URL [http://www.ingber.com/combat86\\_approach.pdf](http://www.ingber.com/combat86_approach.pdf).

**Ingber:1986:RCS**

- [Ing86c] L. Ingber. Riemannian contributions to short-ranged velocity-dependent nucleon-nucleon interactions. *Physical Review D (Particles and Fields)*, 33:3781-3784, 1986. CODEN PRVDAQ. ISSN 0556-2821 (print), 1089-4918 (electronic), 1538-4500. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/nuclear86\\_riemann.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/nuclear86_riemann.ps.Z).

**Ingber:1986:RCV**

- [Ing86d] L. Ingber. Riemannian contributions to velocity-dependent

- nucleon-nucleon interaction. *Bulletin of the American Physical Society*, 31:869, 1986. CODEN BAPSA6. ISSN 0003-0503.
- [Ing86e] L. Ingber. Statistical mechanics of neocortical interactions. *Bulletin of the American Physical Society*, 31:868, 1986. CODEN BAPSA6. ISSN 0003-0503.
- [Ing87a] L. Ingber. C3 decision aids: Statistical mechanics application of biological intelligence. In Anonymous [Ano87], pages 49–57. ISBN ??? LCCN ???
- [Ing87b] L. Ingber. Modeling C3 of a regional battle-manager: Statistical mechanics application of biological intelligence. Technical report, ANSER, Arlington, VA, 1987.
- [Ing88a] L. Ingber. Applications of biological intelligence to command, control and communications. In Cotterill [Cot88], pages 513–533. ISBN 0-521-34179-5. LCCN QP376 .C6341 1988; WL300 C642 1988.
- [Ing88b] L. Ingber. Mathematical comparison of computer models to exercise data: Comparison of JANUS(T) to national training center data. In *1988 JDL C2 Symposium: Naval Postgraduate School, Monterey, CA, 7–9 June 1988*, pages 541–549. SAIC, McLean, VA, 1988. ISBN ??? LCCN ???
- [Ing88c] L. Ingber. Mesoscales in neocortex and in command, control and communications (C3) systems. In Delacour and Levy [DL88], pages 387–409. ISBN 0-444-70522-8. LCCN QP408 .S971 1988; WL 104 S994 1988.
- [Ing88d] L. Ingber. Statistical mechanics of mesoscales in neocortex and in command, control and communications (C3): Proceedings, Sixth International Conference, St. Louis, MO, 4–7 August 1987. *Mathematical and computer modelling*, 11:457–463, 1988. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic).
- [Ing89a] L. Ingber. Mathematical comparison of computer models to exercise data. In *1989 JDL C2 Symposium: National Defense University, Washington, DC, 27–29 June 1989*, pages 169–192. SAIC, McLean, VA, 1989. ISBN ??? LCCN ???
- [Ing89b] L. Ingber. Mathematical comparison of computer models to exercise data. In T. K. Gardener, editor, *Symposium on Data Efficiency Using Pre-Processing*, pages 72–115. TKG Consultants, Vienna, VA, 1989.

**Ingber:1986:SMN**

[Ing88c]

**Ingber:1988:MNC****Ingber:1987:CDA**

[Ing88d]

**Ingber:1988:SMM****Ingber:1987:MCR****Ingber:1989:MCCa****Ingber:1988:ABI**

[Ing89a]

**Ingber:1989:MCCb****Ingber:1988:MCC**

[Ing89b]

**Ingber:1989:MCJ**

- [Ing89c] L. Ingber. Mathematical comparison of JANUS(T) simulation to national training center. In Johnson and Levis [JL89], pages 165–176. ISBN 0-916159-18-3. LCCN B212.C64 1988.

**Ingber:1989:VFS**

- [Ing89d] L. Ingber. Very fast simulated re-annealing. *Mathematical and computer modelling*, 12(8):967–973, 1989. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/asa89\\_vfsr.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/asa89_vfsr.ps.Z).

**Ingber:1990:SMA**

- [Ing90] L. Ingber. Statistical mechanical aids to calculating term structure models. *Phys. Rev. A*, 42(12):7057–7064, 1990. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/markets90\\_interest.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/markets90_interest.ps.Z).

**Ingber:1991:SMM**

- [Ing91a] L. Ingber. Statistical mechanical measures of performance of combat. In Pace [Pac91], pages 940–945. ISBN 0-911801-91-X. LCCN QA76 .S82 1991.

**Ingber:1991:SMN**

- [Ing91b] L. Ingber. Statistical mechanics of neocortical interactions: A scaling paradigm applied to electroencephalography. *Phys. Rev.*

*A*, 44(6):4017–4060, 1991. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni91\\_eeg.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni91_eeg.ps.Z).

**Ingber:1992:GMN**

- [Ing92a] L. Ingber. Generic mesoscopic neural networks based on statistical mechanics of neocortical interactions. *Phys. Rev. A*, 45(4):R2183–R2186, 1992. CODEN PLRAAN. ISSN 1050-2947 (print), 1094-1622, 1538-4446, 1538-4519. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni92\\_mnn.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni92_mnn.ps.Z).

**Ingber:1992:GAS**

- [Ing92b] L. Ingber. GNU aids small science in a big way. *GNU's Bulletin*, 1(12):9–10, 1992. CODEN ????. ISSN ????

**Ingber:1993:ASA**

- [Ing93a] L. Ingber. Adaptive simulated annealing (ASA). Technical report, Lester Ingber Research, McLean, VA, USA, 1993. URL [ASA-shar.Z](#); [ASA.tar.gz](#); [ASA.tar.Z](#); [ASA.zip](#); <ftp://ftp.alumni.caltech.edu/pub/ingber/ASA-shar>.

**Ingber:1993:SAP**

- [Ing93b] L. Ingber. Simulated annealing: Practice versus theory. *Mathematical and computer modelling*, 18(11):29–57, 1993. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL <ftp://ftp.alumni.caltech.edu/pub/ingber/sap.ps.Z>.

- ftp.alumni.caltech.edu/pub/ingber/asa93\_sapvt.ps.Z.
- [Ing93c] L. Ingber. Statistical mechanics of combat and extensions. In C. Jones, editor, *Toward a Science of Command, Control, and Communications*, pages 117–149. American Institute of Aeronautics and Astronautics, Washington, D.C., 1993. ISBN 1-56347-068-3. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/combata93\\_c3sci.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/combata93_c3sci.ps.Z); [http://www.ingber.com/combata93\\_c3sci.pdf](http://www.ingber.com/combata93_c3sci.pdf).
- [Ing94] L. Ingber. Statistical mechanics of neocortical interactions: Path-integral evolution of short-term memory. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 49(5B):4652–4664, 1994. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni94\\_stm.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni94_stm.ps.Z).
- [Ing95a] L. Ingber. Multiple scales of brain-mind interaction: Commentary on images of mind by M. I. Posner and M. E. Raichle. *Behavioral and brain sciences*, 18(2):360–362, 1995. CODEN BBSCDH. ISSN 1469-1825, 0140-525X. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni95\\_images.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni95_images.ps.Z).
- [Ing95b] L. Ingber. Path-integral calculation of multivariate Fokker–Planck systems. *Mathematical and computer modelling*, 21(11):61–67, 1995. CODEN MC-MOEG. ISSN 0895-7177 (print), 1872-9479 (electronic).
- [Ing95c] L. Ingber. Path-integral evolution of multivariate systems with moderate noise. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 51(2):1616–1619, 1995. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/path95\\_nonl.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/path95_nonl.ps.Z).
- [Ing95d] L. Ingber. Statistical mechanics of multiple scales of neocortical interactions. In Nunez [Nun95], pages 628–681. ISBN 0-19-505728-7. LCCN QP383.12 .N46 1995; WL307 N35 1995; WL 307 N438 1995. URL [http://www.ingber.com/smni95\\_scales.pdf](http://www.ingber.com/smni95_scales.pdf). With contributions by Brian A. Cuttillo et al.
- [Ing95e] L. Ingber. Statistical mechanics of neocortical interactions: Constraints on 40 Hz models of short-term memory. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 1995. CODEN PLEEE8.

ISSN 1539-3755 (print), 1550-2376 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni95\\_stm40hz.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni95_stm40hz.ps.Z). (to be published).

**Ingber:1995:SMNc**

[Ing95f] L. Ingber. Statistical mechanics of neocortical interactions: Multiple scales of EEG. *Electroencephalography and clinical neurophysiology: an international journal*, 1995. ISSN ????. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni95\\_eeg.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni95_eeg.ps.Z). (to be published).

**Ingber:1995:SMNa**

[Ing95g] L. Ingber. Statistical mechanics of neocortical interactions (SMNI). Technical report, Lester Ingber Research, McLean, VA, USA, 1995. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/smni95\\_lecture.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/smni95_lecture.ps.Z).

**Ingber:1995:SMNd**

[Ing95h] L. Ingber. Statistical mechanics of nonlinear nonequilibrium financial markets: Applications to optimized trading. *Mathematical and computer modelling*, 1995. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/markets95\\_trading.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/markets95_trading.ps.Z). (to be published).

**Ingber:1996:ASA**

[Ing96a] L. Ingber. Adaptive simulated annealing (ASA): Lessons

learned. *Control and cybernetics*, 25(1):33–54, 1996. CODEN CCYBAP. ISSN 0324-8569. URL [ftp://ftp.alumni.caltech.edu/pub/ingber/asa95\\_lessons.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/asa95_lessons.ps.Z); [http://www.ingber.com/asa96\\_lessons.pdf](http://www.ingber.com/asa96_lessons.pdf).

**Ingber:1996:CMI**

[Ing96b] L. Ingber. Canonical momenta indicators of financial markets and neocortical EEG. In ichi Amari et al. [iAXC<sup>+</sup>96], pages 777–784. ISBN 981-3083-05-0 (set), 981-3083-03-4 (softcover: vol. 1), 981-3083-04-2 (softcover: vol. 2). LCCN QA76.87. .I573 1996. URL [http://www.ingber.com/markets96\\_momenta.pdf](http://www.ingber.com/markets96_momenta.pdf). Two volumes.

**Ingber:1996:NNN**

[Ing96c] L. Ingber. Nonlinear nonequilibrium nonquantum nonchaotic statistical mechanics of neocortical interactions. *Behavioral and brain sciences*, 19(2):300–301, 1996. CODEN BBSCDH. ISSN 0140-525X (print), 1469-1825 (electronic). URL [http://www.ingber.com/smni96\\_nonlinear.pdf](http://www.ingber.com/smni96_nonlinear.pdf).

**Ingber:1996:SMNa**

[Ing96d] L. Ingber. Statistical mechanics of neocortical interactions: Multiple scales of EEG. In Dasheiff and Vincent [DV96], pages 79–112. ISBN 0-444-82429-4. ISSN 0424-8155. LCCN QP376.5.C67 1996. URL [http://www.ingber.com/smni96\\_eeg.pdf](http://www.ingber.com/smni96_eeg.pdf). Invited talk to Frontier Science in EEG

Symposium, New Orleans, 9 Oct 1993.

**Ingber:1996:SMNb**

- [Ing96e] L. Ingber. Statistical mechanics of nonlinear nonequilibrium financial markets: Applications to optimized trading. *Mathematical and computer modelling*, 23(7):101–121, 1996. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [http://www.ingber.com/markets96\\_trading.pdf](http://www.ingber.com/markets96_trading.pdf).

**Ingber:1996:TMC**

- [Ing96f] L. Ingber. Trading markets with canonical momenta and adaptive simulated annealing. Technical report, Lester Ingber Research, McLean, VA, USA, 1996. URL [http://www.ingber.com/markets96\\_brief.pdf](http://www.ingber.com/markets96_brief.pdf).

**Ingber:1997:SMNb**

- [Ing97a] L. Ingber. Statistical mechanics of neocortical interactions: Applications of canonical momenta indicators to electroencephalography. *Physical Review E (Statistical physics, plasmas, fluids, and related interdisciplinary topics)*, 55(4):4578–4593, 1997. CODEN PLEEE8. ISSN 1539-3755 (print), 1550-2376 (electronic). URL [http://www.ingber.com/smni97\\_cmi.pdf](http://www.ingber.com/smni97_cmi.pdf).

**Ingber:1997:SMNa**

- [Ing97b] L. Ingber. Statistical mechanics of neocortical interactions (SMNI). Technical report, Lester Ingber Research, Chicago, IL,

USA, 1997. URL [http://www.ingber.com/smni97\\_lecture.pdf](http://www.ingber.com/smni97_lecture.pdf).

**Ingber:1998:DMK**

- [Ing98a] L. Ingber. Data mining and knowledge discovery via statistical mechanics in nonlinear stochastic systems. *Mathematical and computer modelling*, 27(3):9–31, 1998. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [http://www.ingber.com/path98\\_datamining.pdf](http://www.ingber.com/path98_datamining.pdf).

**Ingber:1998:SAS**

- [Ing98b] L. Ingber. Some applications of statistical mechanics of financial markets. Technical report, Lester Ingber Research, Chicago, IL, USA, 1998. URL [http://www.ingber.com/markets98\\_smfm\\_appl.pdf](http://www.ingber.com/markets98_smfm_appl.pdf).

**Ingber:1998:SMF**

- [Ing98c] L. Ingber. Statistical mechanics of financial markets (SMFM). Technical report, Lester Ingber Research, Chicago, IL, USA, 1998. URL [http://www.ingber.com/markets98\\_lecture.pdf](http://www.ingber.com/markets98_lecture.pdf).

**Ingber:1998:SMN**

- [Ing98d] L. Ingber. Statistical mechanics of neocortical interactions: Training and testing canonical momenta indicators of EEG. *Mathematical and computer modelling*, 27(3):33–64, 1998. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic).



URL [http://www.ingber.com/smni98\\_cmi\\_test.pdf](http://www.ingber.com/smni98_cmi_test.pdf).

**Ingber:1999:SOT**

- [Ing99a] L. Ingber. A simple options training model. *Mathematical and computer modelling*, 30 (5-6):167–182, 1999. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [http://www.ingber.com/markets99\\_spread.pdf](http://www.ingber.com/markets99_spread.pdf).

**Ingber:1999:SMN**

- [Ing99b] L. Ingber. Statistical mechanics of neocortical interactions: Reaction time correlates of the  $g$  factor. *Psychology*, 10(068), 1999. CODEN ???? ISSN ???? URL [http://www.ingber.com/smni99\\_g\\_factor.pdf](http://www.ingber.com/smni99_g_factor.pdf).

**Ingber:2000:KNK**

- [Ing00a] L. Ingber. Keri no kata. *Shotokan Research Society International (SRSI)*, 1(4), 2000. CODEN ???? ISSN ???? URL [http://www.ingber.com/karate00\\_keri\\_no\\_kata.html](http://www.ingber.com/karate00_keri_no_kata.html).

**Ingber:2000:SMNa**

- [Ing00b] L. Ingber. Statistical mechanics of neocortical interactions: EEG correlates of reaction times. In *Digest of papers of the 2000 World Congress on Medical Physics and Biomedical Engineering and the proceedings of the 22nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society: July 23–28, 2000, Chicago's Navy Pier*. World Congress on

Medical Physics and Biomedical Engineering, Chicago, IL, USA, 2000. ISBN ???? LCCN ???? URL [http://www.ingber.com/smni00\\_eeg\\_rt.pdf](http://www.ingber.com/smni00_eeg_rt.pdf).

**Ingber:2000:SMNb**

- [Ing00c] L. Ingber. Statistical mechanics of neocortical interactions: EEG eigenfunctions of short-term memory. *Behavioral and brain sciences*, 23(3):403–405, 2000. CODEN BBSCDH. ISSN 0140-525X (print), 1469-1825 (electronic).

**Ingber:2000:HRP**

- [Ing00d] Lester Ingber. High-resolution path-integral development of financial options. *Physica A*, 283(3–4):529–558, 2000. CODEN PHYADX. ISSN 0378-4371 (print), 1873-2119 (electronic). URL [http://www.ingber.com/markets00\\_highres.pdf](http://www.ingber.com/markets00_highres.pdf).

**Ingber:2001:ASA**

- [Ing01a] L. Ingber. Adaptive simulated annealing (ASA) and path-integral (PATHINT) algorithms: Generic tools for complex systems. Technical report, Lester Ingber Research, Chicago, IL, USA, 2001. URL [http://www.ingber.com/asa01\\_lecture.html](http://www.ingber.com/asa01_lecture.html); [http://www.ingber.com/asa01\\_lecture.pdf](http://www.ingber.com/asa01_lecture.pdf).

**Ingber:2001:SMC**

- [Ing01b] L. Ingber. Statistical mechanics of combat (SMC): Mathematical comparison of computer models

- to exercise data. Technical report, Lester Ingber Research, Chicago, IL, USA, 2001. URL [http://www.ingber.com/combat01\\_lecture.html](http://www.ingber.com/combat01_lecture.html); [http://www.ingber.com/combat01\\_lecture.pdf](http://www.ingber.com/combat01_lecture.pdf). [Ing16]
- [Ing01c] L. Ingber. Statistical mechanics of financial markets (SMFM): Applications to trading indicators and options. Technical report, Lester Ingber Research, Chicago, IL, USA, 2001. URL [http://www.ingber.com/markets01\\_lecture.html](http://www.ingber.com/markets01_lecture.html); [http://www.ingber.com/markets01\\_lecture.pdf](http://www.ingber.com/markets01_lecture.pdf). [IP70]
- [Ing01d] L. Ingber. Statistical mechanics of neocortical interactions (SMNI): Multiple scales of short-term memory and EEG phenomena. Technical report, Lester Ingber Research, Chicago, IL, USA, 2001. URL [http://www.ingber.com/smni01\\_lecture.html](http://www.ingber.com/smni01_lecture.html); [http://www.ingber.com/smni01\\_lecture.pdf](http://www.ingber.com/smni01_lecture.pdf). [IR92a]
- [Ing02] L. Ingber. Statistical mechanics of portfolios of options. Technical report, Lester Ingber Research, Chicago, IL, USA, 2002. URL [http://www.ingber.com/markets02\\_portfolio.pdf](http://www.ingber.com/markets02_portfolio.pdf). [IR92b]
- [Ing09] Lester Ingber. Statistical mechanics of neocortical interactions: portfolio of physiological indicators. *Open Cybernetics and Systemics Journal*, 3:13–26, 2009. ISSN 1874-110X. [Ingber:2016:SMN]
- Lester Ingber. Statistical mechanics of neocortical interactions: large-scale EEG influences on molecular processes. *Journal of Theoretical Biology*, 395:144–152, 2016. CODEN JT-BIAP. ISSN 0022-5193 (print), 1095-8541 (electronic). [Ingber:1970:NFN]
- L. Ingber and R. Potenza. Nuclear forces and nuclear energetics. *Phys. Rev. C*, 1:112–122, 1970. CODEN PRVCAN. ISSN 0556-2813, 1089-4918. [Ingber:1992:GAV]
- L. Ingber and B. Rosen. Genetic algorithms and very fast simulated reannealing: A comparison. *Mathematical and computer modelling*, 16(11):87–100, 1992. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/asa92\\_saga.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/asa92_saga.ps.Z). [Ingber:1992:VFS]
- L. Ingber and B. Rosen. Very fast simulated reannealing (VFSR). Technical report, University of Texas, San Antonio, TX, 1992. [Ingber:1993:GAV]
- L. Ingber and B. Rosen. Genetic algorithms and very fast simulated reannealing: A comparison.

- Operations research/management science*, 33(5):523, 1993. CODEN ????? ISSN 0030-3658, 0474-277X. [IW99]
- [IS91] L. Ingber and D. D. Sworder. Statistical mechanics of combat with human factors. *Mathematical and computer modelling*, 15(11):99–127, 1991. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). [Ingber:1991:SMC]
- [ISN95] L. Ingber, R. Srinivasan, and P. L. Nunez. Path-integral evolution of chaos embedded in noise: Duffing neocortical analog. *Mathematical and computer modelling*, 1995. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/path95\\_duffing.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/path95_duffing.ps.Z). (to be published). [Ingber:1995:PIEb] [IW00]
- [ISN96] L. Ingber, R. Srinivasan, and P. L. Nunez. Path-integral evolution of chaos embedded in noise: Duffing neocortical analog. *Mathematical and computer modelling*, 23(3):43–53, 1996. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [http://www.ingber.com/path96\\_duffing.pdf](http://www.ingber.com/path96_duffing.pdf). [Ingber:1996:PIE] [IWJB91]
- [IU87] L. Ingber and S. Upton. Stochastic model of combat. In Anonymous [Ano87], pages 59–63. ISBN ????? LCCN ????? [Ingber:1987:SMC] [JL89]
- [Ingber:1999:VVF] L. Ingber and J. K. Wilson. Volatility of volatility of financial markets. *Mathematical and computer modelling*, 29(5):39–57, 1999. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [http://www.ingber.com/markets99\\_vol.pdf](http://www.ingber.com/markets99_vol.pdf).
- [Ingber:2000:SMF] L. Ingber and J. K. Wilson. Statistical mechanics of financial markets: exponential modifications to Black–Scholes. *Mathematical and computer modelling*, 31(8–9):167–192, 2000. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [http://www.ingber.com/markets00\\_exp.pdf](http://www.ingber.com/markets00_exp.pdf).
- [Ingber:1991:ASM] L. Ingber, M. F. Wehner, G. M. Jabbour, and T. M. Barnhill. Application of statistical mechanics methodology to term-structure bond-pricing models. *Mathematical and computer modelling*, 15(11):77–98, 1991. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL [ftp://ftp.alumni.caltech.edu/pub/ingber/markets91\\_interest.ps.Z](ftp://ftp.alumni.caltech.edu/pub/ingber/markets91_interest.ps.Z).
- [Johnson:1989:SCC] Stuart E. Johnson and Alexander H. Levis, editors. *The Science of Command and Control*:

*Part II, Coping With Complexity*, volume 2 of *AIP information system series*. AFCEA International Press, Washington, DC, USA, 1989. ISBN 0-916159-18-3. LCCN B212.C64 1988.

**Jones:1993:TSC**

- [Jon93] Carl Jones, editor. *Toward a Science of Command, Control, and Communications*, volume 156 of *Progress in astronautics and aeronautics*. American Institute of Aeronautics and Astronautics, Washington, D.C., 1993. ISBN 1-56347-068-3. 284 pp. LCCN ????

**Nunez:2013:TEE**

- [NSI13] Paul L. Nunez, Ramesh Srinivasan, and Lester Ingber. Theoretical and experimental electrophysiology in human neocortex: multiscale dynamic correlates of conscious experience. In *Multiscale Analysis and Nonlinear Dynamics*, Rev. Nonlinear Dyn. Complex., pages 149–177. Wiley-VCH, Weinheim, Germany, 2013.

**Nunez:1995:NDH**

- [Nun95] Paul L. Nunez, editor. *Neocortical Dynamics and Human EEG Rhythms*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1995. ISBN 0-19-505728-7. xii + 708 pp. LCCN QP383.12 .N46 1995; WL307 N35 1995; WL 307 N438 1995. With contributions by Brian A. Cuttillo et al.

**Pace:1991:PSC**

- [Pac91] Dale Pace, editor. *Proceedings of the 1991 Summer Computer Simulation Conference: July 22–24, 1991, Hyatt Regency, Baltimore, Baltimore, Maryland*. Society for Computer Simulation, San Diego, CA, USA, 1991. ISBN 0-911801-91-X. LCCN QA76 .S82 1991.