Sergey V Buldyrev

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/3836047/sergey-v-buldyrev-publications-by-year.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

65 21,814 145 220 h-index g-index citations papers 6.62 24,036 227 5.5 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
220	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM 2022 , 269-293		
219	Cascading failures in anisotropic interdependent networks of spatial modular structures. <i>New Journal of Physics</i> , 2021 , 23, 113001	2.9	2
218	Efficient network immunization under limited knowledge. <i>National Science Review</i> , 2021 , 8, nwaa229	10.8	18
217	Market instability and the size-variance relationship. <i>Scientific Reports</i> , 2021 , 11, 5737	4.9	2
216	How Small Is Too Small for the Capillarity Theory?. Journal of Physical Chemistry C, 2021, 125, 5335-5348	8 3.8	1
215	Distribution of blackouts in the power grid and the Motter and Lai model. <i>Physical Review E</i> , 2021 , 103, 032309	2.4	4
214	Phase amplification in spinodal decomposition of immiscible fluids with interconversion of species. <i>Physical Review E</i> , 2021 , 103, L060101	2.4	4
213	Systemic stress test model for shared portfolio networks. <i>Scientific Reports</i> , 2021 , 11, 3358	4.9	4
212	Diffusion interactions between crossing fibers of the brain. <i>Magnetic Resonance in Medicine</i> , 2021 , 86, 429-441	4.4	
211	Energy Stored in Nanoscale Water Capillary Bridges between Patchy Surfaces. <i>Langmuir</i> , 2020 , 36, 7246	5-7251	2
21 0	Cascading failures in complex networks. <i>Journal of Complex Networks</i> , 2020 , 8,	1.7	5
209	Faster calculation of the percolation correlation length on spatial networks. <i>Physical Review E</i> , 2020 , 101, 013306	2.4	2
208	Reversible bootstrap percolation: Fake news and fact checking. <i>Physical Review E</i> , 2020 , 101, 042307	2.4	7
207	Spreading of localized attacks on spatial multiplex networks with a community structure. <i>Physical Review Research</i> , 2020 , 2,	3.9	3
206	Energy stored in nanoscale water capillary bridges formed between chemically heterogeneous surfaces with circular patches. <i>Chinese Physics B</i> , 2020 , 29, 114703	1.2	1
205	Insights into bootstrap percolation: Its equivalence with k-core percolation and the giant component. <i>Physical Review E</i> , 2019 , 99, 022311	2.4	7
204	Validation of Capillarity Theory at the Nanometer Scale. II: Stability and Rupture of Water Capillary Bridges in Contact with Hydrophobic and Hydrophilic Surfaces. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 1556-1569	3.8	7

203	A study of cascading failures in real and synthetic power grid topologies. Network Science, 2018, 6, 448-	-468	6
202	Network overload due to massive attacks. <i>Physical Review E</i> , 2018 , 97, 052309	2.4	11
201	On Economic Complexity and the Fitness of Nations. <i>Scientific Reports</i> , 2017 , 7, 15332	4.9	26
200	Interdependent lattice networks in high dimensions. <i>Physical Review E</i> , 2016 , 94, 052306	2.4	11
199	Validation of Capillarity Theory at the Nanometer Scale by Atomistic Computer Simulations of Water Droplets and Bridges in Contact with Hydrophobic and Hydrophilic Surfaces. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 1597-1608	3.8	21
198	Energy landscape in protein folding and unfolding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 3159-63	11.5	62
197	The phase behavior study of human antibody solution using multi-scale modeling. <i>Journal of Chemical Physics</i> , 2016 , 145, 194901	3.9	11
196	A statistical physics implementation of Coase?s theory of the firm. <i>Research in Economics</i> , 2016 , 70, 536	- <u>5</u> 57	6
195	Crystallization of lysozyme with (R)-, (S)- and (RS)-2-methyl-2,4-pentanediol. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015 , 71, 427-41		3
194	Physics of the Jagla model as the liquid-liquid coexistence line slope varies. <i>Journal of Chemical Physics</i> , 2015 , 142, 224501	3.9	16
193	Two types of dynamic crossovers in a network-forming liquid with tetrahedral symmetry. <i>Journal of Non-Crystalline Solids</i> , 2015 , 407, 392-398	3.9	4
192	Optimization of crystal nucleation close to a metastable fluid-fluid phase transition. <i>Scientific Reports</i> , 2015 , 5, 11260	4.9	18
191	Diffusivity and short-time dynamics in two models of silica. <i>Journal of Chemical Physics</i> , 2015 , 142, 1045	6 06 9	17
190	Increasing Accuracy: A New Design and Algorithm for Automatically Measuring Weights, Travel Direction and Radio Frequency Identification (RFID) of Penguins. <i>PLoS ONE</i> , 2015 , 10, e0126292	3.7	1
189	Behavior of the Widom line in critical phenomena. <i>Physical Review Letters</i> , 2014 , 112, 135701	7.4	46
188	Spontaneous recovery in dynamical networks. <i>Nature Physics</i> , 2014 , 10, 34-38	16.2	215
187	Inverse melting in a two-dimensional off-lattice model. <i>Journal of Chemical Physics</i> , 2014 , 140, 144505	3.9	6
186	The Italian primary school-size distribution and the city-size: a complex nexus. <i>Scientific Reports</i> , 2014 , 4, 5301	4.9	4

185	Network of Interdependent Networks: Overview of Theory and Applications. <i>Understanding Complex Systems</i> , 2014 , 3-36	0.4	24
184	Search for a liquid-liquid critical point in models of silica. <i>Journal of Chemical Physics</i> , 2014 , 140, 224502	3.9	56
183	Cascading failures in networks with proximate dependent nodes. <i>Physical Review E</i> , 2014 , 89, 032808	2.4	24
182	The extreme vulnerability of interdependent spatially embedded networks. <i>Nature Physics</i> , 2013 , 9, 667	7-667.2	209
181	Crackling sound generation during the formation of liquid bridges: A lattice gas model. <i>Physica A:</i> Statistical Mechanics and Its Applications, 2013 , 392, 3409-3416	3.3	8
180	Temperature and length scale dependence of solvophobic solvation in a single-site water-like liquid. <i>Journal of Chemical Physics</i> , 2013 , 138, 064506	3.9	13
179	The robustness of interdependent clustered networks. <i>Europhysics Letters</i> , 2013 , 101, 18002	1.6	82
178	Percolation of a general network of networks. <i>Physical Review E</i> , 2013 , 88, 062816	2.4	87
177	A coarse-grained protein model in a water-like solvent. Scientific Reports, 2013, 3, 1841	4.9	10
176	Effect of hydrophobic environments on the hypothesized liquid-liquid critical point of water. Journal of Biological Physics, 2012 , 38, 97-111	1.6	15
175	Communication activity in a social network: relation between long-term correlations and inter-event clustering. <i>Scientific Reports</i> , 2012 , 2, 560	4.9	58
174	Homogeneous crystal nucleation near a metastable fluid-fluid phase transition. <i>Physical Review Letters</i> , 2012 , 109, 095702	7.4	16
173	Phase diagram of a two-dimensional system with anomalous liquid properties. <i>Journal of Chemical Physics</i> , 2012 , 137, 034507	3.9	26
172	Different water scenarios for a primitive model with two types of hydrogen bonds. <i>Europhysics Letters</i> , 2012 , 97, 56005	1.6	16
171	Networks formed from interdependent networks. <i>Nature Physics</i> , 2012 , 8, 40-48	16.2	796
170	Potential of mean force between hydrophobic solutes in the Jagla model of water and implications for cold denaturation of proteins. <i>Journal of Chemical Physics</i> , 2012 , 136, 044512	3.9	14
169	Modeling simple amphiphilic solutes in a Jagla solvent. <i>Journal of Chemical Physics</i> , 2012 , 136, 044511	3.9	17
168	Cascading failures in interdependent lattice networks: the critical role of the length of dependency links. <i>Physical Review Letters</i> , 2012 , 108, 228702	7.4	180

167	Confinement of anomalous liquids in nanoporous matrices. <i>Physical Review Letters</i> , 2012 , 109, 105701	7.4	14
166	Fractals in BiologyBiology fractals 2012 , 488-511		1
165	Waterlike glass polyamorphism in a monoatomic isotropic Jagla model. <i>Journal of Chemical Physics</i> , 2011 , 134, 064507	3.9	41
164	Communication activity in social networks: growth and correlations. <i>European Physical Journal B</i> , 2011 , 84, 147-159	1.2	13
163	Liquid and glass polymorphism in a monatomic system with isotropic, smooth pair interactions. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 14229-39	3.4	35
162	Robustness of a network of networks. <i>Physical Review Letters</i> , 2011 , 107, 195701	7.4	418
161	Robustness of interdependent networks under targeted attack. <i>Physical Review E</i> , 2011 , 83, 065101	2.4	346
160	Dynamics of the contact between a ruthenium surface with a single nanoasperity and a flat ruthenium surface: Molecular dynamics simulations. <i>Physical Review B</i> , 2011 , 83,	3.3	3
159	Interdependent networks with identical degrees of mutually dependent nodes. <i>Physical Review E</i> , 2011 , 83, 016112	2.4	168
158	Cascade of failures in coupled network systems with multiple support-dependence relations. <i>Physical Review E</i> , 2011 , 83, 036116	2.4	252
157	Critical effect of dependency groups on the function of networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 1007-10	11.5	217
156	Catastrophic cascade of failures in interdependent networks. <i>Nature</i> , 2010 , 464, 1025-8	50.4	2614
155	Effect of hydrophobic solutes on the liquid-liquid critical point. <i>Physical Review E</i> , 2010 , 81, 061504	2.4	28
154	Cluster formation, waterlike anomalies, and re-entrant melting for a family of bounded repulsive interaction potentials. <i>Physical Review E</i> , 2010 , 81, 031201	2.4	22
153	Liquid-liquid phase transition and glass transition in a monoatomic model system. <i>International Journal of Molecular Sciences</i> , 2010 , 11, 5184-200	6.3	12
152	Hydrophobic collapse and cold denaturation in the Jagla model of water. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 284109	1.8	17
151	Interdependent networks: reducing the coupling strength leads to a change from a first to second order percolation transition. <i>Physical Review Letters</i> , 2010 , 105, 048701	7.4	517
150	Correlated randomness and switching phenomena. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010 , 389, 2880-2893	3.3	23

149	A tetrahedral entropy for water. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 22130-4	11.5	85
148	Appearance of a fractional StokesEinstein relation in water and a structural interpretation of its onset. <i>Nature Physics</i> , 2009 , 5, 565-569	16.2	199
147	Scaling laws of human interaction activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 12640-5	11.5	173
146	Structure of shells in complex networks. <i>Physical Review E</i> , 2009 , 80, 036105	2.4	90
145	A monatomic system with a liquid-liquid critical point and two distinct glassy states. <i>Journal of Chemical Physics</i> , 2009 , 130, 054505	3.9	71
144	Relation of water anomalies to the excess entropy. <i>Physical Review E</i> , 2008 , 78, 051201	2.4	50
143	Correspondence between phase diagrams of the TIP5P water model and a spherically symmetric repulsive ramp potential with two characteristic length scales. <i>Physical Review E</i> , 2008 , 77, 042201	2.4	51
142	Pyrazine in supercritical xenon: local number density defined by experiment and calculation. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 15431-41	3.4	5
141	The size variance relationship of business firm growth rates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 19595-600	11.5	60
140	Fractal boundaries of complex networks. <i>Europhysics Letters</i> , 2008 , 84, 48004	1.6	44
139	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	2	51
138	Transport and percolation theory in weighted networks. <i>Physical Review E</i> , 2007 , 75, 045103	2.4	19
137	Local structure and thermodynamics of a core-softened potential fluid: theory and simulation. <i>ChemPhysChem</i> , 2007 , 8, 138-47	3.2	10
136	Revisiting LDy flight search patterns of wandering albatrosses, bumblebees and deer. <i>Nature</i> , 2007 , 449, 1044-8	50.4	626
135	The Growth of Business Firms: Facts and Theory. <i>Journal of the European Economic Association</i> , 2007 , 5, 574-584	3.3	43
134	Effect of water-wall interaction potential on the properties of nanoconfined water. <i>Physical Review E</i> , 2007 , 75, 011202	2.4	60
133	Water-like solvation thermodynamics in a spherically symmetric solvent model with two characteristic lengths. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 20177-82	11.5	90
132	Structure of the first- and second-neighbor shells of simulated water: quantitative relation to translational and orientational order. <i>Physical Review E</i> , 2007 , 76, 051201	2.4	94

(2005-2006)

131	Anomalous electrical and frictionless flow conductance in complex networks. <i>Physica D: Nonlinear Phenomena</i> , 2006 , 224, 69-76	3.3	9
130	Relationship between the liquid phase transition and dynamic behaviour in the Jagla model. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, S2239-S2246	1.8	31
129	Scale-free networks emerging from weighted random graphs. <i>Physical Review E</i> , 2006 , 73, 025103	2.4	12
128	Monte Carlo simulation of liquid bridge rupture: application to lung physiology. <i>Physical Review E</i> , 2006 , 74, 026311	2.4	16
127	Thermodynamic and dynamic anomalies for dumbbell molecules interacting with a repulsive ramplike potential. <i>Physical Review E</i> , 2006 , 73, 061504	2.4	28
126	Preferential attachment and growth dynamics in complex systems. <i>Physical Review E</i> , 2006 , 74, 035103	2.4	33
125	Molecular dynamics study of orientational cooperativity in water. <i>Physical Review E</i> , 2006 , 73, 041505	2.4	69
124	Dry friction avalanches: experiment and theory. <i>Physical Review E</i> , 2006 , 74, 066110	2.4	20
123	Percolation model for growth rates of aggregates and its application for business firm growth. <i>Physical Review E</i> , 2006 , 74, 036118	2.4	7
122	Thermodynamics and dynamics of the two-scale spherically symmetric Jagla ramp model of anomalous liquids. <i>Physical Review E</i> , 2006 , 74, 031108	2.4	143
121	Power Law Correlations in DNA Sequences 2006 , 123-164		3
120	Optimal paths in strong and weak disorder: a unified approach. <i>Physical Review E</i> , 2006 , 73, 036128	2.4	13
119	Family of tunable spherically symmetric potentials that span the range from hard spheres to waterlike behavior. <i>Physical Review E</i> , 2006 , 73, 051204	2.4	97
118	Static and dynamic heterogeneities in water. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2005 , 363, 509-23	3	44
117	Folding Trp-cage to NMR resolution native structure using a coarse-grained protein model. <i>Biophysical Journal</i> , 2005 , 88, 147-55	2.9	125
116	Structural order for one-scale and two-scale potentials. <i>Physical Review Letters</i> , 2005 , 95, 130604	7·4	131
115	Liquid-liquid phase transition for an attractive isotropic potential with wide repulsive range. <i>Physical Review E</i> , 2005 , 71, 061504	2.4	74
114	Transition between strong and weak disorder regimes for the optimal path. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005 , 346, 174-182	3.3	1

113	Optimal path in random networks with disorder: A mini review. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005 , 346, 82-92	3.3	18
112	Crackles and instabilities during lung inflation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005 , 357, 18-26	3.3	15
111	A statistically based density map method for identification and quantification of regional differences in microcolumnarity in the monkey brain. <i>Journal of Neuroscience Methods</i> , 2005 , 141, 321-3	323	21
110	Routes to colloidal gel formation. <i>Computer Physics Communications</i> , 2005 , 169, 166-171	4.2	48
109	Scale-Free properties of weighted random graphs: Minimum Spanning Trees and Percolation. <i>AIP Conference Proceedings</i> , 2005 ,	О	2
108	Relating airway diameter distributions to regular branching asymmetry in the lung. <i>Physical Review Letters</i> , 2005 , 95, 168101	7.4	39
107	Clusters of mobile molecules in supercooled water. <i>Physical Review E</i> , 2005 , 72, 011202	2.4	40
106	Current flow in random resistor networks: the role of percolation in weak and strong disorder. <i>Physical Review E</i> , 2005 , 71, 045101	2.4	39
105	Possible connection between the optimal path and flow in percolation clusters. <i>Physical Review E</i> , 2005 , 72, 056131	2.4	10
104	Scaling of optimal-path-lengths distribution in complex networks. <i>Physical Review E</i> , 2005 , 72, 025102	2.4	9
103	Static and dynamic anomalies in a repulsive spherical ramp liquid: theory and simulation. <i>Physical Review E</i> , 2005 , 72, 021501	2.4	94
102	Thermodynamics, structure, and dynamics of water confined between hydrophobic plates. <i>Physical Review E</i> , 2005 , 72, 051503	2.4	192
101	Anomalous transport in scale-free networks. <i>Physical Review Letters</i> , 2005 , 94, 248701	7.4	82
100	Folding events in the 21-30 region of amyloid beta-protein (Abeta) studied in silico. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 6015-20	11.5	113
99	Effect of disorder strength on optimal paths in complex networks. <i>Physical Review E</i> , 2004 , 70, 046133	2.4	28
98	Universality of the optimal path in the strong disorder limit. <i>Physical Review E</i> , 2004 , 70, 035102	2.4	10
97	Static heterogeneities in liquid water. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004 , 342, 40-47	3.3	7
96	Dynamic Heterogeneities in Supercooled Water [] Journal of Physical Chemistry B, 2004 , 108, 6655-6662	3.4	52

95	Multiple folding pathways of the SH3 domain. <i>Biophysical Journal</i> , 2004 , 87, 521-33	2.9	35
94	Heterogeneities in the Dynamics of Supercooled Water 2004 , 145-161		
93	FLUCTUATIONS, NOISE AND SCALING IN THE CARDIO-PULMONARY SYSTEM. Fluctuation and Noise Letters, 2003 , 03, R1-R25	1.2	23
92	Identifying importance of amino acids for protein folding from crystal structures. <i>Methods in Enzymology</i> , 2003 , 374, 616-38	1.7	11
91	A system with multiple liquid I quid critical points. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003 , 330, 124-129	3.3	59
90	Length of optimal path in random networks with strong disorder. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003 , 330, 246-252	3.3	6
89	Dynamical robustness of L\(\textstyre{\textstyre{U}} \) search strategies. Physical Review Letters, 2003, 91, 240601	7.4	92
88	Postbreakthrough behavior in flow through porous media. <i>Physical Review E</i> , 2003 , 67, 056314	2.4	17
87	Perimeter growth of a branched structure: application to crackle sounds in the lung. <i>Physical Review E</i> , 2003 , 68, 011909	2.4	7
86	Optimal paths in disordered complex networks. <i>Physical Review Letters</i> , 2003 , 91, 168701	7.4	148
85	Connection between Adam-Gibbs theory and spatially heterogeneous dynamics. <i>Physical Review Letters</i> , 2003 , 90, 085506	7.4	116
84	Fluid transport in branched structures with temporary closures: a model for quasistatic lung inflation. <i>Physical Review E</i> , 2003 , 67, 031912	2.4	8
83	Using percolation theory to predict oil field performance. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002 , 314, 103-108	3.3	14
82	L ^Q y flight random searches in biological phenomena. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002 , 314, 208-213	3.3	75
81	Physiology: Dynamic instabilities in the inflating lung. <i>Nature</i> , 2002 , 417, 809-11	50.4	55
80	Uncertainty in oil production predicted by percolation theory. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002 , 306, 376-380	3.3	15
79	Glassy behavior of a homopolymer from molecular dynamics simulations. <i>Physical Review E</i> , 2002 , 65, 030801	2.4	19
78	Universality classes for self-avoiding walks in a strongly disordered system. <i>Physical Review E</i> , 2002 , 65, 056128	2.4	35

77	Transitions between inherent structures in water. <i>Physical Review E</i> , 2002 , 65, 041502	2.4	50
76	Liquid-liquid phase transition in one-component fluids. <i>Journal of Physics Condensed Matter</i> , 2002 , 14, 2193-2200	1.8	43
75	Scaling in the growth of geographically subdivided populations: invariant patterns from a continent-wide biological survey. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2002 , 357, 627-33	5.8	29
74	Thermodynamics and folding kinetics analysis of the SH3 domain form discrete molecular dynamics. <i>Journal of Molecular Biology</i> , 2002 , 318, 863-76	6.5	51
73	Molecular dynamics simulation of the SH3 domain aggregation suggests a generic amyloidogenesis mechanism. <i>Journal of Molecular Biology</i> , 2002 , 324, 851-7	6.5	146
72	Direct molecular dynamics observation of protein folding transition state ensemble. <i>Biophysical Journal</i> , 2002 , 83, 3525-32	2.9	119
71	Luy flights search patterns of biological organisms. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001 , 295, 85-88	3.3	60
70	Improvements in the statistical approach to random LWy flight searches. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001 , 295, 89-92	3.3	45
69	Properties of L\(\textstyre{\textstyre{U}}\)y flights on an interval with absorbing boundaries. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001 , 302, 148-161	3.3	57
68	Generic mechanism for generating a liquid-liquid phase transition. <i>Nature</i> , 2001 , 409, 692-5	50.4	335
67	Avalanche dynamics of crackle sound in the lung. <i>Physical Review Letters</i> , 2001 , 87, 088101	7.4	33
66	Thermodynamically important contacts in folding of model proteins. <i>Physical Review E</i> , 2001 , 63, 03290	012.4	8
65	Distributions of dimeric tandem repeats in non-coding and coding DNA sequences. <i>Journal of Theoretical Biology</i> , 2000 , 202, 273-82	2.3	33
64	Optimization of coding potentials using positional dependence of nucleotide frequencies. <i>Journal of Theoretical Biology</i> , 2000 , 206, 525-37	2.3	11
63	Luy flights in random searches. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000 , 282, 1-12	3.3	157
62	Species independence of mutual information in coding and noncoding DNA. <i>Physical Review E</i> , 2000 , 61, 5624-9	2.4	94
61	Dependence of conductance on percolation backbone mass. <i>Physical Review E</i> , 2000 , 61, 3435-40	2.4	13
60	Flow between two sites on a percolation cluster. <i>Physical Review E</i> , 2000 , 62, 8270-81	2.4	57

(1998-2000)

59	Description of microcolumnar ensembles in association cortex and their disruption in Alzheimer and Lewy body dementias. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 5039-43	11.5	82
58	Identifying the protein folding nucleus using molecular dynamics. <i>Journal of Molecular Biology</i> , 2000 , 296, 1183-8	6.5	130
57	Average mutual information of coding and noncoding DNA. <i>Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing</i> , 2000 , 614-23	1.3	4
56	Scaling behavior in crackle sound during lung inflation. <i>Physical Review E</i> , 1999 , 60, 4659-63	2.4	21
55	Traveling time and traveling length in critical percolation clusters. <i>Physical Review E</i> , 1999 , 60, 3425-8	2.4	76
54	Nanometer Scale Dynamics in Diffusion Limited Propagation of Interfaces in Amorphous Alloys. <i>Physical Review Letters</i> , 1999 , 83, 784-787	7.4	3
53	Waterlike anomalies for core-softened models of fluids: one dimension. <i>Physical Review E</i> , 1999 , 60, 67	1 4. 21	71
52	Clustering of identical oligomers in coding and noncoding DNA sequences. <i>Journal of Biomolecular Structure and Dynamics</i> , 1999 , 17, 79-87	3.6	7
51	Expansion of tandem repeats and oligomer clustering in coding and noncoding DNA sequences. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999 , 273, 19-32	3.3	10
50	Distribution of shortest paths in percolation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999 , 266, 55-61	3.3	22
49	Predicting oil recovery using percolation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999 , 266, 107-114	3.3	32
48	Optimizing the success of random searches. <i>Nature</i> , 1999 , 401, 911-4	50.4	1098
47	Quasicrystals in a monodisperse system. <i>Physical Review E</i> , 1999 , 60, 2664-9	2.4	40
46	Scaling of the Distribution of Shortest Paths in Percolation. <i>Journal of Statistical Physics</i> , 1998 , 93, 603-	61 3	48
45	Model of unequal chromosomal crossing over in DNA sequences. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998 , 249, 594-599	3.3	17
44	Discrete molecular dynamics studies of the folding of a protein-like model. <i>Folding & Design</i> , 1998 , 3, 577-87		255
43	Liquid-State Anomalies and the Stell-Hemmer Core-Softened Potential. <i>Physical Review Letters</i> , 1998 , 81, 4895-4898	7.4	174
42	Power Law Scaling for a System of Interacting Units with Complex Internal Structure. <i>Physical Review Letters</i> , 1998 , 80, 1385-1388	7.4	201

41	Distribution of Base Pair Repeats in Coding and Noncoding DNA Sequences. <i>Physical Review Letters</i> , 1997 , 79, 5182-5185	7.4	33
40	Volume distributions of avalanches in lung inflation: A statistical mechanical approach. <i>Physical Review E</i> , 1997 , 56, 3385-3394	2.4	11
39	Scaling Behavior in Economics: II. Modeling of Company Growth. <i>Journal De Physique, I</i> , 1997 , 7, 635-650)	84
38	Aggregation and disaggregation of senile plaques in Alzheimer disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997 , 94, 7612-6	11.5	93
37	Scaling Behavior in Economics: I. Empirical Results for Company Growth. <i>Journal De Physique, I</i> , 1997 , 7, 621-633		139
36	Scaling behavior in economics: The problem of quantifying company growth. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1997 , 244, 1-24	3.3	59
35	CAN STATISTICAL PHYSICS CONTRIBUTE TO THE SCIENCE OF ECONOMICS?. Fractals, 1996, 04, 415-425	3.2	30
34	Scaling behaviour in the growth of companies. <i>Nature</i> , 1996 , 379, 804-806	50.4	534
33	Avalanches in the lung: A statistical mechanical model. <i>Physical Review Letters</i> , 1996 , 76, 2192-2195	7.4	46
32	Logistic mapflan analytical solution. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1995 , 218, 457-4	16B	11
31	Statistical properties of DNA sequences. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1995 , 221, 180-92	3.3	100
30	Avalanches and the directed percolation depinning model: Experiments, simulations, and theory. <i>Physical Review E</i> , 1995 , 51, 4655-4673	2.4	51
29	Systematic analysis of coding and noncoding DNA sequences using methods of statistical linguistics. <i>Physical Review E</i> , 1995 , 52, 2939-50	2.4	82
28	Surface roughening with quenched disorder in high dimensions: Exact results for the Cayley tree. <i>Physical Review E</i> , 1995 , 52, 373-388	2.4	10
27	Long-range correlation properties of coding and noncoding DNA sequences: GenBank analysis. <i>Physical Review E</i> , 1995 , 51, 5084-91	2.4	458
26	Zipf plots and the size distribution of firms. <i>Economics Letters</i> , 1995 , 49, 453-457	1.3	224
25	Dynamics of surface roughening with quenched disorder. <i>Physical Review Letters</i> , 1995 , 74, 4205-4208	7.4	21
24	Fractals in biology and medicine. <i>Chaos, Solitons and Fractals</i> , 1995 , 6, 171-201	9.3	96

23	Fractals in Biology and Medicine: From DNA to the Heartbeat 1994 , 49-88		7
22	Linguistic features of noncoding DNA sequences. <i>Physical Review Letters</i> , 1994 , 73, 3169-72	7.4	205
21	New exponent characterizing the effect of evaporation on imbibition experiments. <i>Physical Review Letters</i> , 1994 , 72, 641-644	7.4	40
20	Punctuated equilibrium and "history-dependent" percolation. <i>Physical Review E</i> , 1994 , 50, 2403-2406	2.4	29
19	Statistical and linguistic features of noncoding DNA: A heterogeneous «Complex system». <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1994 , 16, 1339-1356		9
18	Non-equilibrium dynamics as an indispensable characteristic of a healthy biological system. <i>Integrative Psychological and Behavioral Science</i> , 1994 , 29, 283-93		59
17	Statistical mechanics in biology: how ubiquitous are long-range correlations?. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1994 , 205, 214-53	3.3	131
16	Correlation approach to identify coding regions in DNA sequences. <i>Biophysical Journal</i> , 1994 , 67, 64-70	2.9	161
15	Mosaic organization of DNA nucleotides. <i>Physical Review E</i> , 1994 , 49, 1685-9	2.4	3261
14	Fractals in Biology and Medicine: From DNA to the Heartbeat 1994 , 49-88		17
13	Fractals in Biology and Medicine: From DNA to the Heartbeat 1994 , 49-88 SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS 1994 , 453-465		17
		2.4	
13	SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS 1994 , 453-465 Finite-size effects on long-range correlations: implications for analyzing DNA sequences. <i>Physical</i>	2.4	1
13	SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS 1994 , 453-465 Finite-size effects on long-range correlations: implications for analyzing DNA sequences. <i>Physical Review E</i> , 1993 , 47, 3730-3 Fractal landscapes and molecular evolution: modeling the myosin heavy chain gene family.	'	1 202
13 12 11	SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS 1994, 453-465 Finite-size effects on long-range correlations: implications for analyzing DNA sequences. <i>Physical Review E</i> , 1993, 47, 3730-3 Fractal landscapes and molecular evolution: modeling the myosin heavy chain gene family. <i>Biophysical Journal</i> , 1993, 65, 2673-9	2.9	1 202 131
13 12 11	SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS 1994, 453-465 Finite-size effects on long-range correlations: implications for analyzing DNA sequences. <i>Physical Review E</i> , 1993, 47, 3730-3 Fractal landscapes and molecular evolution: modeling the myosin heavy chain gene family. <i>Biophysical Journal</i> , 1993, 65, 2673-9 SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS. <i>Fractals</i> , 1993, 01, 827-839	2.9	1 202 131
13 12 11 10 9	SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS 1994, 453-465 Finite-size effects on long-range correlations: implications for analyzing DNA sequences. <i>Physical Review E</i> , 1993, 47, 3730-3 Fractal landscapes and molecular evolution: modeling the myosin heavy chain gene family. <i>Biophysical Journal</i> , 1993, 65, 2673-9 SURFACE ROUGHENING WITH QUENCHED DISORDER IN d-DIMENSIONS. <i>Fractals</i> , 1993, 01, 827-839 Long-range fractal correlations in DNA. <i>Physical Review Letters</i> , 1993, 71, 1776	2.9 3.2 7.4	1 202 131 12 48

5	Anomalous interface roughening in porous media: Experiment and model. <i>Physical Review A</i> , 1992 , 45, R8313-R8316	2.6	273	
4	Epoint temperature and exponents for the bond fluctuation model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992 , 182, 346-352	3.3	1	
3	Fractal landscape analysis of DNA walks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992 , 191, 25-9	3.3	43	
2	Ballistic deposition with power-law noise: A variant of the Zhang model. <i>Physical Review A</i> , 1991 , 43, 7113-7116	2.6	41	
1	The Optimal Pathin an ErdE-REyi Random Graph. <i>Lecture Notes in Physics</i> ,127-137	0.8	1	