Igor M Sokolov

List of Publications by Year in descending order

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317 papers 12,690 citations

25034 57 h-index 97 g-index

341 all docs

341 docs citations

times ranked

341

6780 citing authors

#	Article	IF	CITATIONS
1	Fractional Kinetics. Physics Today, 2002, 55, 48-54.	0.3	574
2	Models of anomalous diffusion in crowded environments. Soft Matter, 2012, 8, 9043.	2.7	453
3	From diffusion to anomalous diffusion: A century after Einstein's Brownian motion. Chaos, 2005, 15, 026103.	2 . 5	367
4	Anomalous diffusion spreads its wings. Physics World, 2005, 18, 29-32.	0.0	357
5	Retarding subdiffusion and accelerating superdiffusion governed by distributed-order fractional diffusion equations. Physical Review E, 2002, 66, 046129.	2.1	329
6	Nonergodicity Mimics Inhomogeneity in Single Particle Tracking. Physical Review Letters, 2008, 100, 250602.	7.8	281
7	A toolbox for determining subdiffusive mechanisms. Physics Reports, 2015, 573, 1-29.	25.6	240
8	Brownian yet Non-Gaussian Diffusion: From Superstatistics to Subordination of Diffusing Diffusivities. Physical Review X, 2017, 7, .	8.9	235
9	Fractional diffusion in inhomogeneous media. Journal of Physics A, 2005, 38, L679-L684.	1.6	232
10	Anomalous transport in external fields: Continuous time random walks and fractional diffusion equations extended. Physical Review E, 1998, 58, 1621-1633.	2.1	196
11	Reshuffling scale-free networks: From random to assortative. Physical Review E, 2004, 70, 066102.	2.1	194
12	Percolation on heterogeneous networks as a model for epidemics. Mathematical Biosciences, 2002, 180, 293-305.	1.9	188
13	Modeling Echo Chambers and Polarization Dynamics in Social Networks. Physical Review Letters, 2020, 124, 048301.	7.8	182
14	Diffusion on a Solid Surface: Anomalous is Normal. Physical Review Letters, 2004, 92, 250601.	7.8	176
15	Random Search with Resetting: A Unified Renewal Approach. Physical Review Letters, 2018, 121, 050601.	7.8	170
16	Field-Induced Dispersion in Subdiffusion. Physical Review Letters, 2006, 97, 140602.	7.8	150
17	Reaction-subdiffusion equations. Physical Review E, 2006, 73, 031102.	2.1	144
18	Relative Dispersion in Fully Developed Turbulence: The Richardson's Law and Intermittency Corrections. Physical Review Letters, 2002, 88, 094501.	7.8	140

#	Article	IF	CITATIONS
19	Rapid Trench Channeling of Graphenes with Catalytic Silver Nanoparticles. Nano Letters, 2009, 9, 457-461.	9.1	136
20	Fractional Fokker-Planck equation for ultraslow kinetics. Europhysics Letters, 2003, 63, 326-332.	2.0	130
21	Paradoxal Diffusion in Chemical Space for Nearest-Neighbor Walks over Polymer Chains. Physical Review Letters, 1997, 79, 857-860.	7.8	124
22	Lévy flights from a continuous-time process. Physical Review E, 2000, 63, 011104.	2.1	113
23	Geography in a scale-free network model. Physical Review E, 2002, 66, 056105.	2.1	113
24	Generalized fractional diffusion equations for accelerating subdiffusion and truncated Lévy flights. Physical Review E, 2008, 78, 021111.	2.1	102
25	Unfolding Accessibility Provides a Macroscopic Approach to Temporal Networks. Physical Review Letters, 2013, 110, 118701.	7.8	99
26	Fractional diffusion equation for a power-law-truncated Lévy process. Physica A: Statistical Mechanics and Its Applications, 2004, 336, 245-251.	2.6	98
27	Subdiffusion of mixed origins: When ergodicity and nonergodicity coexist. Physical Review E, 2010, 81, 010101.	2.1	96
28	Target Search of N Sliding Proteins on a DNA. Biophysical Journal, 2005, 89, 895-902.	0.5	95
29	From subdiffusion to superdiffusion of particles on solid surfaces. Physical Review E, 2004, 70, 051104.	2.1	91
30	Reversible Dewetting of a Molecularly Thin Fluid Water Film in a Soft Graphene–Mica Slit Pore. Nano Letters, 2012, 12, 774-779.	9.1	90
31	Towards deterministic equations for Lévy walks: The fractional material derivative. Physical Review E, 2003, 67, 010101.	2.1	89
32	Scaled Brownian motion as a mean-field model for continuous-time random walks. Physical Review E, 2014, 89, 012115.	2.1	88
33	Distributed-order diffusion equations and multifractality: Models and solutions. Physical Review E, 2015, 92, 042117.	2.1	83
34	Solutions of a class of non-Markovian Fokker-Planck equations. Physical Review E, 2002, 66, 041101.	2.1	82
35	Evolving networks with disadvantaged long-range connections. Physical Review E, 2002, 66, 026118.	2.1	82
36	Cyclization of a Polymer: First-Passage Problem for a Non-Markovian Process. Physical Review Letters, 2003, 90, 080601.	7.8	82

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37	Thermodynamics and fractional Fokker-Planck equations. Physical Review E, 2001, 63, 056111.	2.1	81
38	Effective distances for epidemics spreading on complex networks. Physical Review E, 2017, 95, 012313.	2.1	80
39	Underdamped scaled Brownian motion: (non-)existence of the overdamped limit in anomalous diffusion. Scientific Reports, 2016, 6, 30520.	3.3	79
40	Subdiffusion in time-averaged, confined random walks. Physical Review E, 2009, 80, 011109.	2.1	78
41	Measuring statistical evenness: A panoramic overview. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 1323-1353.	2.6	78
42	Resetting processes with noninstantaneous return. Physical Review E, 2020, 101, 052130.	2.1	74
43	Statistics of two-particle dispersion in two-dimensional turbulence. Physics of Fluids, 2002, 14, 3224-3232.	4.0	73
44	Continuous-time random walk with correlated waiting times. Physical Review E, 2009, 80, 031112.	2.1	72
45	Relaxation properties of small-world networks. Physical Review E, 2000, 62, 4405-4408.	2.1	71
46	Measuring statistical heterogeneity: The Pietra index. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 117-125.	2.6	70
47	Scaled Brownian motion with renewal resetting. Physical Review E, 2019, 100, 012120.	2.1	68
48	Diffusion mechanisms of localised knots along a polymer. Europhysics Letters, 2006, 76, 696-702.	2.0	67
49	Ito, Stratonovich, Häggi and all the rest: The thermodynamics of interpretation. Chemical Physics, 2010, 375, 359-363.	1.9	65
50	Subdiffusion in Peptides Originates from the Fractal-Like Structure of Configuration Space. Physical Review Letters, 2008, 100, 188103.	7.8	63
51	Nonrenewal resetting of scaled Brownian motion. Physical Review E, 2019, 100, 012119.	2.1	63
52	Patterns and scaling in surface fragmentation processes. Physical Review E, 1996, 54, 4293-4298.	2.1	62
53	Epidemics, disorder, and percolation. Physica A: Statistical Mechanics and Its Applications, 2003, 325, 1-8.	2.6	61
54	Test for Determining a Subdiffusive Model in Ergodic Systems from Single Trajectories. Physical Review Letters, 2013, 110, 090601.	7.8	61

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55	Dispersionless Transport in a Washboard Potential. Physical Review Letters, 2007, 98, 020602.	7.8	60
56	Codifference as a practical tool to measure interdependence. Physica A: Statistical Mechanics and Its Applications, 2015, 421, 412-429.	2.6	58
57	Giant diffusion of underdamped particles in a biased periodic potential. Physical Review E, 2016, 93, 042106.	2.1	56
58	Stationary states in Langevin dynamics under asymmetric Lévy noises. Physical Review E, 2007, 76, 041122.	2.1	55
59	Quantifying the non-ergodicity of scaled Brownian motion. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 375002.	2.1	54
60	Unexpected crossovers in correlated random-diffusivity processes. New Journal of Physics, 2020, 22, 083041.	2.9	53
61	Small-world Rouse networks as models of cross-linked polymers. Journal of Chemical Physics, 2000, 113, 7652-7655.	3.0	52
62	Ballistic versus diffusive pair dispersion in the Richardson regime. Physical Review E, 2000, 61, 2717-2722.	2.1	52
63	Kramers-like escape driven by fractional Gaussian noise. Physical Review E, 2010, 81, 041119.	2.1	52
64	First passage time densities in resonate-and-fire models. Physical Review E, 2006, 73, 031108.	2.1	50
65	Bulk-mediated diffusion on a planar surface: Full solution. Physical Review E, 2012, 86, 041101.	2.1	50
66	Law of Mass Action, Detailed Balance, and the Modeling of Calcium Puffs. Physical Review Letters, 2010, 105, 048103.	7.8	48
67	Directed particle diffusion under "burnt bridges―conditions. Physical Review E, 2001, 64, 011102.	2.1	47
68	Optimal foraging by zooplankton within patches: The case of Daphnia. Mathematical Biosciences, 2007, 207, 165-188.	1.9	47
69	Maximization of statistical heterogeneity: From Shannon's entropy to Gini's index. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 3023-3038.	2.6	47
70	Time averaging and emerging nonergodicity upon resetting of fractional Brownian motion and heterogeneous diffusion processes. Physical Review E, 2021, 104, 024105.	2.1	46
71	Transport in a Lévy ratchet: Group velocity and distribution spread. Physical Review E, 2008, 78, 011117.	2.1	45
72	Bulk-mediated surface diffusion along a cylinder: Propagators and crossovers. Physical Review E, 2009, 79, 040105.	2.1	43

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73	Beyond monofractional kinetics. Chaos, Solitons and Fractals, 2017, 102, 210-217.	5.1	43
74	Weak ergodicity breaking in an anomalous diffusion process of mixed origins. Physical Review E, 2014, 89, 012136.	2.1	42
75	Disentangling Sources of Anomalous Diffusion. Physical Review Letters, 2013, 111, 010601.	7.8	41
76	Diffusion-controlled reactionA+Bâ†'0 in one dimension: The role of particle mobilities and the diffusion-equation approach. Physical Review A, 1991, 44, 2388-2393.	2.5	40
77	Superdiffusive Klein-Kramers equation: Normal and ano malous time evolution and Lévy walk moments. Europhysics Letters, 2002, 58, 482-488.	2.0	40
78	Enzymatic Chain Scission Kinetics of Poly(Îμ-caprolactone) Monolayers. Langmuir, 2007, 23, 12202-12207.	3.5	40
79	Diffusion-controlled reactions in lamellar systems. Physical Review A, 1991, 43, 2714-2719.	2.5	39
80	On the energetics of a nonlinear system rectifying thermal fluctuations. Europhysics Letters, 1998, 44, 278-283.	2.0	39
81	Universal fluctuations in subdiffusive transport. Europhysics Letters, 2009, 86, 30009.	2.0	39
82	Front Propagation and Local Ordering in One-Dimensional Irreversible Autocatalytic Reactions. Physical Review Letters, 1996, 77, 4462-4465.	7.8	38
83	Brownian yet non-Gaussian diffusion in heterogeneous media: from superstatistics to homogenization. New Journal of Physics, 2020, 22, 063046.	2.9	38
84	Dynamics of annealed systems under external fields: CTRW and the fractional Fokker-Planck equations. Europhysics Letters, 2001, 56, 175-180.	2.0	37
85	SIS epidemics with household structure: the self-consistent field method. Mathematical Biosciences, 2004, 190, 71-85.	1.9	37
86	Stationary Fronts in anA+Bâ†'OReaction under Subdiffusion. Physical Review Letters, 2008, 100, 108304.	7.8	37
87	Nonergodicity of reset geometric Brownian motion. Physical Review E, 2022, 105, L012106.	2.1	37
88	Harmonic oscillator under Lévy noise: Unexpected properties in the phase space. Physical Review E, 2011, 83, 041118.	2.1	36
89	Mixing effects in theA+B→0 reaction-diffusion scheme. Physical Review Letters, 1991, 66, 1942-1945.	7.8	34
90	Anomalous diffusion in run-and-tumble motion. Physical Review E, 2012, 86, 021117.	2.1	34

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91	Non-equilibrium directed diffusion and inherently irreversible heat engines. Journal of Physics A, 1997, 30, 3021-3027.	1.6	33
92	Anomalous diffusion of self-propelled particles in directed random environments. Physical Review E, 2014, 90, 030701.	2.1	33
93	Do strange kinetics imply unusual thermodynamics?. Physical Review E, 2001, 64, 021107.	2.1	32
94	Continuous Time Random Walk, Mittag-Leffler Waiting Time and Fractional Diffusion: Mathematical Aspects., 0,, 93-127.		32
95	Inertia triggers nonergodicity of fractional Brownian motion. Physical Review E, 2021, 104, 024115.	2.1	32
96	Continuum description of a contact infection spread in a SIR model. Mathematical Biosciences, 2007, 208, 205-215.	1.9	31
97	Non-uniqueness of the first passage time density of Lévy random processes. Journal of Physics A, 2004, 37, L609-L615.	1.6	30
98	First passage time of Nexcluded-volume particles on a line. Physical Review E, 2005, 72, 041102.	2.1	30
99	Spread of infectious diseases in directed and modular metapopulation networks. Physical Review E, 2012, 85, 066111.	2.1	30
100	Stationary states in single-well potentials under symmetric Lévy noises. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P07008.	2.3	29
101	Dynamics of Ethanol and Water Mixtures Observed in a Self-Adjusting Molecularly Thin Slit Pore. Langmuir, 2014, 30, 3455-3459.	3.5	29
102	Distribution of striation thicknesses in reacting lamellar systems. Physical Review A, 1991, 43, 6545-6549.	2.5	28
103	Mesoscopic description of reactions for anomalous diffusion: a case study. Journal of Physics Condensed Matter, 2007, 19, 065118.	1.8	28
104	Reaction-subdiffusion equations for the A⇌ Breaction. Physical Review E, 2008, 77, 032102.	2.1	28
105	An improved scheme for a Robin boundary condition in discrete-time random walk algorithms. Journal of Computational Physics, 2018, 374, 1152-1165.	3.8	28
106	Statistical Model for Surface Fracture. Europhysics Letters, 1993, 22, 487-492.	2.0	27
107	Analysis of a one-dimensional fracture model. Journal of Physics A, 1993, 26, 4521-4537.	1.6	27
108	Fractal properties of anomalous diffusion in intermittent maps. Physical Review E, 2007, 75, 036213.	2.1	27

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109	Statistical mechanics of entropic forces: disassembling a toy. European Journal of Physics, 2010, 31, 1353-1367.	0.6	27
110	Relation between generalized diffusion equations and subordination schemes. Physical Review E, 2021, 103, 032133.	2.1	27
111	Reversible fluctuation rectifier. Physical Review E, 1999, 60, 4946-4949.	2.1	26
112	Two scaling domains in multiple cracking phenomena. Physical Review E, 2000, 62, 7807-7810.	2.1	26
113	Percolation of spatially constrained Erdős-Rényi networks with degree correlations. Physical Review E, 2014, 89, 012116.	2.1	26
114	Fluctuation-Dominated Kinetics under Stirring. Physical Review Letters, 1997, 78, 741-744.	7.8	25
115	Two-particle dispersion by correlated random velocity fields. Physical Review E, 1999, 60, 5528-5532.	2.1	25
116	Multi-point distribution function for the continuous time random walk. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P08001-P08001.	2.3	25
117	Front propagation inA+Bâ†'2Areaction under subdiffusion. Physical Review E, 2008, 78, 011128.	2.1	25
118	Unequal Twins: Probability Distributions Do Not Determine Everything. Physical Review Letters, 2011, 107, 260601.	7.8	25
119	Continuous-time random walks under power-law resetting. Physical Review E, 2020, 101, 062117.	2.1	25
120	Kinetics in coagulation-annihilation processes. Physical Review E, 1994, 50, 2335-2338.	2.1	24
121	Irreversible and reversible modes of operation of deterministic ratchets. Physical Review E, 2001, 63, 021107.	2.1	24
122	Lévy ratchet in a weak noise limit: Theory and simulation. European Physical Journal: Special Topics, 2010, 191, 223-237.	2.6	24
123	Distribution of first-passage times to specific targets on compactly explored fractal structures. Physical Review E, 2011, 83, 020104.	2.1	24
124	Effective surface motion on a reactive cylinder of particles that perform intermittent bulk diffusion. Journal of Chemical Physics, 2011, 134, 204116.	3.0	24
125	Nanophase Separation in Monomolecularly Thin Water–Ethanol Films Controlled by Graphene. Nano Letters, 2015, 15, 1171-1176.	9.1	24
126	Emergence of Polarized Ideological Opinions in Multidimensional Topic Spaces. Physical Review X, 2021, 11, .	8.9	24

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127	Editorial: Ecological complex systems. European Physical Journal B, 2008, 65, 307-314.	1.5	23
128	Inhomogeneous broadening of electronic transitions in a liquid helium bubble: The role of shape fluctuations. Journal of Low Temperature Physics, 1993, 90, 319-330.	1.4	22
129	Dynamics of a polyampholyte hooked around an obstacle. Physical Review E, 1997, 56, R2390-R2393.	2.1	22
130	Correlations in scale-free networks: Tomography and percolation. Physical Review E, 2003, 68, 036119.	2.1	22
131	First passage time densities in non-Markovian models with subthreshold oscillations. Europhysics Letters, 2006, 73, 691-697.	2.0	22
132	Growing networks under geographical constraints. Physical Review E, 2007, 75, 046117.	2.1	22
133	Anomalous Relaxation in Complex Systems: From Stretched to Compressed Exponentials., 0,, 327-345.		22
134	Gini characterization of extreme-value statistics. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 4462-4472.	2.6	22
135	On the spectral distribution of the energy of equilibrium radiation in matter. JETP Letters, 2015, 101, 299-302.	1.4	22
136	Scaled geometric Brownian motion features sub- or superexponential ensemble-averaged, but linear time-averaged mean-squared displacements. Physical Review E, 2021, 103, 062127.	2.1	22
137	Epidemics with mutating infectivity on small-world networks. Scientific Reports, 2020, 10, 5919.	3.3	22
138	Degree Correlations Optimize Neuronal Network Sensitivity to Sub-Threshold Stimuli. PLoS ONE, 2015, 10, e0121794.	2.5	22
139	Fluctuation statistics in the diffusion-limitedA+B→0 reaction. Physical Review A, 1990, 42, 7075-7079.	2.5	21
140	Reactions in systems with mixing. Journal of Physics A, 1991, 24, 3687-3700.	1.6	21
141	Linear response to perturbation of nonexponential renewal process: A generalized master equation approach. Physical Review E, 2006, 73, 067102.	2.1	21
142	Interspike interval densities of resonate and fire neurons. BioSystems, 2007, 89, 63-68.	2.0	21
143	Not hotter than hot. Nature Physics, 2014, 10, 7-8.	16.7	20
144	Discreteness effects on the front propagation in the A + B â†' 2 A reaction in 3 dimensions. Europhysics Letters, 1998, 44, 7-12.	2.0	19

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145	Necessary conditions of the equivalence of canonical and grand canonical ensembles in Coulomb system thermodynamics. Physics of Plasmas, 2012, 19, .	1.9	19
146	Infections on Temporal Networks—A Matrix-Based Approach. PLoS ONE, 2016, 11, e0151209.	2.5	19
147	Front propagation in one-dimensional autocatalytic reactions: The breakdown of the classical picture at small particle concentrations. Physical Review E, 2000, 62, 141-145.	2.1	18
148	Cyclization of a polymer with charged reactive end groups. Journal of Chemical Physics, 2001, 114, 5043-5048.	3.0	18
149	SanchoetÂal.Reply:. Physical Review Letters, 2005, 94, .	7.8	18
150	Blowing DNA Bubbles. Nano Letters, 2006, 6, 2561-2566.	9.1	18
151	Continuous-time random walks with internal dynamics and subdiffusive reaction-diffusion equations. Physical Review E, 2008, 78, 060102.	2.1	18
152	Nonspectral Relaxation in One Dimensional Ornstein-Uhlenbeck Processes. Physical Review Letters, 2013, 110, 150602.	7.8	18
153	Extreme fluctuation dominance in biology: On the usefulness of wastefulness. Physics of Life Reviews, 2019, 28, 88-91.	2.8	18
154	Finite-size effects in Barab $ ilde{A}_i$ si-Albert growing networks. Physical Review E, 2007, 75, 056114.	2.1	17
155	Statistics and the single molecule. Physics Magazine, 0, 1, .	0.1	17
156	Communication: Impact of inertia on biased Brownian transport in confined geometries. Journal of Chemical Physics, 2012, 136, 111102.	3.0	17
157	Brownian motion under noninstantaneous resetting in higher dimensions. Physical Review E, 2020, 102, 032129.	2.1	17
158	Fragmentation of viscoelastic surface layers. Europhysics Letters, 1997, 40, 275-280.	2.0	16
159	Front form and velocity in a one-dimensional autocatalyticA+Bâ†'2Areaction. Physical Review E, 1997, 56, 4130-4134.	2.1	16
160	Understanding anomalous transport in intermittent maps: From continuous-time random walks to fractals. Europhysics Letters, 2005, 70, 63-69.	2.0	16
161	Sampling from scale-free networks and the matchmaking paradox. Physical Review E, 2010, 81, 026107.	2.1	16
162	Active particles forced by an asymmetric dichotomous angle drive. Physical Review E, 2012, 85, 052101.	2.1	16

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163	Convergence to a Gaussian by Narrowing of Central Peak in Brownian yet Non-Gaussian Diffusion in Disordered Environments. Physical Review Letters, 2021, 127, 120601.	7.8	16
164	Restoring ergodicity of stochastically reset anomalous-diffusion processes. Physical Review Research, 2022, 4, .	3.6	16
165	Spatial organization in the A+B→0 reaction under confined-scale mixing. Journal of Chemical Physics, 1997, 107, 843-848.	3.0	15
166	Excitation Trapping in Dynamically Disordered Polymers. Macromolecules, 1998, 31, 2521-2526.	4.8	15
167	Competitive evaporation in arrays of droplets. Physical Review E, 1998, 57, 6198-6201.	2.1	15
168	Scaling of the rupture dynamics of polymer chains pulled at one end at a constant rate. Physical Review E, 2009, 79, 021803.	2.1	15
169	Normal and anomalous diffusion in random potential landscapes. Physical Review E, 2012, 85, 050104.	2.1	15
170	Estimation of the smallest eigenvalue in fractional escape problems: Semi-analytics and fits. Computer Physics Communications, 2015, 187, 29-37.	7.5	15
171	Non-monotonous Wetting of Graphene–Mica and MoS ₂ –Mica Interfaces with a Molecular Layer of Water. Langmuir, 2018, 34, 15228-15237.	3.5	15
172	Influence of interface hydration on sliding of graphene and molybdenum-disulfide single-layers. Journal of Colloid and Interface Science, 2019, 540, 142-147.	9.4	15
173	Continuous-time random walks in an oscillating field: Field-induced dispersion and the death of linear response. Chaos, Solitons and Fractals, 2007, 34, 81-86.	5.1	14
174	Front propagation in a one-dimensional autocatalytic reaction-subdiffusion system. Physical Review E, 2009, 79, 041135.	2.1	14
175	Diffusion through Bifurcations in Oscillating Nano- and Microscale Contacts: Fundamentals and Applications. Physical Review X, 2015, 5, .	8.9	14
176	Insight into the wetting of a graphene-mica slit pore with a monolayer of water. Physical Review B, 2017, 95, .	3.2	14
177	Spatial correlations and cross sections of clusters in the A+Bâ†'Oreaction. Physical Review E, 1996, 53, 3167-3172.	2.1	13
178	Kinetics of the A+Bâ†'0 reaction under steady and turbulent flows. Journal of Chemical Physics, 1996, 105, 10925-10933.	3.0	13
179	A perturbation approach to transport in discrete ratchet systems. Journal of Physics A, 1999, 32, 2541-2550.	1.6	13
180	An analysis of disorder in thin silicon oxide coatings. Europhysics Letters, 1999, 48, 280-285.	2.0	13

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181	Patterns of fragmentation for polymer coatings. Journal of Macromolecular Science - Physics, 1999, 38, 971-980.	1.0	13
182	Spectra and waiting-time densities in firing resonant and nonresonant neurons. Physical Review E, 2004, 70, 031916.	2.1	13
183	Hopping on a zig-zag course. European Physical Journal: Special Topics, 2008, 157, 33-42.	2.6	13
184	Diversity of Poissonian populations. Physical Review E, 2010, 81, 011122.	2.1	13
185	Antipersistent Random Walk in a Two State Flashing Magnetic Potential. Physical Review Letters, 2012, 109, 070601.	7.8	13
186	On the fractal characterization of Paretian Poisson processes. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 3043-3053.	2.6	13
187	Eliminating inertia in a stochastic model of a micro-swimmer with constant speed. European Physical Journal: Special Topics, 2017, 226, 2039-2055.	2.6	13
188	Influencers identification in complex networks through reaction-diffusion dynamics. Physical Review E, 2018, 98, .	2.1	13
189	Locally temperature - driven mathematical model of West Nile virus spread in Germany. Journal of Theoretical Biology, 2020, 488, 110117.	1.7	13
190	The A + B .fwdarw. O Reaction under Short-Range Interactions. The Journal of Physical Chemistry, 1994, 98, 7256-7259.	2.9	12
191	Universal scaling and nonlinearity in surface layer fragmentation. Physical Review E, 2000, 61, 3216-3219.	2.1	12
192	Competition between L \tilde{A} @vy jumps and continuous drift. Physica A: Statistical Mechanics and Its Applications, 2003, 330, 46-52.	2.6	12
193	The matchmaking paradox: a statistical explanation. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 055001.	2.1	12
194	Configurational subdiffusion of peptides: A network study. Physical Review E, 2011, 83, 021902.	2.1	12
195	Relaxation to stationary states for anomalous diffusion. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 4549-4557.	3.3	12
196	Diffusion of active particles with stochastic torques modeled as <i <math="">\hat{l} ± </i> -stable noise. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 034003.	2.1	12
197	Underdamped stochastic harmonic oscillator driven by Lévy noise. Physical Review E, 2017, 96, 042118.	2.1	12
198	Natural and Modified Forms of Distributed-Order Fractional Diffusion Equations., 2011,, 107-127.		12

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199	Kinetic Aspects of Interacting Reacting Species. Europhysics Letters, 1993, 21, 885-890.	2.0	11
200	Thermally activated breakdown in a simple polymer model. Physical Review E, 2010, 81, 031804.	2.1	11
201	Fluctuationâ€dominated A+Bâ†'0 kinetics under shortâ€ranged interparticle interactions. Journal of Chemical Physics, 1996, 105, 6304-6314.	3.0	10
202	Infection fronts in contact disease spread. European Physical Journal B, 2008, 65, 353-359.	1.5	10
203	Asymptotic front behavior in an <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi><mml:mi>++</mml:mi>B<mml:mo>â†'B (mml:mi> (mml:mi) (mml:mi)</mml:mo></mml:math>	c/r <mark>aml:</mark> mo:	> < no ml:mn > 2
204	Model of lateral diffusion in ultrathin layered films. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 5095-5101.	2.6	10
205	Anomalous transport in cellular flows: The role of initial conditions and aging. Physical Review E, 2016, 94, 032128.	2.1	10
206	What information is contained in the fluorescence correlation spectroscopy curves, and where. Physical Review E, 2016, 94, 022407.	2.1	10
207	What is the alternative to the Alexander–Orbach relation?. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 095003.	2.1	10
208	Mean field model of coagulation and annihilation reactions in a medium of quenched traps: Subdiffusion. Physical Review E, 2009, 79, 051113.	2.1	9
209	Velocity Distributions and Kinetic Equations for Plasmas Including Levy Type Power Law Tails. Contributions To Plasma Physics, 2009, 49, 704-712.	1.1	9
210	Generalized fluctuation-dissipation theorem as a test of the Markovianity of a system. Europhysics Letters, 2017, 118, 20001.	2.0	9
211	Non-Gaussian, transiently anomalous, and ergodic self-diffusion of flexible dumbbells in crowded two-dimensional environments: Coupled translational and rotational motions. Physical Review E, 2021, 104, 064603.	2.1	9
212	Models for cracking of polymer coatings. Macromolecular Symposia, 1994, 81, 235-248.	0.7	8
213	Dispersion of passive particles by a quasi-two-dimensional turbulent flow. Physical Review E, 1999, 59, 5412-5416.	2.1	8
214	Disorder and plasticity in the fragmentation of coatings. Physical Review E, 2001, 64, 016109.	2.1	8
215	Periodic driving controls random motion of Brownian steppers. Journal of Physics Condensed Matter, 2005, 17, S3661-S3672.	1.8	8
216	On Hilfer's objection to the fractional time diffusion equation. Physica A: Statistical Mechanics and Its Applications, 2007, 373, 231-236.	2.6	8

#	Article	IF	Citations
217	Effective-medium approximation for lattice random walks with long-range jumps. Physical Review E, 2016, 94, 012135.	2.1	8
218	Mean squared displacement in a generalized Lévy walk model. Physical Review E, 2019, 100, 012117.	2.1	8
219	Large deviations in continuous-time random walks. Physical Review E, 2021, 103, 042116.	2.1	8
220	Paradigm Shift of the Molecular Dynamics Concept in the Cell Membrane: High-Speed Single-Molecule Tracking Revealed the Partitioning of the Cell Membrane., 0,, 545-574.		7
221	Convoluted Gauss-Levy distributions and exploding Coulomb clusters. European Physical Journal: Special Topics, 2010, 187, 157-170.	2.6	7
222	Tracer diffusion inside fibrinogen layers. Journal of Chemical Physics, 2014, 140, 044706.	3.0	7
223	Effects of tunneling and multiphoton transitions on squeezed-state generation in bistable driven systems. Physical Review A, 2019, 99, .	2.5	7
224	Reversible Switching of Charge Transfer at the Graphene–Mica Interface with Intercalating Molecules. ACS Nano, 2020, 14, 11594-11604.	14.6	7
225	Continuous-time random walk of a rigid triangle. Journal of Physics A, 1995, 28, 6645-6653.	1.6	6
226	Relation between the probability density and other properties of a stationary random process. Physical Review E, 1999, 60, 3402-3404.	2.1	6
227	Comment on "Anomalous Heat Conduction and Anomalous Diffusion in One-Dimensional Systems― Physical Review Letters, 2004, 92, 089401; author reply 089402.	7.8	6
228	Self-Sorting of Polyelectrolyteâ^'Amphiphile Complexes on a Graphite Surface. Macromolecules, 2007, 40, 5182-5186.	4.8	6
229	Time averages in continuous-time random walks. Physical Review E, 2017, 95, 022108.	2.1	6
230	Tunneling current induced squeezing of the single-molecule vibrational mode. Physical Review B, 2019, 100, .	3.2	6
231	Spectral energy distribution of the equilibrium radiation and its asymptotic behavior in ideal gaseous plasmas. Physics of Plasmas, 2020, 27, 022106.	1.9	6
232	A dumbbell's random walk in continuous time. Journal of Physics A, 1994, 27, 7733-7738.	1.6	5
233	Tension and mobility of a DNA fragment in the lakes-straits model. Macromolecular Theory and Simulations, 1995, 4, 145-154.	1.4	5
234	Exact enumeration of all conformations of a heteropolymer chain in a prescribed, non-compact volume. Journal of Chemical Physics, 1997, 106, 7829-7833.	3.0	5

#	Article	IF	CITATIONS
235	Internal friction and mode relaxation in a simple chain model. Journal of Chemical Physics, 2009, 131, 235104.	3.0	5
236	Non-monotonic dependence of the polymer rupture force on molecule chain length. Europhysics Letters, 2009, 86, 28001.	2.0	5
237	On the relation between event-based and time-based current statistics. Europhysics Letters, 2010, 89, 10008.	2.0	5
238	Robust linear regression with broad distributions of errors. Physica A: Statistical Mechanics and Its Applications, 2015, 434, 257-267.	2.6	5
239	Nonspectral modes and how to find them in the Ornstein-Uhlenbeck process with white \hat{l} 4-stable noise. Physical Review E, 2016, 93, 052104.	2.1	5
240	Ticks on the Run: A Mathematical Model of Crimean-Congo Haemorrhagic Fever (CCHF)—Key Factors for Transmission. Epidemiologia, 2022, 3, 116-134.	2.2	5
241	Atomic resolution with high-eigenmode tapping mode atomic force microscopy. Physical Review Research, 2022, 4, .	3 . 6	5
242	Surface of liquid helium as a trap for rydberg atom. Mechanisms of relaxation. Zeitschrift FÃ $\frac{1}{4}$ r Physik D-Atoms Molecules and Clusters, 1989, 14, 173-177.	1.0	4
243	Diffusion-controlled reactionA+Bâ†'0 on Peano curves. Physical Review A, 1991, 43, 5698-5701.	2.5	4
244	Memory Effects in Diffusion-Controlled Reactions. Europhysics Letters, 1994, 27, 495-500.	2.0	4
245	The mobility of negative charges in liquid hydrogen. Journal of Low Temperature Physics, 1994, 95, 683-694.	1.4	4
246	Statistical features in the lakes-straits model and the influence of hernias. Electrophoresis, 1996, 17, 1060-1064.	2.4	4
247	Particle dispersion in synthetic turbulent flows. Physical Review E, 2000, 62, 4997-5005.	2.1	4
248	Anomalous Molecular Displacement Laws in Porous Media and Polymers Probed by Nuclear Magnetic Resonance Techniques., 0,, 485-518.		4
249	On anomalous diffusion in a plasma in velocity space. Physics of Plasmas, 2010, 17, .	1.9	4
250	Evidence of Rouse-like dynamics in magnetically ratchetting colloidal chains. Soft Matter, 2011, 7, 7944.	2.7	4
251	Superdiffusion in 2D open-horizon billiards with stochastically oscillating boundaries. Europhysics Letters, 2012, 98, 10006.	2.0	4
252	Effective pair potential for atoms in the Coulomb model of substance. Europhysics Letters, 2013, 101, 35002.	2.0	4

#	Article	IF	Citations
253	Diffusion of small particles in a solid polymeric medium. Physical Review E, 2013, 88, 022120.	2.1	4
254	Spectral properties of the fractional Fokker-Planck operator for the LÃ@vy flight in a harmonic potential. European Physical Journal B, 2014, 87, 1.	1.5	4
255	Taming Lévy flights in confined crowded geometries. Journal of Chemical Physics, 2015, 142, 164904.	3.0	4
256	A model of return intervals between earthquake events. Europhysics Letters, 2016, 114, 60003.	2.0	4
257	Spot variation fluorescence correlation spectroscopy by data post-processing. Scientific Reports, 2017, 7, 5614.	3.3	4
258	Transport on intermediate time scales in flows with cat's eye patterns. Physical Review E, 2017, 96, 062128.	2.1	4
259	Enhanced excitation of a driven bistable system induced by spectrum degeneracy. Physical Review A, 2019, 100, .	2.5	4
260	Statistical properties of intermittent bursts in the Texas Helimak. Physics of Plasmas, 2019, 26, 052301.	1.9	4
261	Inhomogeneous parametric scaling and variable-order fractional diffusion equations. Physical Review E, 2020, 102, 012133.	2.1	4
262	Fluctuation-dominated kinetics in the a+b?O reaction between immobile particles. Journal of Statistical Physics, 1991, 65, 849-857.	1.2	3
263	Bistability of Polymers in Pores. Macromolecules, 1996, 29, 4777-4781.	4.8	3
264	Front propagation in the one-dimensional autocatalyticA+Bâ†'2Areaction with decay. Physical Review E, 1999, 59, 2561-2565.	2.1	3
265	Modeling coatings under substrate compression. Physical Review B, 1999, 59, 8541-8550.	3.2	3
266	Walking on ratchets: a model of two Brownian motors with bistable coupling., 2003, 5114, 20.		3
267	Anomalous Heat Conduction. , 0, , 293-321.		3
268	Money Circulation Science– Fractional Dynamics in Human Mobility. , 0, , 459-483.		3
269	Application of hyperbolic scaling for calculation of reaction-subdiffusion front propagation. Physical Review E, 2012, 86, 022101.	2.1	3
270	Onsagers Fluctuation Theory and New Developments Including Non-equilibrium L'evy Fluctuations. Acta Physica Polonica B, 2013, 44, 859.	0.8	3

#	Article	IF	Citations
271	Canonical fitness model for simple scale-free graphs. Physical Review E, 2013, 87, 022806.	2.1	3
272	Reconstructing interaction potentials in thin films from real-space images. Physical Review E, 2016, 93, 043306.	2.1	3
273	Population equations for degree-heterogenous neural networks. Physical Review E, 2017, 96, 052306.	2.1	3
274	Reconstruction of substrate's diffusion landscape by the wavelet analysis of single particle diffusion tracks. Physica A: Statistical Mechanics and Its Applications, 2019, 533, 122102.	2.6	3
275	Shaping surfaces and interfaces of 2D materials on mica with intercalating water and ethanol. Molecular Physics, 2021, 119, .	1.7	3
276	Localisation in the Anderson model with correlated site energies. Journal of Physics C: Solid State Physics, 1983, 16, 893-899.	1.5	2
277	Special facets of diffusion and energy transfer in macromolecular systems. European Physical Journal D, 1998, 48, 487-493.	0.4	2
278	ANOMALOUS DIFFUSION AND GENERALIZED DIFFUSION EQUATIONS. Fluctuation and Noise Letters, 2005, 05, L275-L282.	1.5	2
279	Steady-State Luminescence of Polymers. Macromolecules, 2005, 38, 3504-3510.	4.8	2
280	Data scattering in scanning tunneling spectroscopy. Ultramicroscopy, 2008, 109, 85-90.	1.9	2
281	Electric Microfield Distributions in Alkali Plasmas with Account of the Ion Structure. Contributions To Plasma Physics, 2009, 49, 388-402.	1.1	2
282	Molecular dynamic simulations of electric microfield distributions in a nonideal electron-positron plasma. Plasma Physics Reports, 2010, 36, 1161-1166.	0.9	2
283	Collective escape processes in many-particle systems. European Physical Journal: Special Topics, 2010, 191, 187-210.	2.6	2
284	Statistics of Time-Dependent Rupture of Single ds-DNA. Journal of Physical Chemistry B, 2013, 117, 8875-8879.	2.6	2
285	Bulk-mediated Surface Diffusion on a Cylinder in the Fast Exchange Limit. Mathematical Modelling of Natural Phenomena, 2013, 8, 114-126.	2.4	2
286	Sorption of small molecules in polymeric media. Physica A: Statistical Mechanics and Its Applications, 2016, 464, 54-63.	2.6	2
287	Adiabatic elimination of inertia of the stochastic microswimmer driven by <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>α</mml:mi></mml:math> -stable noise. Physical Review E, 2017, 96, 042610.	2.1	2
288	Life time of catch bond clusters. Physica A: Statistical Mechanics and Its Applications, 2018, 507, 398-405.	2.6	2

#	Article	IF	Citations
289	Path-integral formulation of spreading processes in complex networks. European Physical Journal: Special Topics, 0 , 1 .	2.6	2
290	Anomalous Diffusion on Fractal Networks. , 2012, , 13-25.		2
291	Simulations of Chemical Reactions. , 1996, , 102-120.		2
292	Non-equilibrium Escape Problems Under Bivariate \$alpha \$-stable Noises. Acta Physica Polonica B, 2016, 47, 1327.	0.8	2
293	Universal fluctuations and ergodicity of generalized diffusivity on critical percolation clusters. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 345001.	2.1	2
294	Detecting temporal correlations in hopping dynamics in Lennard–Jones liquids. Journal of Physics A: Mathematical and Theoretical, 0, , .	2.1	2
295	Mobility and lifetime of negative charges in liquid H2. European Physical Journal B, 1995, 98, 437-438.	1.5	1
296	Patterns of motion for random walkers under holonomic constraints. Journal of Physics A, 1997, 30, 5735-5742.	1.6	1
297	Evaporation and coarsening dynamics with open boundaries. Physical Review E, 1999, 59, 189-193.	2.1	1
298	Scaling Laws in the Fragmentation of Disordered Layersâ€. Journal of Physical Chemistry B, 2000, 104, 3881-3886.	2.6	1
299	One-Dimensional Space-Discrete Transport Subject toÂLévy Perturbations. Journal of Statistical Physics, 2008, 133, 205-215.	1.2	1
300	Random Processes with Infinite Moments. , 0, , 75-91.		1
301	Dynamical localization and eigenstate localization in trap models. European Physical Journal B, 2014, 87, 1.	1.5	1
302	A statistical study of gyro-averaging effects in a reduced model of drift-wave transport. Physics of Plasmas, 2016, 23, 082308.	1.9	1
303	Direct and inverse problems in dispersive time-of-flight photocurrent revisited. European Physical Journal B, 2017, 90, 1.	1.5	1
304	Reaction-diffusion on random spatial networks with scale-free jumping rates via effective medium theory. Physical Review E, 2018, 98, .	2.1	1
305	Modeling the voltage distribution in a non-locally but globally electroneutral confined electrolyte medium: applications for nanophysiology. Journal of Mathematical Biology, 2021, 82, 65.	1.9	1
306	Sub-diffusive behavior in the Standard Map. European Physical Journal: Special Topics, 2021, 230, 2765-2773.	2.6	1

#	Article	IF	CITATIONS
307	Suppression of Fluctuation-Dominated Kinetics by Mixing. , 1992, , 53-65.		1
308	Nonscaling displacement distributions as may be seen in fluorescence correlation spectroscopy. Physical Review E, 2017, 95, 052139.	2.1	1
309	Reactions under mixing in viscous polymeric media. Makromolekulare Chemie Macromolecular Symposia, 1991, 50, 19-29.	0.6	O
310	Study of a bimolecular annihilation process for coarsening reactants. Journal of Chemical Physics, 1999, 110, 6458-6462.	3.0	0
311	Efficiency of Rectification: Reversible vs. Irreversible Regimes. AIP Conference Proceedings, 2002, , .	0.4	O
312	Anomalous Transport in Glass-Forming Liquids. , 0, , 347-366.		0
313	Electric Microfield Distributions in Alkali Plasmas with Account of the Ion Structure in a Moderately Coupled Approximation. Contributions To Plasma Physics, 2011, 51, 386-390.	1.1	O
314	$\ddot{\text{I}}$ -4theory Hamiltonian for fluids: Application to the surface tension near the critical point. Physical Review B, 2020, 101, .	3.2	0
315	Front Propagation in an Autocatalytic Reaction-Subdiffusion System. , 2012, , 239-247.		O
316	Structure of Layered Systems Under Reactions. , 1991, , 203-206.		0
317	Multiphoton resonance in a driven Kerr oscillator in the presence of high-order nonlinearities. Physical Review A, 2021, 104, .	2.5	O