## Sergey V Buldyrev

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3836047/publications.pdf

Version: 2024-02-01

224 papers

26,014 citations

68 h-index 157

227 all docs

227 docs citations

times ranked

227

14487 citing authors

g-index

#	Article	IF	CITATIONS
1	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM., 2022, , 269-293.		O
2	Cascading failures in isotropic and anisotropic spatial networks induced by localized attacks and overloads. New Journal of Physics, 2022, 24, 043045.	2.9	5
3	Modeling fluid polyamorphism through a maximum-valence approach. Physical Review E, 2022, 106, .	2.1	3
4	Efficient network immunization under limited knowledge. National Science Review, 2021, 8, nwaa229.	9.5	26
5	Systemic stress test model for shared portfolio networks. Scientific Reports, 2021, 11, 3358.	3.3	7
6	Diffusion interactions between crossing fibers of the brain. Magnetic Resonance in Medicine, 2021, 86, 429-441.	3.0	0
7	Market instability and the size-variance relationship. Scientific Reports, 2021, 11, 5737.	3.3	3
8	How Small Is Too Small for the Capillarity Theory?. Journal of Physical Chemistry C, 2021, 125, 5335-5348.	3.1	4
9	Distribution of blackouts in the power grid and the Motter and Lai model. Physical Review E, 2021, 103, 032309.	2.1	9
10	Phase amplification in spinodal decomposition of immiscible fluids with interconversion of species. Physical Review E, 2021, 103, L060101.	2.1	9
11	Cascading failures in anisotropic interdependent networks of spatial modular structures. New Journal of Physics, 2021, 23, 113001.	2.9	7
12	Energy Stored in Nanoscale Water Capillary Bridges between Patchy Surfaces. Langmuir, 2020, 36, 7246-7251.	3.5	5
13	Cascading failures in complex networks. Journal of Complex Networks, 2020, 8, .	1.8	26
14	Faster calculation of the percolation correlation length on spatial networks. Physical Review E, 2020, 101, 013306.	2.1	4
15	Reversible bootstrap percolation: Fake news and fact checking. Physical Review E, 2020, 101, 042307.	2.1	8
16	Energy stored in nanoscale water capillary bridges formed between chemically heterogeneous surfaces with circular patches. Chinese Physics B, 2020, 29, 114703.	1.4	3
17	Spreading of localized attacks on spatial multiplex networks with a community structure. Physical Review Research, 2020, 2, .	3.6	8
18	Insights into bootstrap percolation: Its equivalence with k-core percolation and the giant component. Physical Review E, 2019, 99, 022311.	2.1	10

#	Article	IF	Citations
19	Validation of Capillarity Theory at the Nanometer Scale. II: Stability and Rupture of Water Capillary Bridges in Contact with Hydrophobic and Hydrophilic Surfaces. Journal of Physical Chemistry C, 2018, 122, 1556-1569.	3.1	8
20	A study of cascading failures in real and synthetic power grid topologies. Network Science, 2018, 6, 448-468.	1.0	8
21	Network overload due to massive attacks. Physical Review E, 2018, 97, 052309.	2.1	18
22	On Economic Complexity and the Fitness of Nations. Scientific Reports, 2017, 7, 15332.	3.3	44
23	The phase behavior study of human antibody solution using multi-scale modeling. Journal of Chemical Physics, 2016, 145, 194901.	3.0	14
24	A statistical physics implementation of Coase $\times$ 3s theory of the firm. Research in Economics, 2016, 70, 536-557.	0.8	7
25	Interdependent lattice networks in high dimensions. Physical Review E, 2016, 94, 052306.	2.1	16
26	Validation of Capillarity Theory at the Nanometer Scale by Atomistic Computer Simulations of Water Droplets and Bridges in Contact with Hydrophobic and Hydrophilic Surfaces. Journal of Physical Chemistry C, 2016, 120, 1597-1608.	3.1	24
27	Energy landscape in protein folding and unfolding. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3159-3163.	7.1	98
28	The Italian primary school-size distribution and the city-size: a complex nexus. Scientific Reports, 2015, 4, 5301.	3.3	4
29	Optimization of crystal nucleation close to a metastable fluid-fluid phase transition. Scientific Reports, 2015, 5, 11260.	3.3	21
30	Diffusivity and short-time dynamics in two models of silica. Journal of Chemical Physics, 2015, 142, 104506.	3.0	18
31	Increasing Accuracy: A New Design and Algorithm for Automatically Measuring Weights, Travel Direction and Radio Frequency Identification (RFID) of Penguins. PLoS ONE, 2015, 10, e0126292.	2.5	4
32	Crystallization of lysozyme with $(\langle i\rangle R\langle i\rangle)$ -, $(\langle i\rangle S\langle i\rangle)$ - and $(\langle i\rangle RS\langle i\rangle)$ -2-methyl-2,4-pentanediol. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 427-441.	2.5	3
33	Physics of the Jagla model as the liquid-liquid coexistence line slope varies. Journal of Chemical Physics, 2015, 142, 224501.	3.0	19
34	Two types of dynamic crossovers in a network-forming liquid with tetrahedral symmetry. Journal of Non-Crystalline Solids, 2015, 407, 392-398.	3.1	4
35	Network of Interdependent Networks: Overview of Theory and Applications. Understanding Complex Systems, 2014, , 3-36.	0.6	33
36	Search for a liquid-liquid critical point in models of silica. Journal of Chemical Physics, 2014, 140, 224502.	3.0	61

#	Article	IF	CITATIONS
37	Cascading failures in networks with proximate dependent nodes. Physical Review E, 2014, 89, 032808.	2.1	29
38	Behavior of the Widom Line in Critical Phenomena. Physical Review Letters, 2014, 112, 135701.	7.8	51
39	Spontaneous recovery in dynamical networks. Nature Physics, 2014, 10, 34-38.	16.7	251
40	Inverse melting in a two-dimensional off-lattice model. Journal of Chemical Physics, 2014, 140, 144505.	3.0	7
41	The extreme vulnerability of interdependent spatially embedded networks. Nature Physics, 2013, 9, 667-672.	16.7	253
42	Crackling sound generation during the formation of liquid bridges: A lattice gas model. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 3409-3416.	2.6	11
43	Temperature and length scale dependence of solvophobic solvation in a single-site water-like liquid. Journal of Chemical Physics, 2013, 138, 064506.	3.0	15
44	The robustness of interdependent clustered networks. Europhysics Letters, 2013, 101, 18002.	2.0	97
45	Percolation of a general network of networks. Physical Review E, 2013, 88, 062816.	2.1	103
46	A Coarse-Grained Protein Model in a Water-like Solvent. Scientific Reports, 2013, 3, 1841.	3.3	12
47	Potential of mean force between hydrophobic solutes in the Jagla model of water and implications for cold denaturation of proteins. Journal of Chemical Physics, 2012, 136, 044512.	3.0	14
48	Modeling simple amphiphilic solutes in a Jagla solvent. Journal of Chemical Physics, 2012, 136, 044511.	3.0	18
49	Cascading Failures in Interdependent Lattice Networks: The Critical Role of the Length of Dependency Links. Physical Review Letters, 2012, 108, 228702.	7.8	211
50	Confinement of Anomalous Liquids in Nanoporous Matrices. Physical Review Letters, 2012, 109, 105701.	7.8	16
51	Communication activity in a social network: relation between long-term correlations and inter-event clustering. Scientific Reports, 2012, 2, 560.	3.3	70
52	Homogeneous Crystal Nucleation Near a Metastable Fluid-Fluid Phase Transition. Physical Review Letters, 2012, 109, 095702.	7.8	19
53	Phase diagram of a two-dimensional system with anomalous liquid properties. Journal of Chemical Physics, 2012, 137, 034507.	3.0	30
54	Different water scenarios for a primitive model with two types of hydrogen bonds. Europhysics Letters, 2012, 97, 56005.	2.0	18

#	Article	IF	CITATIONS
55	Networks formed from interdependent networks. Nature Physics, 2012, 8, 40-48.	16.7	961
56	Effect of hydrophobic environments on the hypothesized liquid-liquid critical point of water. Journal of Biological Physics, 2012, 38, 97-111.	1.5	17
57	Fractals in Biology. , 2012, , 488-511.		1
58	Robustness of a Network of Networks. Physical Review Letters, 2011, 107, 195701.	7.8	509
59	Robustness of interdependent networks under targeted attack. Physical Review E, 2011, 83, 065101.	2.1	408
60	Waterlike glass polyamorphism in a monoatomic isotropic Jagla model. Journal of Chemical Physics, 2011, 134, 064507.	3.0	46
61	Communication activity in social networks: growth and correlations. European Physical Journal B, 2011, 84, 147-159.	1.5	15
62	Liquid and Glass Polymorphism in a Monatomic System with Isotropic, Smooth Pair Interactions. Journal of Physical Chemistry B, 2011, 115, 14229-14239.	2.6	41
63	Dynamics of the contact between a ruthenium surface with a single nanoasperity and a flat ruthenium surface: Molecular dynamics simulations. Physical Review B, $2011,83,.$	3.2	4
64	Interdependent networks with identical degrees of mutually dependent nodes. Physical Review E, 2011, 83, 016112.	2.1	193
65	Cascade of failures in coupled network systems with multiple support-dependence relations. Physical Review E, 2011, 83, 036116.	2.1	315
66	Critical effect of dependency groups on the function of networks. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1007-1010.	7.1	247
67	Correlated randomness and switching phenomena. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 2880-2893.	2.6	26
68	Catastrophic cascade of failures in interdependent networks. Nature, 2010, 464, 1025-1028.	27.8	3,326
69	Effect of hydrophobic solutes on the liquid-liquid critical point. Physical Review E, 2010, 81, 061504.	2.1	30
70	Cluster formation, waterlike anomalies, and re-entrant melting for a family of bounded repulsive interaction potentials. Physical Review E, 2010, 81, 031201.	2.1	26
71	Liquid-Liquid Phase Transition and Glass Transition in a Monoatomic Model System. International Journal of Molecular Sciences, 2010, 11, 5184-5200.	4.1	17
72	Hydrophobic collapse and cold denaturation in the Jagla model of water. Journal of Physics Condensed Matter, 2010, 22, 284109.	1.8	20

#	Article	IF	CITATIONS
73	Interdependent Networks: Reducing the Coupling Strength Leads to a Change from a First to Second Order Percolation Transition. Physical Review Letters, 2010, 105, 048701.	7.8	632
74	A tetrahedral entropy for water. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22130-22134.	7.1	98
75	Appearance of a fractional Stokes–Einstein relation in water and a structural interpretation ofÂits onset. Nature Physics, 2009, 5, 565-569.	16.7	219
76	Scaling laws of human interaction activity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12640-12645.	7.1	207
77	Structure of shells in complex networks. Physical Review E, 2009, 80, 036105.	2.1	112
78	A monatomic system with a liquid-liquid critical point and two distinct glassy states. Journal of Chemical Physics, 2009, 130, 054505.	3.0	77
79	Relation of water anomalies to the excess entropy. Physical Review E, 2008, 78, 051201.	2.1	52
80	Correspondence between phase diagrams of the TIP5P water model and a spherically symmetric repulsive ramp potential with two characteristic length scales. Physical Review E, 2008, 77, 042201.	2.1	52
81	Pyrazine in Supercritical Xenon: Local Number Density Defined by Experiment and Calculation. Journal of Physical Chemistry B, 2008, 112, 15431-15441.	2.6	5
82	The size variance relationship of business firm growth rates. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19595-19600.	7.1	74
83	Fractal boundaries of complex networks. Europhysics Letters, 2008, 84, 48004.	2.0	50
84	Effect of water-wall interaction potential on the properties of nanoconfined water. Physical Review E, 2007, 75, 011202.	2.1	66
85	Water-like solvation thermodynamics in a spherically symmetric solvent model with two characteristic lengths. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20177-20182.	7.1	93
86	Structure of the first- and second-neighbor shells of simulated water: Quantitative relation to translational and orientational order. Physical Review E, 2007, 76, 051201.	2.1	109
87	OPTIMAL PATH AND MINIMAL SPANNING TREES IN RANDOM WEIGHTED NETWORKS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 2215-2255.	1.7	65
88	Transport and percolation theory in weighted networks. Physical Review E, 2007, 75, 045103.	2.1	20
89	Local Structure and Thermodynamics of a Core-Softened Potential Fluid: Theory and Simulation. ChemPhysChem, 2007, 8, 138-147.	2.1	10
90	Revisiting Lévy flight search patterns of wandering albatrosses, bumblebees and deer. Nature, 2007, 449, 1044-1048.	27.8	736

#	Article	IF	CITATIONS
91	The Growth of Business Firms: Facts and Theory. Journal of the European Economic Association, 2007, 5, 574-584.	3.5	54
92	Thermodynamics and dynamics of the two-scale spherically symmetric Jagla ramp model of anomalous liquids. Physical Review E, 2006, 74, 031108.	2.1	154
93	Power Law Correlations in DNA Sequences. , 2006, , 123-164.		9
94	Optimal paths in strong and weak disorder: A unified approach. Physical Review E, 2006, 73, 036128.	2.1	15
95	Family of tunable spherically symmetric potentials that span the range from hard spheres to waterlike behavior. Physical Review E, 2006, 73, 051204.	2.1	106
96	Anomalous electrical and frictionless flow conductance in complex networks. Physica D: Nonlinear Phenomena, 2006, 224, 69-76.	2.8	11
97	Relationship between the liquid–liquid phase transition and dynamic behaviour in the Jagla model. Journal of Physics Condensed Matter, 2006, 18, S2239-S2246.	1.8	35
98	Scale-free networks emerging from weighted random graphs. Physical Review E, 2006, 73, 025103.	2.1	13
99	Monte Carlo simulation of liquid bridge rupture: Application to lung physiology. Physical Review E, 2006, 74, 026311.	2.1	16
100	Thermodynamic and dynamic anomalies for dumbbell molecules interacting with a repulsive ramplike potential. Physical Review E, 2006, 73, 061504.	2.1	30
101	Preferential attachment and growth dynamics in complex systems. Physical Review E, 2006, 74, 035103.	2.1	43
102	Molecular dynamics study of orientational cooperativity in water. Physical Review E, 2006, 73, 041505.	2.1	72
103	Dry friction avalanches: Experiment and theory. Physical Review E, 2006, 74, 066110.	2.1	22
104	Percolation model for growth rates of aggregates and its application for business firm growth. Physical Review E, 2006, 74, 036118.	2.1	7
105	Transition between strong and weak disorder regimes for the optimal path. Physica A: Statistical Mechanics and Its Applications, 2005, 346, 174-182.	2.6	1
106	Optimal path in random networks with disorder: A mini review. Physica A: Statistical Mechanics and Its Applications, 2005, 346, 82-92.	2.6	20
107	Crackles and instabilities during lung inflation. Physica A: Statistical Mechanics and Its Applications, 2005, 357, 18-26.	2.6	18
108	A statistically based density map method for identification and quantification of regional differences in microcolumnarity in the monkey brain. Journal of Neuroscience Methods, 2005, 141, 321-332.	2.5	27

#	Article	IF	CITATIONS
109	Routes to colloidal gel formation. Computer Physics Communications, 2005, 169, 166-171.	7.5	52
110	Scale-Free properties of weighted random graphs: Minimum Spanning Trees and Percolation. AIP Conference Proceedings, 2005, , .	0.4	2
111	Relating Airway Diameter Distributions to Regular Branching Asymmetry in the Lung. Physical Review Letters, 2005, 95, 168101.	7.8	50
112	Clusters of mobile molecules in supercooled water. Physical Review E, 2005, 72, 011202.	2.1	42
113	Current flow in random resistor networks: The role of percolation in weak and strong disorder. Physical Review E, 2005, 71, 045101.	2.1	42
114	Possible connection between the optimal path and flow in percolation clusters. Physical Review E, 2005, 72, 056131.	2.1	12
115	Scaling of optimal-path-lengths distribution in complex networks. Physical Review E, 2005, 72, 025102.	2.1	9
116	Static and dynamic anomalies in a repulsive spherical ramp liquid: Theory and simulation. Physical Review E, 2005, 72, 021501.	2.1	102
117	Thermodynamics, structure, and dynamics of water confined between hydrophobic plates. Physical Review E, 2005, 72, 051503.	2.1	206
118	Anomalous Transport in Scale-Free Networks. Physical Review Letters, 2005, 94, 248701.	7.8	84
119	Folding events in the 21-30 region of amyloid Â-protein (AÂ) studied in silico. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6015-6020.	7.1	122
120	Static and dynamic heterogeneities in water. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 509-523.	3.4	49
121	Folding Trp-Cage to NMR Resolution Native Structure Using a Coarse-Grained Protein Model. Biophysical Journal, 2005, 88, 147-155.	0.5	130
122	Structural Order for One-Scale and Two-Scale Potentials. Physical Review Letters, 2005, 95, 130604.	7.8	142
123	Liquid-liquid phase transition for an attractive isotropic potential with wide repulsive range. Physical Review E, 2005, 71, 061504.	2.1	83
124	Effect of disorder strength on optimal paths in complex networks. Physical Review E, 2004, 70, 046133.	2.1	29
125	Universality of the optimal path in the strong disorder limit. Physical Review E, 2004, 70, 035102.	2.1	11
126	Static heterogeneities in liquid water. Physica A: Statistical Mechanics and Its Applications, 2004, 342, 40-47.	2.6	8

#	Article	IF	CITATIONS
127	Dynamic Heterogeneities in Supercooled Water. Journal of Physical Chemistry B, 2004, 108, 6655-6662.	2.6	59
128	Multiple Folding Pathways of the SH3 Domain. Biophysical Journal, 2004, 87, 521-533.	0.5	38
129	Heterogeneities in the Dynamics of Supercooled Water. , 2004, , 145-161.		0
130	A system with multiple liquid–liquid critical points. Physica A: Statistical Mechanics and Its Applications, 2003, 330, 124-129.	2.6	65
131	Length of optimal path in random networks with strong disorder. Physica A: Statistical Mechanics and Its Applications, 2003, 330, 246-252.	2.6	7
132	Dynamical Robustness of Lévy Search Strategies. Physical Review Letters, 2003, 91, 240601.	7.8	106
133	Postbreakthrough behavior in flow through porous media. Physical Review E, 2003, 67, 056314.	2.1	23
134	Perimeter growth of a branched structure: Application to crackle sounds in the lung. Physical Review E, 2003, 68, 011909.	2.1	9
135	Optimal Paths in Disordered Complex Networks. Physical Review Letters, 2003, 91, 168701.	7.8	160
136	Connection between Adam-Gibbs Theory and Spatially Heterogeneous Dynamics. Physical Review Letters, 2003, 90, 085506.	7.8	120
137	Fluid transport in branched structures with temporary closures: A model for quasistatic lung inflation. Physical Review E, 2003, 67, 031912.	2.1	9
138	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. Fluctuation and Noise Letters, 2003, 03, R1-R25.	1.5	31
139	Identifying Importance of Amino Acids for Protein Folding from Crystal Structures. Methods in Enzymology, 2003, 374, 616-638.	1.0	12
140	Glassy behavior of a homopolymer from molecular dynamics simulations. Physical Review E, 2002, 65, 030801.	2.1	21
141	Universality classes for self-avoiding walks in a strongly disordered system. Physical Review E, 2002, 65, 056128.	2.1	36
142	Transitions between inherent structures in water. Physical Review E, 2002, 65, 041502.	2.1	57
143	Liquid-liquid phase transition in one-component fluids. Journal of Physics Condensed Matter, 2002, 14, 2193-2200.	1.8	50
144	Scaling in the growth of geographically subdivided populations: invariant patterns from a continent-wide biological survey. Philosophical Transactions of the Royal Society B: Biological Sciences, 2002, 357, 627-633.	4.0	33

#	Article	IF	Citations
145	Thermodynamics and Folding Kinetics Analysis of the SH3 Domain form Discrete Molecular Dynamics. Journal of Molecular Biology, 2002, 318, 863-876.	4.2	54
146	Molecular Dynamics Simulation of the SH3 Domain Aggregation Suggests a Generic Amyloidogenesis Mechanism. Journal of Molecular Biology, 2002, 324, 851-857.	4.2	157
147	Direct Molecular Dynamics Observation of Protein Folding Transition State Ensemble. Biophysical Journal, 2002, 83, 3525-3532.	0.5	133
148	Using percolation theory to predict oil field performance. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 103-108.	2.6	15
149	Lévy flight random searches in biological phenomena. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 208-213.	2.6	94
150	Dynamic instabilities in the inflating lung. Nature, 2002, 417, 809-811.	27.8	84
151	Uncertainty in oil production predicted by percolation theory. Physica A: Statistical Mechanics and Its Applications, 2002, 306, 376-380.	2.6	19
152	Lévy flights search patterns of biological organisms. Physica A: Statistical Mechanics and Its Applications, 2001, 295, 85-88.	2.6	68
153	Improvements in the statistical approach to random Lévy flight searches. Physica A: Statistical Mechanics and Its Applications, 2001, 295, 89-92.	2.6	51
154	Properties of Lévy flights on an interval with absorbing boundaries. Physica A: Statistical Mechanics and Its Applications, 2001, 302, 148-161.	2.6	66
155	Generic mechanism for generating a liquid–liquid phase transition. Nature, 2001, 409, 692-695.	27.8	367
156	The salesman and the tourist. Nature, 2001, 413, 373-374.	27.8	55
157	Avalanche Dynamics of Crackle Sound in the Lung. Physical Review Letters, 2001, 87, 088101.	7.8	40
158	Thermodynamically important contacts in folding of model proteins. Physical Review E, 2001, 63, 032901.	2.1	9
159	Distributions of Dimeric Tandem Repeats in Non-coding and Coding DNA Sequences. Journal of Theoretical Biology, 2000, 202, 273-282.	1.7	38
160	Optimization of Coding Potentials Using Positional Dependence of Nucleotide Frequencies. Journal of Theoretical Biology, 2000, 206, 525-537.	1.7	14
161	Lévy flights in random searches. Physica A: Statistical Mechanics and Its Applications, 2000, 282, 1-12.	2.6	199
162	Kinetics of the protein folding transition. AIP Conference Proceedings, 2000, , .	0.4	0

#	Article	IF	CITATIONS
163	Species independence of mutual information in coding and noncoding DNA. Physical Review E, 2000, 61, 5624-5629.	2.1	120
164	Dependence of conductance on percolation backbone mass. Physical Review E, 2000, 61, 3435-3440.	2.1	14
165	Flow between two sites on a percolation cluster. Physical Review E, 2000, 62, 8270-8281.	2.1	67
166	Description of microcolumnar ensembles in association cortex and their disruption in Alzheimer and Lewy body dementias. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 5039-5043.	7.1	96
167	Identifying the protein folding nucleus using molecular dynamics 1 1Edited by A. R. Fersht. Journal of Molecular Biology, 2000, 296, 1183-1188.	4.2	137
168	Scaling behavior in crackle sound during lung inflation. Physical Review E, 1999, 60, 4659-4663.	2.1	26
169	Traveling time and traveling length in critical percolation clusters. Physical Review E, 1999, 60, 3425-3428.	2.1	92
170	Nanometer Scale Dynamics in Diffusion Limited Propagation of Interfaces in Amorphous Alloys. Physical Review Letters, 1999, 83, 784-787.	7.8	4
171	Waterlike anomalies for core-softened models of fluids: One dimension. Physical Review E, 1999, 60, 6714-6721.	2.1	74
172	Clustering of Identical Oligomers in Coding and Noncoding DNA Sequences. Journal of Biomolecular Structure and Dynamics, 1999, 17, 79-87.	3.5	9
173	Expansion of tandem repeats and oligomer clustering in coding and noncoding DNA sequences. Physica A: Statistical Mechanics and Its Applications, 1999, 273, 19-32.	2.6	15
174	Distribution of shortest paths in percolation. Physica A: Statistical Mechanics and Its Applications, 1999, 266, 55-61.	2.6	25
175	Predicting oil recovery using percolation. Physica A: Statistical Mechanics and Its Applications, 1999, 266, 107-114.	2.6	40
176	Optimizing the success of random searches. Nature, 1999, 401, 911-914.	27.8	1,370
177	Quasicrystals in a monodisperse system. Physical Review E, 1999, 60, 2664-2669.	2.1	42
178	AVERAGE MUTUAL INFORMATION OF CODING AND NONCODING DNA. , 1999, , 614-23.		12
179	Scaling of the Distribution of Shortest Paths in Percolation. Journal of Statistical Physics, 1998, 93, 603-613.	1.2	52
180	Model of unequal chromosomal crossing over in DNA sequences. Physica A: Statistical Mechanics and Its Applications, 1998, 249, 594-599.	2.6	18

#	Article	IF	CITATIONS
181	Discrete molecular dynamics studies of the folding of a protein-like model. Folding & Design, 1998, 3, 577-587.	4.5	283
182	Liquid-State Anomalies and the Stell-Hemmer Core-Softened Potential. Physical Review Letters, 1998, 81, 4895-4898.	7.8	188
183	Power Law Scaling for a System of Interacting Units with Complex Internal Structure. Physical Review Letters, 1998, 80, 1385-1388.	7.8	231
184	Distribution of Base Pair Repeats in Coding and Noncoding DNA Sequences. Physical Review Letters, 1997, 79, 5182-5185.	7.8	44
185	Volume distributions of avalanches in lung inflation: A statistical mechanical approach. Physical Review E, 1997, 56, 3385-3394.	2.1	14
186	Scaling Behavior in Economics: II. Modeling of Company Growth. Journal De Physique, I, 1997, 7, 635-650.	1.2	100
187	Aggregation and disaggregation of senile plaques in Alzheimer disease. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 7612-7616.	7.1	110
188	Scaling Behavior in Economics: I. Empirical Results for Company Growth. Journal De Physique, I, 1997, 7, 621-633.	1.2	164
189	Scaling behavior in economics: The problem of quantifying company growth. Physica A: Statistical Mechanics and Its Applications, 1997, 244, 1-24.	2.6	68
190	Scaling behaviour in the growth of companies. Nature, 1996, 379, 804-806.	27.8	637
191	Avalanches in the Lung: A Statistical Mechanical Model. Physical Review Letters, 1996, 76, 2192-2195.	7.8	52
192	CAN STATISTICAL PHYSICS CONTRIBUTE TO THE SCIENCE OF ECONOMICS?. Fractals, 1996, 04, 415-425.	3.7	37
193	"Logistic map― an analytical solution. Physica A: Statistical Mechanics and Its Applications, 1995, 218, 457-460.	2.6	12
194	Statistical properties of DNA sequences. Physica A: Statistical Mechanics and Its Applications, 1995, 221, 180-192.	2.6	124
195	Avalanches and the directed percolation depinning model: Experiments, simulations, and theory. Physical Review E, 1995, 51, 4655-4673.	2.1	57
196	Systematic analysis of coding and noncoding DNA sequences using methods of statistical linguistics. Physical Review E, 1995, 52, 2939-2950.	2.1	101
197	Surface roughening with quenched disorder in high dimensions: Exact results for the Cayley tree. Physical Review E, 1995, 52, 373-388.	2.1	10
198	Long-range correlation properties of coding and noncoding DNA sequences: GenBank analysis. Physical Review E, 1995, 51, 5084-5091.	2.1	526

#	Article	IF	Citations
199	Zipf plots and the size distribution of firms. Economics Letters, 1995, 49, 453-457.	1.9	267
200	Dynamics of Surface Roughening with Quenched Disorder. Physical Review Letters, 1995, 74, 4205-4208.	7.8	27
201	Fractals in biology and medicine. Chaos, Solitons and Fractals, 1995, 6, 171-201.	5.1	111
202	Fractals in Biology and Medicine: From DNA to the Heartbeat. , 1994, , 49-88.		30
203	Linguistic Features of Noncoding DNA Sequences. Physical Review Letters, 1994, 73, 3169-3172.	7.8	251
204	New exponent characterizing the effect of evaporation on imbibition experiments. Physical Review Letters, 1994, 72, 641-644.	7.8	43
205	Punctuated equilibrium and â€~â€~history-dependent'' percolation. Physical Review E, 1994, 50, R2403-R2	2406.	32
206	Statistical and linguistic features of noncoding DNA: A heterogeneous «Complex system». Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1339-1356.	0.4	10
207	Non-equilibrium dynamics as an indispensable characteristic of a healthy biological system. Integrative Psychological and Behavioral Science, 1994, 29, 283-293.	0.3	69
208	Statistical mechanics in biology: how ubiquitous are long-range correlations?. Physica A: Statistical Mechanics and Its Applications, 1994, 205, 214-253.	2.6	153
209	Correlation approach to identify coding regions in DNA sequences. Biophysical Journal, 1994, 67, 64-70.	0.5	174
210	Mosaic organization of DNA nucleotides. Physical Review E, 1994, 49, 1685-1689.	2.1	3,996
211	Fractals in Biology and Medicine: From DNA to the Heartbeat. , 1994, , 49-88.		21
212	SURFACE ROUGHENING WITH QUENCHED DISORDER IN <i>d</i> -DIMENSIONS., 1994,, 453-465.		5
213	Long-range power-law correlations in condensed matter physics and biophysics. Physica A: Statistical Mechanics and Its Applications, 1993, 200, 4-24.	2.6	65
214	Anisotropic percolation and the d-dimensional surface roughening problem. Physica A: Statistical Mechanics and Its Applications, 1993, 200, 200-211.	2.6	26
215	Finite-size effects on long-range correlations: Implications for analyzing DNA sequences. Physical Review E, 1993, 47, 3730-3733.	2.1	247
216	Fractal landscapes and molecular evolution: modeling the myosin heavy chain gene family. Biophysical Journal, 1993, 65, 2673-2679.	0.5	141

#	Article	IF	CITATIONS
217	SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS. Fractals, 1993, 01, 827-839.	3.7	12
218	Long-range fractal correlations in DNA. Physical Review Letters, 1993, 71, 1776-1776.	7.8	53
219	Generalized Lévy-walk model for DNA nucleotide sequences. Physical Review E, 1993, 47, 4514-4523.	2.1	142
220	Anomalous interface roughening in porous media: Experiment and model. Physical Review A, 1992, 45, R8313-R8316.	2.5	295
221	$\hat{l}_{j}$ -point temperature and exponents for the bond fluctuation model. Physica A: Statistical Mechanics and Its Applications, 1992, 182, 346-352.	2.6	1
222	Fractal landscape analysis of DNA walks. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 25-29.	2.6	48
223	Ballistic deposition with power-law noise: A variant of the Zhang model. Physical Review A, 1991, 43, 7113-7116.	2.5	45
224	The Optimal Pathin an Erdős-Rényi Random Graph. Lecture Notes in Physics, 0, , 127-137.	0.7	1