Amos Maritan

List of Publications by Year
in descending order

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238 papers	14,550 citations	58 h-index	111 g-index
		23567	23533
243 all docs	243 docs citations	243 times ranked	13287 citing authors

#	Article	IF	Citations
1	Proteins â€" a celebration of consilience. International Journal of Modern Physics B, 2022, 36, .	2.0	4
2	Seeing the forest for the trees through metabolic scaling. , 2022, 1, .		2
3	Pairing statistics and melting of random DNA oligomers: Finding your partner in superdiverse environments. PLoS Computational Biology, 2022, 18, e1010051.	3.2	3
4	DNA sequence symmetries from randomness: the origin of the Chargaffâ€™s second parity rule. Briefings in Bioinformatics, 2021, 22, 2172-2181.	6.5	16
5	Local sequenceâ€structure relationships in proteins. Protein Science, 2021, 30, 818-829.	7.6	15
6	Building blocks of protein structures: Physics meets biology. Physical Review E, 2021, 104, 014402.	2.1	10
7	Upscaling human activity data: A statistical ecology approach. PLoS ONE, 2021, 16, e0253461.	2.5	1
8	Spontaneous dimensional reduction and ground state degeneracy in a simple chain model. Physical Review E, 2021, 104, L012101.	2.1	3
9	Marginally compact phase and ordered ground states in a model polymer with side spheres. Physical Review E, 2021, 104, L012501.	2.1	2
10	Scaling of joint mass and metabolism fluctuations in in silico cell-laden spheroids. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2025211118.	7.1	4
11	Constrained proteome allocation affects coexistence in models of competitive microbial communities. ISME Journal, 2021, 15, 1458-1477.	9.8	10
12	True scale-free networks hidden by finite size effects. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	40
13	Effective Resource Competition Model for Species Coexistence. Physical Review Letters, 2021, 127, 208101.	7.8	10
14	Optimal transport from a point-like source. Continuum Mechanics and Thermodynamics, 2020, 32, 1325-1335.	2.2	1
15	Dynamic metabolic adaptation can promote species coexistence in competitive microbial communities. PLoS Computational Biology, 2020, 16, e1007896.	3.2	60
16	Emergence of Network Motifs in Deep Neural Networks. Entropy, 2020, 22, 204.	2.2	6
17	Neutral and niche forces as drivers of species selection. Journal of Theoretical Biology, 2019, 483, 109969.	1.7	10
18	Inferring macroâ€ecological patterns from local presence/absence data. Oikos, 2019, 128, 1641-1652.	2.7	5

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19	Entropy production in master equations and Fokkerâ€“Planck equations: facing the coarse-graining and recovering the information loss. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 104013.	2.3	15
20	On the probabilistic nature of the species-area relation. Journal of Theoretical Biology, 2019, 462, 391-407.	1.7	4
21	Local symmetry determines the phases of linear chains: a simple model for the self-assembly of peptides. Soft Matter, 2019, 15, 5596-5613.	2.7	13
22	Reconciling cooperation, biodiversity and stability in complex ecological communities. Scientific Reports, 2019, 9, 5580.	3.3	19
23	Generalized size scaling of metabolic rates based on single-cell measurements with freshwater phytoplankton. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17323-17329.	7.1	16
24	The elixir phase of chain molecules. Proteins: Structure, Function and Bioinformatics, 2019, 87, 176-184.	2.6	11
25	Archetypes of human cognition defined by time preference for reward and their brain correlates: An evolutionary trade-off approach. NeuroImage, 2019, 185, 322-334.	4.2	15
26	River landscapes and optimal channel networks. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6548-6553.	7.1	32
27	Testing a general approach to assess the degree of disturbance in tropical forests. Journal of Vegetation Science, 2017, 28, 659-668.	2.2	11
28	Feasibility and coexistence of large ecological communities. Nature Communications, 2017, 8, .	12.8	115
29	Explorability and the origin of network sparsity in living systems. Scientific Reports, 2017, 7, 12323.	3.3	34
30	Upscaling species richness and abundances in tropical forests. Science Advances, 2017, 3, e1701438.	10.3	29
31	Covariations in ecological scaling laws fostered by community dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10672-10677.	7.1	25
32	Species coexistence in a neutral dynamics with environmental noise. Journal of Theoretical Biology, 2017, 413, 1-10.	1.7	42
33	Entropy production in systems with random transition rates close to equilibrium. Physical Review E, 2017, 96, 062110.	2.1	7
34	Generalized CNS arousal: An elementary force within the vertebrate nervous system. Neuroscience and Biobehavioral Reviews, 2016, 68, 167-176.	6.1	42
35	Application of optimal data-based binning method to spatial analysis of ecological datasets. Spatial Statistics, 2016, 16, 137-151.	1.9	7
36	New activity pattern in human interactive dynamics. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P09006.	2.3	4

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37	Resilience and reactivity of global food security. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6902-6907.	7.1	179
38	Sample and population exponents of generalized Taylorâ€™s law. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7755-7760.	7.1	64
39	Effect of localization on the stability of mutualistic ecological networks. Nature Communications, 2015, 6, 10179.	12.8	70
40	Towards a unified descriptive theory for spatial ecology: predicting biodiversity patterns across spatial scales. Methods in Ecology and Evolution, 2015, 6, 324-332.	5.2	57
41	Predicting the stability of large structured food webs. Nature Communications, 2015, 6, 7842.	12.8	108
42	Generalized receptor law governs phototaxis in the phytoplankton Euglena gracilis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7045-7050.	7.1	60
43	On entropy production in nonequilibrium systems. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P08014.	2.3	9
44	Coexistence in neutral theories: interplay of criticality and mild local preferences. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P01030.	2.3	6
45	Form, function, and evolution of living organisms. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3332-3337.	7.1	66
46	Evolution and selection of river networks: Statics, dynamics, and complexity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2417-2424.	7.1	143
47	Disentangling the effect of hybrid interactions and of the constant effort hypothesis on ecological community stability. Oikos, 2014, 123, 525-532.	2.7	56
48	Time to Absorption for a Heterogeneous Neutral Competition Model. Journal of Statistical Physics, 2014, 156, 119-130.	1.2	4
49	Diffusion of tagged particles in a crowded medium. Europhysics Letters, 2014, 107, 20006.	2.0	14
50	Information-based fitness and the emergence of criticality in living systems. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10095-10100.	7.1	145
51	Emergence of structural and dynamical properties of ecological mutualistic networks. Nature, 2013, 500, 449-452.	27.8	221
52	Flory theory for polymers. Journal of Physics Condensed Matter, 2013, 25, 503101.	1.8	57
53	Scaling body size fluctuations. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4646-4650.	7.1	77
54	Analysis of noise-induced bimodality in a Michaelisâ€“Menten single-step enzymatic cycle. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 336-342.	2.6	9

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55	An allometry-based approach for understanding forest structure, predicting tree-size distribution and assessing the degree of disturbance. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20122375.	2.6	35
56	From Cellular Characteristics to Disease Diagnosis: Uncovering Phenotypes with Supercells. PLoS Computational Biology, 2013, 9, e1003215.	3.2	34
57	Growth or reproduction: emergence of an evolutionary optimal strategy. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P10020.	2.3	3
58	Water-controlled wealth of nations. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4230-4233.	7.1	108
59	The effect of quenched disorder in neutral theories. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P04032.	2.3	19
60	Human Mobility in a Continuum Approach. PLoS ONE, 2013, 8, e60069.	2.5	67
61	An exactly solvable coarse-grained model for species diversity. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P07017.	2.3	4
62	Shapes of hydrophobic thick membranes. Europhysics Letters, 2012, 98, 56006.	2.0	0
63	Scale invariance in the dynamics of spontaneous behavior. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10564-10569.	7.1	100
64	Spatial aggregation and the speciesâ€“area relationship across scales. Journal of Theoretical Biology, 2012, 313, 87-97.	1.7	24
65	Absence of detailed balance in ecology. Europhysics Letters, 2012, 100, 38002.	2.0	7
66	Protein Sequence and Structure: Is One More Fundamental than the Other?. Journal of Statistical Physics, 2012, 148, 637-646.	1.2	4
67	A universal model for mobility and migration patterns. Nature, 2012, 484, 96-100.	27.8	1,027
68	On species persistence-time distributions. Journal of Theoretical Biology, 2012, 303, 15-24.	1.7	32
69	Inverse problem for multivariate time series using dynamical latent variables. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 3159-3169.	2.6	1
70	Spatial effects on species persistence and implications for biodiversity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4346-4351.	7.1	70
71	Self-similarity and scaling in forest communities. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7658-7662.	7.1	27
72	A general basis for quarter-power scaling in animals. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15816-15820.	7.1	171

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73	Exploring the Universe of Protein Structures beyond the Protein Data Bank. PLoS Computational Biology, 2010, 6, e1000957.	3.2	62
74	Simplified Exactly Solvable Model for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi></mml:math>-Amyloid Aggregation. Physical Review Letters, 2010, 105, 108102.	7.8	15
75	Predicting spatial similarity of freshwater fish biodiversity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7058-7062.	7.1	19
76	First-principles design of nanomachines. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6900-6903.	7.1	25
77	Towards a theory of biodiversity. Nature, 2009, 460, 334-335.	27.8	17
78	Inferring species interactions in tropical forests. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13854-13859.	7.1	103
79	Phase diagrams for DNA denaturation under stretching forces. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, L04001.	2.3	11
80	Microseconds Dynamics Simulations of the Outer-Membrane Protease T. Biophysical Journal, 2008, 94, 71-78.	0.5	43
81	Incipient criticality in ecological communities. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18714-18717.	7.1	13
82	Self-Templated Nucleation in Peptide and Protein Aggregation. Physical Review Letters, 2008, 101, 258101.	7.8	89
83	Aggregation of natively folded proteins: a theoretical approach. Journal of Physics Condensed Matter, 2007, 19, 285221.	1.8	5
84	Symmetry, shape, and order. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19187-19192.	7.1	14
85	Structural motifs of biomolecules. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 17283-17286.	7.1	31
86	Patterns of relative species abundance in rainforests and coral reefs. Nature, 2007, 450, 45-49.	27.8	244
87	The origami of life. Journal of Physics Condensed Matter, 2006, 18, 847-888.	1.8	13
88	What determines the spectrum of protein native state structures?. Proteins: Structure, Function and Bioinformatics, 2006, 63, 273-277.	2.6	7
89	Comparing models of species abundance (Reply). Nature, 2006, 441, E1-E2.	27.8	12
90	Dynamical evolution of ecosystems. Nature, 2006, 444, 926-928.	27.8	117

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91	Comment on â€œRevising the distributive networks models of West, Brown and Enquist (1997) and Banavar, Maritan and Rinaldo (1999): Metabolic inequity of living tissues provides clues for the observed allometric scaling rulesâ€•by Makarieva, Gorshkov and Li. Journal of Theoretical Biology, 2006, 239, 391-393.	1.7	7
92	Partially folded states of HIV-1 protease: Molecular dynamics simulations and ligand binding. Computational and Theoretical Chemistry, 2006, 769, 111-121.	1.5	6
93	A Novel Ensemble in Statistical Physics. Journal of Statistical Physics, 2006, 123, 167-180.	1.2	3
94	Linear One-Step Processes with Artificial Boundaries. Journal of Statistical Physics, 2006, 125, 491-511.	1.2	2
95	Marginal compactness of protein native structures. Journal of Physics Condensed Matter, 2006, 18, S297-S306.	1.8	6
96	Insight into the Structure of Amyloid Fibrils from the Analysis of Globular Proteins. PLoS Computational Biology, 2006, 2, e170.	3.2	180
97	A backbone-based theory of protein folding. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16623-16633.	7.1	433
98	Common attributes of native-state structures of proteins, disordered proteins, and amyloid. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6883-6888.	7.1	48
99	Using the principle of entropy maximization to infer genetic interaction networks from gene expression patterns. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19033-19038.	7.1	209
100	Non-Neutral Vegetation Dynamics. PLoS ONE, 2006, 1, e78.	2.5	16
101	Characterization and modeling of proteinâ€“protein interaction networks. Physica A: Statistical Mechanics and Its Applications, 2005, 352, 1-27.	2.6	68
102	Geometrical model for the native-state folds of proteins. Biophysical Chemistry, 2005, 115, 289-294.	2.8	7
103	Density dependence explains tree species abundance and diversity in tropical forests. Nature, 2005, 438, 658-661.	27.8	287
104	A new interpolation formula for semiflexible polymers. Biophysical Chemistry, 2005, 115, 251-254.	2.8	19
105	Physics of thick polymers. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 650-679.	2.1	21
106	What determines the structures of native folds of proteins?. Journal of Physics Condensed Matter, 2005, 17, S1515-S1522.	1.8	5
107	Pretransitional behavior of a water in liquid crystal microemulsion close to the demixing transition: Evidence for intermicellar attraction mediated by paranematic fluctuations. Journal of Chemical Physics, 2005, 122, 214721.	3.0	18
108	Coarse-Grained Model of Proteins Incorporating Atomistic Detail of the Active Site. Physical Review Letters, 2005, 95, 218102.	7.8	157

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109	Species lifetime distribution for simple models of ecologies. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15747-15751.	7.1	66
110	Proteins and polymers. Journal of Chemical Physics, 2005, 122, 234910.	3.0	15
111	Lattice Tube Model of Proteins. Physical Review Letters, 2004, 93, 238101.	7.8	24
112	Organization of Ecosystems in the Vicinity of a Novel Phase Transition. Physical Review Letters, 2004, 92, 218703.	7.8	16
113	Network Structures from Selection Principles. Physical Review Letters, 2004, 92, 198701.	7.8	62
114	Unified perspective on proteins: A physics approach. Physical Review E, 2004, 70, 041905.	2.1	61
115	Geometry and symmetry presculpt the free-energy landscape of proteins. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7960-7964.	7.1	203
116	Accurate and efficient description of protein vibrational dynamics: Comparing molecular dynamics and Gaussian models. Proteins: Structure, Function and Bioinformatics, 2004, 55, 635-645.	2.6	160
117	Recognition of coarse-grained protein tertiary structure. Proteins: Structure, Function and Bioinformatics, 2004, 55, 536-547.	2.6	2
118	On network form and function. Physica A: Statistical Mechanics and Its Applications, 2004, 340, 749-755.	2.6	6
119	What can one learn from experiments about the elusive transition state?. Protein Science, 2004, 13, 2446-2457.	7.6	24
120	Simulations of Action of DNA Topoisomerases to Investigate Boundaries and Shapes of Spaces of Knots. Biophysical Journal, 2004, 87, 2968-2975.	0.5	48
121	Coarse grained models: the kinetics of motor proteins. Computational Materials Science, 2004, 30, 172-179.	3.0	2
122	Self-Interactions of Strands and Sheets. Journal of Statistical Physics, 2003, 110, 35-50.	1.2	45
123	A comment on the protein folds as platonic forms. Journal of Theoretical Biology, 2003, 223, 263-265.	1.7	3
124	Assembly of protein tertiary structures from secondary structures using optimized potentials. Proteins: Structure, Function and Bioinformatics, 2003, 52, 155-165.	2.6	13
125	Elucidation of the disulfide-folding pathway of hirudin by a topology-based approach. Proteins: Structure, Function and Bioinformatics, 2003, 53, 720-730.	2.6	5
126	Neutral theory and relative species abundance in ecology. Nature, 2003, 424, 1035-1037.	27.8	672

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127	Allometric cascades. Nature, 2003, 421, 713-714.	27.8	64
128	Global protein function prediction from protein-protein interaction networks. Nature Biotechnology, 2003, 21, 697-700.	17.5	611
129	Elasticity of Semiflexible Polymers with and without Self-Interactions. Macromolecules, 2003, 36, 10095-10102.	4.8	40
130	Colloquium: Geometrical approach to protein folding: a tube picture. Reviews of Modern Physics, 2003, 75, 23-34.	45.6	86
131	Modeling of Protein Interaction Networks. Complexus, 2003, 1, 38-44.	0.6	392
132	Tubes near the edge of compactness and folded protein structures *. Journal of Physics Condensed Matter, 2003, 15, S1787-S1796.	1.8	8
133	Geometry of Compact Tubes and Protein Structures. Complexus, 2003, 1, 4-13.	0.6	22
134	Force dependent transition rates in chemical kinetics models for motor proteins. Journal of Chemical Physics, 2002, 117, 10339-10349.	3.0	12
135	Supply-demand balance and metabolic scaling. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10506-10509.	7.1	201
136	Multiple Steering Molecular Dynamics Applied to Water Exchange at Alkali Ions. Journal of Physical Chemistry B, 2002, 106, 13027-13032.	2.6	15
137	The intracellular antibody capture technology (IACT): towards a consensus sequence for intracellular antibodies. Journal of Molecular Biology, 2002, 317, 73-83.	4.2	130
138	Energy landscape and native-state structure of proteinsâ€"A simplified model. Europhysics Letters, 2002, 58, 623-629.	2.0	29
139	Elastic Properties of Proteins: Insight on the Folding Process and Evolutionary Selection of Native Structures. Journal of Molecular Biology, 2002, 321, 909-921.	4.2	59
140	Folding Pathways of Prion and Doppel. Biophysical Journal, 2002, 83, 3533-3541.	0.5	40
141	Network allometry. Geophysical Research Letters, 2002, 29, 3-1.	4.0	107
142	Geometry and physics of proteins. Proteins: Structure, Function and Bioinformatics, 2002, 47, 315-322.	2.6	69
143	Prediction of protein secondary structures from conformational biases. Proteins: Structure, Function and Bioinformatics, 2002, 48, 558-565.	2.6	5
144	Anisotropic effective interactions in a coarse-grained tube picture of proteins. Proteins: Structure, Function and Bioinformatics, 2002, 49, 246-254.	2.6	9

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145	A knowledge-based scale for amino acid membrane propensity. Proteins: Structure, Function and Bioinformatics, 2002, 50, 114-121.	2.6	27
146	The science of life. Computer Physics Communications, 2002, 146, 129-130.	7.5	0
147	Crucial stages of protein folding through a solvable model: Predicting target sites for enzyme-inhibiting drugs. Protein Science, 2002, 11, 1878-1887.	7.6	16
148	Role of Native-State Topology in the Stabilization of Intracellular Antibodies. Biophysical Journal, 2001, 81, 2935-2945.	0.5	10
149	A Self-Consistent Knowledge-Based Approach to Protein Design. Biophysical Journal, 2001, 80, 480-490.	0.5	19
150	An optimal procedure to extract interaction potentials for protein folding. Computational Materials Science, 2001, 20, 305-310.	3.0	6
151	Molecular dynamics studies on HIV-1 protease: Drug resistance and folding pathways. Proteins: Structure, Function and Bioinformatics, 2001, 43, 365-372.	2.6	35
152	Learning effective amino acid interactions through iterative stochastic techniques. Proteins: Structure, Function and Bioinformatics, 2001, 42, 422-431.	2.6	51
153	Computational approach to the protein-folding problem. Proteins: Structure, Function and Bioinformatics, 2001, 42, 433-435.	2.6	22
154	Scaling, Optimality, and Landscape Evolution. Journal of Statistical Physics, 2001, 104, 1-48.	1.2	92
155	Protein threading by learning. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 14350-14355.	7.1	28
156	Dynamic modeling of gene expression data. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 1693-1698.	7.1	274
157	Field-induced anti-nematic ordering in assemblies of anisotropically polarizable particles. Europhysics Letters, 2001, 55, 362-368.	2.0	6
158	Amino acid classes and the protein folding problem. Journal of Chemical Physics, 2001, 114, 1420-1423.	3.0	28
159	Force Dependence of the Michaelis Constant in a Two-State Ratchet Model for Molecular Motors. Physical Review Letters, 2001, 86, 1134-1137.	7.8	23
160	Computational approach to the protein-folding problem. Proteins: Structure, Function and Bioinformatics, 2001, 42, 433.	2.6	3
161	Recurrent oligomers in proteins: An optimal scheme reconciling accurate and concise backbone representations in automated folding and design studies. Proteins: Structure, Function and Bioinformatics, 2000, 40, 662-674.	2.6	72
162	Optimal shapes of compact strings. Nature, 2000, 406, 287-290.	27.8	270

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163	reply: Rivers, blood and transportation networks. Nature, 2000, 408, 160-160.	27.8	11
164	Fundamental patterns underlying gene expression profiles: Simplicity from complexity. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 8409-8414.	7.1	433
165	Deciphering the folding kinetics of transmembrane helical proteins. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 14229-14234.	7.1	12
166	A novel iterative strategy for protein design. Journal of Chemical Physics, 2000, 112, 2050-2055.	3.0	12
167	Topology of the Fittest Transportation Network. Physical Review Letters, 2000, 84, 4745-4748.	7.8	117
168	Role of Secondary Motifs in Fast Folding Polymers: A Dynamical Variational Principle. Physical Review Letters, 2000, 84, 3009-3012.	7.8	32
169	Extraction of interaction potentials between amino acids from native protein structures. Journal of Chemical Physics, 2000, 112, 9151-9166.	3.0	32
170	Scaling behavior in a nonlocal and nonlinear diffusion equation. Physical Review E, 2000, 62, R5879-R5882.	2.1	5
171	Compactness, aggregation, and prionlike behavior of protein: A lattice model study. Journal of Chemical Physics, 2000, 113, 5072.	3.0	39
172	Scoring functions in protein folding and design. Protein Science, 2000, 9, 812-819.	7.6	18
173	Finite Size Scaling in Ecology. Physical Review Letters, 1999, 83, 4212-4214.	7.8	34
174	Depletion forces in hard-sphere colloids. Physical Review E, 1999, 59, R1339-R1342.	2.1	14
175	Protein Structures and Optimal Folding from a Geometrical Variational Principle. Physical Review Letters, 1999, 82, 3372-3375.	7.8	124
176	A comparative study of existing and new design techniques for protein models. Journal of Chemical Physics, 1999, 110, 9730-9738.	3.0	17
177	Optimal paths and growth processes. Physica A: Statistical Mechanics and Its Applications, 1999, 266, 291-298.	2.6	4
178	Size and form in efficient transportation networks. Nature, 1999, 399, 130-132.	27.8	713
179	Strategies for protein folding and design. Annals of Combinatorics, 1999, 3, 431-450.	0.6	8
180	Folding Lennard-Jones proteins by a contact potential. , 1999, 37, 544-553.		20

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181	Determination of interaction potentials of amino acids from native protein structures: Tests on simple lattice models. Journal of Chemical Physics, 1999, 110, 10123-10133.	3.0	29
182	Models of Fractal River Basins. Journal of Statistical Physics, 1998, 91, 1-15.	1.2	54
183	Interaction potentials for protein folding. , 1998, 30, 244-248.		34
184	Structure-based design of model proteins. , 1998, 31, 10-20.		8
185	Scale Invariant Correlations in a Driven Dissipative Gas. Physical Review Letters, 1998, 80, 4410-4413.	7.8	28
186	Folding, Design, and Determination of Interaction Potentials Using Off-Lattice Dynamics of Model Heteropolymers. Physical Review Letters, 1998, 81, 3287-3290.	7.8	50
187	Variational Approach to Protein Design and Extraction of Interaction Potentials. Physical Review Letters, 1998, 81, 2172-2175.	7.8	35
188	Bethe approximation for a semiflexible polymer chain. Physical Review E, 1998, 58, R5241-R5244.	2.1	28
189	Steric Constraints in Model Proteins. Physical Review Letters, 1998, 80, 5683-5686.	7.8	25
190	Protein Design in a Lattice Model of Hydrophobic and Polar Amino Acids. Physical Review Letters, 1998, 80, 2237-2240.	7.8	41
191	Impurity solvation in a liquid. Journal of Chemical Physics, 1998, 108, 2104-2110.	3.0	0
192	Randomly pinned landscape evolution. Physical Review E, 1997, 55, R4865-R4868.	2.1	50
193	Sculpting of a Fractal River Basin. Physical Review Letters, 1997, 78, 4522-4525.	7.8	78
194	sMean-field theory of sandpiles. Physical Review E, 1997, 55, 1998-2000.	2.1	9
195	Scaling Relationships in Agglomeration and Annihilation Models. Physical Review Letters, 1997, 79, 3278-3281.	7.8	7
196	Stability Threshold as a Selection Principle for Protein Design. Physical Review Letters, 1997, 78, 3967-3970.	7.8	32
197	Adhesion of solids. Physical Review E, 1997, 56, 2626-2634.	2.1	31
198	On Hack's Law. Water Resources Research, 1996, 32, 3367-3374.	4.2	202

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199	Optimal path and directed percolation. Physical Review E, 1996, 53, R2029-R2032.	2.1	5
200	Continuum model for the growth of interfaces. Physical Review E, 1996, 53, 759-778.	2.1	33
201	Scaling laws for river networks. Physical Review E, 1996, 53, 1510-1515.	2.1	208
202	Stochastic growth equations and reparametrization invariance. Reviews of Modern Physics, 1996, 68, 963-983.	45.6	133
203	Interfacial Roughening Induced by Phase Separation. Physical Review Letters, 1996, 76, 1106-1109.	7.8	35
204	Optimal Protein Design Procedure. Physical Review Letters, 1996, 77, 1901-1904.	7.8	87
205	Thermodynamics of Fractal Networks. Physical Review Letters, 1996, 76, 3364-3367.	7.8	89
206	Scaling Properties of Suboptimal Interfaces. Physical Review Letters, 1996, 77, 5288-5291.	7.8	8
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