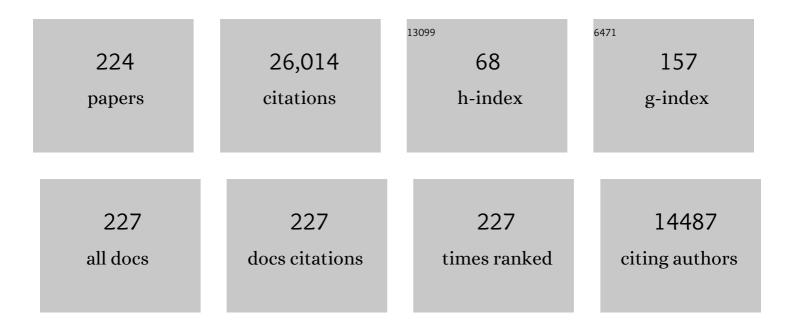
## Sergey V Buldyrev

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3836047/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Mosaic organization of DNA nucleotides. Physical Review E, 1994, 49, 1685-1689.	2.1	3,996
2	Catastrophic cascade of failures in interdependent networks. Nature, 2010, 464, 1025-1028.	27.8	3,326
3	Optimizing the success of random searches. Nature, 1999, 401, 911-914.	27.8	1,370
4	Networks formed from interdependent networks. Nature Physics, 2012, 8, 40-48.	16.7	961
5	Revisiting Lévy flight search patterns of wandering albatrosses, bumblebees and deer. Nature, 2007, 449, 1044-1048.	27.8	736
6	Scaling behaviour in the growth of companies. Nature, 1996, 379, 804-806.	27.8	637
7	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
8	Long-range correlation properties of coding and noncoding DNA sequences: GenBank analysis. Physical Review E, 1995, 51, 5084-5091.	2.1	526
9	Robustness of a Network of Networks. Physical Review Letters, 2011, 107, 195701.	7.8	509
10	Robustness of interdependent networks under targeted attack. Physical Review E, 2011, 83, 065101.	2.1	408
11	Generic mechanism for generating a liquid–liquid phase transition. Nature, 2001, 409, 692-695.	27.8	367
12	Cascade of failures in coupled network systems with multiple support-dependence relations. Physical Review E, 2011, 83, 036116.	2.1	315
13	Anomalous interface roughening in porous media: Experiment and model. Physical Review A, 1992, 45, R8313-R8316.	2.5	295
14	Discrete molecular dynamics studies of the folding of a protein-like model. Folding & Design, 1998, 3, 577-587.	4.5	283
15	Zipf plots and the size distribution of firms. Economics Letters, 1995, 49, 453-457.	1.9	267
16	The extreme vulnerability of interdependent spatially embedded networks. Nature Physics, 2013, 9, 667-672.	16.7	253
17	Linguistic Features of Noncoding DNA Sequences. Physical Review Letters, 1994, 73, 3169-3172.	7.8	251
18	Spontaneous recovery in dynamical networks. Nature Physics, 2014, 10, 34-38.	16.7	251

#	Article	IF	CITATIONS
19	Finite-size effects on long-range correlations: Implications for analyzing DNA sequences. Physical Review E, 1993, 47, 3730-3733.	2.1	247
20	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
21	Power Law Scaling for a System of Interacting Units with Complex Internal Structure. Physical Review Letters, 1998, 80, 1385-1388.	7.8	231
22	Appearance of a fractional Stokes–Einstein relation in water and a structural interpretation ofÂits onset. Nature Physics, 2009, 5, 565-569.	16.7	219
23	Cascading Failures in Interdependent Lattice Networks: The Critical Role of the Length of Dependency Links. Physical Review Letters, 2012, 108, 228702.	7.8	211
24	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
25	Thermodynamics, structure, and dynamics of water confined between hydrophobic plates. Physical Review E, 2005, 72, 051503.	2.1	206
26	Lévy flights in random searches. Physica A: Statistical Mechanics and Its Applications, 2000, 282, 1-12.	2.6	199
27	Interdependent networks with identical degrees of mutually dependent nodes. Physical Review E, 2011, 83, 016112.	2.1	193
28	Liquid-State Anomalies and the Stell-Hemmer Core-Softened Potential. Physical Review Letters, 1998, 81, 4895-4898.	7.8	188
29	Correlation approach to identify coding regions in DNA sequences. Biophysical Journal, 1994, 67, 64-70.	0.5	174
30	Scaling Behavior in Economics: I. Empirical Results for Company Growth. Journal De Physique, I, 1997, 7, 621-633.	1.2	164
31	Optimal Paths in Disordered Complex Networks. Physical Review Letters, 2003, 91, 168701.	7.8	160
32	Molecular Dynamics Simulation of the SH3 Domain Aggregation Suggests a Generic Amyloidogenesis Mechanism. Journal of Molecular Biology, 2002, 324, 851-857.	4.2	157
33	Thermodynamics and dynamics of the two-scale spherically symmetric Jagla ramp model of anomalous liquids. Physical Review E, 2006, 74, 031108.	2.1	154
34	Statistical mechanics in biology: how ubiquitous are long-range correlations?. Physica A: Statistical Mechanics and Its Applications, 1994, 205, 214-253.	2.6	153
35	Generalized Lévy-walk model for DNA nucleotide sequences. Physical Review E, 1993, 47, 4514-4523.	2.1	142
36	Structural Order for One-Scale and Two-Scale Potentials. Physical Review Letters, 2005, 95, 130604.	7.8	142

#	Article	IF	CITATIONS
37	Fractal landscapes and molecular evolution: modeling the myosin heavy chain gene family. Biophysical Journal, 1993, 65, 2673-2679.	0.5	141
38	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
39	Direct Molecular Dynamics Observation of Protein Folding Transition State Ensemble. Biophysical Journal, 2002, 83, 3525-3532.	0.5	133
40	Folding Trp-Cage to NMR Resolution Native Structure Using a Coarse-Grained Protein Model. Biophysical Journal, 2005, 88, 147-155.	0.5	130
41	Statistical properties of DNA sequences. Physica A: Statistical Mechanics and Its Applications, 1995, 221, 180-192.	2.6	124
42	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
43	Species independence of mutual information in coding and noncoding DNA. Physical Review E, 2000, 61, 5624-5629.	2.1	120
44	Connection between Adam-Gibbs Theory and Spatially Heterogeneous Dynamics. Physical Review Letters, 2003, 90, 085506.	7.8	120
45	Structure of shells in complex networks. Physical Review E, 2009, 80, 036105.	2.1	112
46	Fractals in biology and medicine. Chaos, Solitons and Fractals, 1995, 6, 171-201.	5.1	111
47	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
48	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
49	Dynamical Robustness of Lévy Search Strategies. Physical Review Letters, 2003, 91, 240601.	7.8	106
50	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
51	Percolation of a general network of networks. Physical Review E, 2013, 88, 062816.	2.1	103
52	Static and dynamic anomalies in a repulsive spherical ramp liquid: Theory and simulation. Physical Review E, 2005, 72, 021501.	2.1	102
53	Systematic analysis of coding and noncoding DNA sequences using methods of statistical linguistics. Physical Review E, 1995, 52, 2939-2950.	2.1	101
54	Scaling Behavior in Economics: II. Modeling of Company Growth. Journal De Physique, I, 1997, 7, 635-650.	1.2	100

#	Article	IF	CITATIONS
55	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
56	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
57	The robustness of interdependent clustered networks. Europhysics Letters, 2013, 101, 18002.	2.0	97
58	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
59	Lévy flight random searches in biological phenomena. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 208-213.	2.6	94
60	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
61	Traveling time and traveling length in critical percolation clusters. Physical Review E, 1999, 60, 3425-3428.	2.1	92
62	Dynamic instabilities in the inflating lung. Nature, 2002, 417, 809-811.	27.8	84
63	Anomalous Transport in Scale-Free Networks. Physical Review Letters, 2005, 94, 248701.	7.8	84
64	Liquid-liquid phase transition for an attractive isotropic potential with wide repulsive range. Physical Review E, 2005, 71, 061504.	2.1	83
65	A monatomic system with a liquid-liquid critical point and two distinct glassy states. Journal of Chemical Physics, 2009, 130, 054505.	3.0	77
66	Waterlike anomalies for core-softened models of fluids: One dimension. Physical Review E, 1999, 60, 6714-6721.	2.1	74
67	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
68	Molecular dynamics study of orientational cooperativity in water. Physical Review E, 2006, 73, 041505.	2.1	72
69	Communication activity in a social network: relation between long-term correlations and inter-event clustering. Scientific Reports, 2012, 2, 560.	3.3	70
70	Non-equilibrium dynamics as an indispensable characteristic of a healthy biological system. Integrative Psychological and Behavioral Science, 1994, 29, 283-293.	0.3	69
71	Scaling behavior in economics: The problem of quantifying company growth. Physica A: Statistical Mechanics and Its Applications, 1997, 244, 1-24.	2.6	68
72	Lévy flights search patterns of biological organisms. Physica A: Statistical Mechanics and Its Applications, 2001, 295, 85-88.	2.6	68

#	Article	IF	CITATIONS
73	Flow between two sites on a percolation cluster. Physical Review E, 2000, 62, 8270-8281.	2.1	67
74	Properties of Lévy flights on an interval with absorbing boundaries. Physica A: Statistical Mechanics and Its Applications, 2001, 302, 148-161.	2.6	66
75	Effect of water-wall interaction potential on the properties of nanoconfined water. Physical Review E, 2007, 75, 011202.	2.1	66
76	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
77	A system with multiple liquid–liquid critical points. Physica A: Statistical Mechanics and Its Applications, 2003, 330, 124-129.	2.6	65
78	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
79	Search for a liquid-liquid critical point in models of silica. Journal of Chemical Physics, 2014, 140, 224502.	3.0	61
80	Dynamic Heterogeneities in Supercooled Water. Journal of Physical Chemistry B, 2004, 108, 6655-6662.	2.6	59
81	Avalanches and the directed percolation depinning model: Experiments, simulations, and theory. Physical Review E, 1995, 51, 4655-4673.	2.1	57
82	Transitions between inherent structures in water. Physical Review E, 2002, 65, 041502.	2.1	57
83	The salesman and the tourist. Nature, 2001, 413, 373-374.	27.8	55
84	Thermodynamics and Folding Kinetics Analysis of the SH3 Domain form Discrete Molecular Dynamics. Journal of Molecular Biology, 2002, 318, 863-876.	4.2	54
85	The Growth of Business Firms: Facts and Theory. Journal of the European Economic Association, 2007, 5, 574-584.	3.5	54
86	Long-range fractal correlations in DNA. Physical Review Letters, 1993, 71, 1776-1776.	7.8	53
87	Avalanches in the Lung: A Statistical Mechanical Model. Physical Review Letters, 1996, 76, 2192-2195.	7.8	52
88	Scaling of the Distribution of Shortest Paths in Percolation. Journal of Statistical Physics, 1998, 93, 603-613.	1.2	52
89	Routes to colloidal gel formation. Computer Physics Communications, 2005, 169, 166-171.	7.5	52
90	Relation of water anomalies to the excess entropy. Physical Review E, 2008, 78, 051201.	2.1	52

#	Article	IF	CITATIONS
91	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
92	Improvements in the statistical approach to random Lévy flight searches. Physica A: Statistical Mechanics and Its Applications, 2001, 295, 89-92.	2.6	51
93	Behavior of the Widom Line in Critical Phenomena. Physical Review Letters, 2014, 112, 135701.	7.8	51
94	Liquid-liquid phase transition in one-component fluids. Journal of Physics Condensed Matter, 2002, 14, 2193-2200.	1.8	50
95	Relating Airway Diameter Distributions to Regular Branching Asymmetry in the Lung. Physical Review Letters, 2005, 95, 168101.	7.8	50
96	Fractal boundaries of complex networks. Europhysics Letters, 2008, 84, 48004.	2.0	50
97	Static and dynamic heterogeneities in water. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 509-523.	3.4	49
98	Fractal landscape analysis of DNA walks. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 25-29.	2.6	48
99	Waterlike glass polyamorphism in a monoatomic isotropic Jagla model. Journal of Chemical Physics, 2011, 134, 064507.	3.0	46
100	Ballistic deposition with power-law noise: A variant of the Zhang model. Physical Review A, 1991, 43, 7113-7116.	2.5	45
101	Distribution of Base Pair Repeats in Coding and Noncoding DNA Sequences. Physical Review Letters, 1997, 79, 5182-5185.	7.8	44
102	On Economic Complexity and the Fitness of Nations. Scientific Reports, 2017, 7, 15332.	3.3	44
103	New exponent characterizing the effect of evaporation on imbibition experiments. Physical Review Letters, 1994, 72, 641-644.	7.8	43
104	Preferential attachment and growth dynamics in complex systems. Physical Review E, 2006, 74, 035103.	2.1	43
105	Quasicrystals in a monodisperse system. Physical Review E, 1999, 60, 2664-2669.	2.1	42
106	Clusters of mobile molecules in supercooled water. Physical Review E, 2005, 72, 011202.	2.1	42
107	Current flow in random resistor networks: The role of percolation in weak and strong disorder. Physical Review E, 2005, 71, 045101.	2.1	42
108	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

#	Article	IF	CITATIONS
109	Predicting oil recovery using percolation. Physica A: Statistical Mechanics and Its Applications, 1999, 266, 107-114.	2.6	40
110	Avalanche Dynamics of Crackle Sound in the Lung. Physical Review Letters, 2001, 87, 088101.	7.8	40
111	Distributions of Dimeric Tandem Repeats in Non-coding and Coding DNA Sequences. Journal of Theoretical Biology, 2000, 202, 273-282.	1.7	38
112	Multiple Folding Pathways of the SH3 Domain. Biophysical Journal, 2004, 87, 521-533.	0.5	38
113	CAN STATISTICAL PHYSICS CONTRIBUTE TO THE SCIENCE OF ECONOMICS?. Fractals, 1996, 04, 415-425.	3.7	37
114	Universality classes for self-avoiding walks in a strongly disordered system. Physical Review E, 2002, 65, 056128.	2.1	36
115	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
116	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
117	Network of Interdependent Networks: Overview of Theory and Applications. Understanding Complex Systems, 2014, , 3-36.	0.6	33
118	Punctuated equilibrium and â€~â€~history-dependent'' percolation. Physical Review E, 1994, 50, R2403-R	2406.	32
119	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. Fluctuation and Noise Letters, 2003, 03, R1-R25.	1.5	31
120	Fractals in Biology and Medicine: From DNA to the Heartbeat. , 1994, , 49-88.		30
121	Thermodynamic and dynamic anomalies for dumbbell molecules interacting with a repulsive ramplike potential. Physical Review E, 2006, 73, 061504.	2.1	30
122	Effect of hydrophobic solutes on the liquid-liquid critical point. Physical Review E, 2010, 81, 061504.	2.1	30
123	Phase diagram of a two-dimensional system with anomalous liquid properties. Journal of Chemical Physics, 2012, 137, 034507.	3.0	30
124	Effect of disorder strength on optimal paths in complex networks. Physical Review E, 2004, 70, 046133.	2.1	29
125	Cascading failures in networks with proximate dependent nodes. Physical Review E, 2014, 89, 032808.	2.1	29
126	Dynamics of Surface Roughening with Quenched Disorder. Physical Review Letters, 1995, 74, 4205-4208.	7.8	27

#	Article	IF	CITATIONS
127	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
128	Anisotropic percolation and the d-dimensional surface roughening problem. Physica A: Statistical Mechanics and Its Applications, 1993, 200, 200-211.	2.6	26
129	Scaling behavior in crackle sound during lung inflation. Physical Review E, 1999, 60, 4659-4663.	2.1	26
130	Correlated randomness and switching phenomena. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 2880-2893.	2.6	26
131	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
132	Efficient network immunization under limited knowledge. National Science Review, 2021, 8, nwaa229.	9.5	26
133	Cascading failures in complex networks. Journal of Complex Networks, 2020, 8, .	1.8	26
134	Distribution of shortest paths in percolation. Physica A: Statistical Mechanics and Its Applications, 1999, 266, 55-61.	2.6	25
135	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
136	Postbreakthrough behavior in flow through porous media. Physical Review E, 2003, 67, 056314.	2.1	23
137	Dry friction avalanches: Experiment and theory. Physical Review E, 2006, 74, 066110.	2.1	22
138	Glassy behavior of a homopolymer from molecular dynamics simulations. Physical Review E, 2002, 65, 030801.	2.1	21
139	Optimization of crystal nucleation close to a metastable fluid-fluid phase transition. Scientific Reports, 2015, 5, 11260.	3.3	21
140	Fractals in Biology and Medicine: From DNA to the Heartbeat. , 1994, , 49-88.		21
141	Optimal path in random networks with disorder: A mini review. Physica A: Statistical Mechanics and Its Applications, 2005, 346, 82-92.	2.6	20
142	Transport and percolation theory in weighted networks. Physical Review E, 2007, 75, 045103.	2.1	20
143	Hydrophobic collapse and cold denaturation in the Jagla model of water. Journal of Physics Condensed Matter, 2010, 22, 284109.	1.8	20
144	Uncertainty in oil production predicted by percolation theory. Physica A: Statistical Mechanics and Its Applications, 2002, 306, 376-380.	2.6	19

#	Article	IF	CITATIONS
145	Homogeneous Crystal Nucleation Near a Metastable Fluid-Fluid Phase Transition. Physical Review Letters, 2012, 109, 095702.	7.8	19
146	Physics of the Jagla model as the liquid-liquid coexistence line slope varies. Journal of Chemical Physics, 2015, 142, 224501.	3.0	19
147	Model of unequal chromosomal crossing over in DNA sequences. Physica A: Statistical Mechanics and Its Applications, 1998, 249, 594-599.	2.6	18
148	Crackles and instabilities during lung inflation. Physica A: Statistical Mechanics and Its Applications, 2005, 357, 18-26.	2.6	18
149	Modeling simple amphiphilic solutes in a Jagla solvent. Journal of Chemical Physics, 2012, 136, 044511.	3.0	18
150	Different water scenarios for a primitive model with two types of hydrogen bonds. Europhysics Letters, 2012, 97, 56005.	2.0	18
151	Diffusivity and short-time dynamics in two models of silica. Journal of Chemical Physics, 2015, 142, 104506.	3.0	18
152	Network overload due to massive attacks. Physical Review E, 2018, 97, 052309.	2.1	18
153	Liquid-Liquid Phase Transition and Glass Transition in a Monoatomic Model System. International Journal of Molecular Sciences, 2010, 11, 5184-5200.	4.1	17
154	Effect of hydrophobic environments on the hypothesized liquid-liquid critical point of water. Journal of Biological Physics, 2012, 38, 97-111.	1.5	17
155	Monte Carlo simulation of liquid bridge rupture: Application to lung physiology. Physical Review E, 2006, 74, 026311.	2.1	16
156	Confinement of Anomalous Liquids in Nanoporous Matrices. Physical Review Letters, 2012, 109, 105701.	7.8	16
157	Interdependent lattice networks in high dimensions. Physical Review E, 2016, 94, 052306.	2.1	16
158	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
159	Using percolation theory to predict oil field performance. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 103-108.	2.6	15
160	Optimal paths in strong and weak disorder: A unified approach. Physical Review E, 2006, 73, 036128.	2.1	15
161	Communication activity in social networks: growth and correlations. European Physical Journal B, 2011, 84, 147-159.	1.5	15
162	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

#	Article	IF	CITATIONS
163	Volume distributions of avalanches in lung inflation: A statistical mechanical approach. Physical Review E, 1997, 56, 3385-3394.	2.1	14
164	Optimization of Coding Potentials Using Positional Dependence of Nucleotide Frequencies. Journal of Theoretical Biology, 2000, 206, 525-537.	1.7	14
165	Dependence of conductance on percolation backbone mass. Physical Review E, 2000, 61, 3435-3440.	2.1	14
166	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
167	The phase behavior study of human antibody solution using multi-scale modeling. Journal of Chemical Physics, 2016, 145, 194901.	3.0	14
168	Scale-free networks emerging from weighted random graphs. Physical Review E, 2006, 73, 025103.	2.1	13
169	SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS. Fractals, 1993, 01, 827-839.	3.7	12
170	"Logistic map― an analytical solution. Physica A: Statistical Mechanics and Its Applications, 1995, 218, 457-460.	2.6	12
171	Identifying Importance of Amino Acids for Protein Folding from Crystal Structures. Methods in Enzymology, 2003, 374, 616-638.	1.0	12
172	Possible connection between the optimal path and flow in percolation clusters. Physical Review E, 2005, 72, 056131.	2.1	12
173	A Coarse-Grained Protein Model in a Water-like Solvent. Scientific Reports, 2013, 3, 1841.	3.3	12
174	AVERAGE MUTUAL INFORMATION OF CODING AND NONCODING DNA. , 1999, , 614-23.		12
175	Universality of the optimal path in the strong disorder limit. Physical Review E, 2004, 70, 035102.	2.1	11
176	Anomalous electrical and frictionless flow conductance in complex networks. Physica D: Nonlinear Phenomena, 2006, 224, 69-76.	2.8	11
177	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
178	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
179	Surface roughening with quenched disorder in high dimensions: Exact results for the Cayley tree. Physical Review E, 1995, 52, 373-388.	2.1	10
180	Local Structure and Thermodynamics of a Core-Softened Potential Fluid: Theory and Simulation. ChemPhysChem, 2007, 8, 138-147.	2.1	10

#	Article	IF	CITATIONS
181	Insights into bootstrap percolation: Its equivalence with k-core percolation and the giant component. Physical Review E, 2019, 99, 022311.	2.1	10
182	Clustering of Identical Oligomers in Coding and Noncoding DNA Sequences. Journal of Biomolecular Structure and Dynamics, 1999, 17, 79-87.	3.5	9
183	Thermodynamically important contacts in folding of model proteins. Physical Review E, 2001, 63, 032901.	2.1	9
184	Perimeter growth of a branched structure: Application to crackle sounds in the lung. Physical Review E, 2003, 68, 011909.	2.1	9
185	Fluid transport in branched structures with temporary closures: A model for quasistatic lung inflation. Physical Review E, 2003, 67, 031912.	2.1	9
186	Scaling of optimal-path-lengths distribution in complex networks. Physical Review E, 2005, 72, 025102.	2.1	9
187	Power Law Correlations in DNA Sequences. , 2006, , 123-164.		9
188	Distribution of blackouts in the power grid and the Motter and Lai model. Physical Review E, 2021, 103, 032309.	2.1	9
189	Phase amplification in spinodal decomposition of immiscible fluids with interconversion of species. Physical Review E, 2021, 103, L060101.	2.1	9
190	Static heterogeneities in liquid water. Physica A: Statistical Mechanics and Its Applications, 2004, 342, 40-47.	2.6	8
191	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
192	A study of cascading failures in real and synthetic power grid topologies. Network Science, 2018, 6, 448-468.	1.0	8
193	Reversible bootstrap percolation: Fake news and fact checking. Physical Review E, 2020, 101, 042307.	2.1	8
194	Spreading of localized attacks on spatial multiplex networks with a community structure. Physical Review Research, 2020, 2, .	3.6	8
195	Length of optimal path in random networks with strong disorder. Physica A: Statistical Mechanics and Its Applications, 2003, 330, 246-252.	2.6	7
196	Percolation model for growth rates of aggregates and its application for business firm growth. Physical Review E, 2006, 74, 036118.	2.1	7
197	Inverse melting in a two-dimensional off-lattice model. Journal of Chemical Physics, 2014, 140, 144505.	3.0	7
198	A statistical physics implementation of Coase× <sup>3</sup> s theory of the firm. Research in Economics, 2016, 70, 536-557.	0.8	7

#	Article	IF	CITATIONS
199	Systemic stress test model for shared portfolio networks. Scientific Reports, 2021, 11, 3358.	3.3	7
200	Cascading failures in anisotropic interdependent networks of spatial modular structures. New Journal of Physics, 2021, 23, 113001.	2.9	7
201	Pyrazine in Supercritical Xenon: Local Number Density Defined by Experiment and Calculation. Journal of Physical Chemistry B, 2008, 112, 15431-15441.	2.6	5
202	Energy Stored in Nanoscale Water Capillary Bridges between Patchy Surfaces. Langmuir, 2020, 36, 7246-7251.	3.5	5
203	SURFACE ROUGHENING WITH QUENCHED DISORDER IN <i>d</i>		5
204	Cascading failures in isotropic and anisotropic spatial networks induced by localized attacks and overloads. New Journal of Physics, 2022, 24, 043045.	2.9	5
205	Nanometer Scale Dynamics in Diffusion Limited Propagation of Interfaces in Amorphous Alloys. Physical Review Letters, 1999, 83, 784-787.	7.8	4
206	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
207	The Italian primary school-size distribution and the city-size: a complex nexus. Scientific Reports, 2015, 4, 5301.	3.3	4
208	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
209	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
210	Faster calculation of the percolation correlation length on spatial networks. Physical Review E, 2020, 101, 013306.	2.1	4
211	How Small Is Too Small for the Capillarity Theory?. Journal of Physical Chemistry C, 2021, 125, 5335-5348.	3.1	4
212	Crystallization of lysozyme with ( <i>R</i> )-, ( <i>S</i> )- and ( <i>RS</i> )-2-methyl-2,4-pentanediol. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 427-441.	2.5	3
213	Market instability and the size-variance relationship. Scientific Reports, 2021, 11, 5737.	3.3	3
214	Energy stored in nanoscale water capillary bridges formed between chemically heterogeneous surfaces with circular patches. Chinese Physics B, 2020, 29, 114703.	1.4	3
215	Modeling fluid polyamorphism through a maximum-valence approach. Physical Review E, 2022, 106, .	2.1	3
216	Scale-Free properties of weighted random graphs: Minimum Spanning Trees and Percolation. AIP Conference Proceedings, 2005, , .	0.4	2

#	Article	IF	CITATIONS
217	Î,-point temperature and exponents for the bond fluctuation model. Physica A: Statistical Mechanics and Its Applications, 1992, 182, 346-352.	2.6	1
218	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
219	The Optimal Pathin an Erdős-Rényi Random Graph. Lecture Notes in Physics, 0, , 127-137.	0.7	1
220	Fractals in Biology. , 2012, , 488-511.		1
221	Kinetics of the protein folding transition. AIP Conference Proceedings, 2000, , .	0.4	0
222	Diffusion interactions between crossing fibers of the brain. Magnetic Resonance in Medicine, 2021, 86, 429-441.	3.0	0
223	Heterogeneities in the Dynamics of Supercooled Water. , 2004, , 145-161.		0
224	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. , 2022, , 269-293.		0