Pierre Gaspard

List of Publications by Year in descending order

211 papers	9,857 citations	31949 53 h-index	46771 89 g-index
225 all docs	225 docs citations	225 times ranked	4041 citing authors

#	ARTICLE	IF	CITATIONS
1	Wavepacket dancing: Achieving chemical selectivity by shaping light pulses. Chemical Physics, 1989, 139, 201-220.	0.9	645
2	Scattering from a classically chaotic repellor. Journal of Chemical Physics, 1989, 90, 2225-2241.	1.2	324
3	Transport properties, Lyapunov exponents, and entropy per unit time. Physical Review Letters, 1990, 65, 1693-1696.	2.9	256
4	The 2020 motile active matter roadmap. Journal of Physics Condensed Matter, 2020, 32, 193001.	0.7	242
5	Fluctuation theorem for nonequilibrium reactions. Journal of Chemical Physics, 2004, 120, 8898-8905.	1.2	210
6	Bifurcation phenomena near homoclinic systems: A two-parameter analysis. Journal of Statistical Physics, 1984, 35, 697-727.	0.5	191
7	Noise, chaos, and $(\hat{\mu}, \varepsilon)$-entropy per unit time. Physics Reports, 1993, 235, 291-343.	10.3	188
8	Time-Reversed Dynamical Entropy and Irreversibility in Markovian Random Processes. Journal of Statistical Physics, 2004, 117, 599-615.	0.5	186
9	Semiclassical quantization of the scattering from a classically chaotic repellor. Journal of Chemical Physics, 1989, 90, 2242-2254.	1.2	183
10	Fluctuation Theorem for Currents and Schnakenberg Network Theory. Journal of Statistical Physics, 2007, 127, 107-131.	0.5	182
11	The fluctuation theorem for currents in open quantum systems. New Journal of Physics, 2009, 11, 043014.	1.2	167
12	Sporadicity: Between periodic and chaotic dynamical behaviors. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 4591-4595.	3.3	162
13	Fluctuation theorem and Onsager reciprocity relations. Journal of Chemical Physics, 2004, 121, 6167-6174.	1.2	159
14	Exact quantization of the scattering from a classically chaotic repellor. Journal of Chemical Physics, 1989, 90, 2255-2262.	1.2	158
15	Nonequilibrium generation of information in copolymerization processes. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9516-9521.	3.3	139
16	Chaotic scattering theory, thermodynamic formalism, and transport coefficients. Physical Review E, 1995, 52, 3525-3552.	0.8	137
17	Entropy Production and Time Asymmetry in Nonequilibrium Fluctuations. Physical Review Letters, 2007, 98, 150601.	2.9	135
18	Experimental evidence for microscopic chaos. Nature, 1998, 394, 865-868.	13.7	132

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19	Slippage of initial conditions for the Redfield master equation. Journal of Chemical Physics, 1999, 111, 5668-5675.	1.2	130
20	What can we learn from homoclinic orbits in chaotic dynamics?. Journal of Statistical Physics, 1983, 31, 499-518.	0.5	125
21	A fluctuation theorem for currents and non-linear response coefficients. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P02006-P02006.	0.9	122
22	Diffusion, effusion, and chaotic scattering: An exactly solvable Liouvillian dynamics. Journal of Statistical Physics, 1992, 68, 673-747.	0.5	108
23	On using shaped light pulses to control the selectivity of product formation in a chemical reaction: An application to a multiple level system. Journal of Chemical Physics, 1990, 93, 1670-1680.	1.2	107
24	Parametric motion of energy levels: Curvature distribution. Physical Review A, 1990, 42, 4015-4027.	1.0	105
25	Chaotic scattering theory of transport and reaction-rate coefficients. Physical Review E, 1995, 51, 28-35.	0.8	101
26	Biochemical clocks and molecular noise: Theoretical study of robustness factors. Journal of Chemical Physics, 2002, 116, 10997-11010.	1.2	98
27	Methods of Calculation of a Friction Coefficient: Application to Nanotubes. Physical Review Letters, 2003, 91, 185503.	2.9	92
28	Chaotic scattering and diffusion in the Lorentz gas. Physical Review E, 1995, 51, 5332-5352.	0.8	87
29	Topological Hofstadter insulators in a two-dimensional quasicrystal. Physical Review B, 2015, 91, .	1.1	85
30	Homoclinic orbits and mixed-mode oscillations in far-from-equilibrium systems. Journal of Statistical Physics, 1987, 48, 151-199.	0.5	83
31	Non-Markovian stochastic Schrödinger equation. Journal of Chemical Physics, 1999, 111, 5676-5690.	1.2	83
32	Translational dynamics and friction in double-walled carbon nanotubes. Physical Review B, 2006, 73, .	1.1	82
33	The modeling of mixed€mode and chaotic oscillations in electrochemical systems. Journal of Chemical Physics, 1992, 96, 7797-7813.	1.2	81
34	On the Level Spacing Distribution in Quantum Graphs. Journal of Statistical Physics, 2000, 101, 283-319.	0.5	81
35	Fick's law and fractality of nonequilibrium stationary states in a reversible multibaker map. Journal of Statistical Physics, 1995, 81, 935-987.	0.5	80
36	Quantum Work Relations and Response Theory. Physical Review Letters, 2008, 100, 230404.	2.9	75

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37	Fluctuation theorem for transport in mesoscopic systems. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P01011-P01011.	0.9	73
38	Entropy production in open volume-preserving systems. Journal of Statistical Physics, 1997, 88, 1215-1240.	0.5	71
39	Mixedâ€mode oscillations and incomplete homoclinic scenarios to a saddle focus in the indium/thiocyanate electrochemical oscillator. Journal of Chemical Physics, 1992, 97, 8250-8260.	1.2	69
40	Ruelle classical resonances and dynamical chaos: The three- and four-disk scatterers. Physical Review A, 1992, 45, 8383-8397.	1.0	68
41	Fluctuation theorems and the nonequilibrium thermodynamics of molecular motors. Physical Review E, 2006, 74, 011906.	0.8	68
42	The correlation time of mesoscopic chemical clocks. Journal of Chemical Physics, 2002, 117, 8905-8916.	1.2	67
43	Spectral signature of the pitchfork bifurcation: Liouville equation approach. Physical Review E, 1995, 51, 74-94.	0.8	65
44	Hydrodynamic modes as singular eigenstates of the Liouvillian dynamics: Deterministic diffusion. Physical Review E, 1996, 53, 4379-4401.	0.8	65
45	Rotational Dynamics and Friction in Double-Walled Carbon Nanotubes. Physical Review Letters, 2006, 97, 186106.	2.9	64
46	Ä§ expansion for the periodic-orbit quantization of hyperbolic systems. Physical Review A, 1993, 47, R3468-R3471.	1.0	62
47	Quantum master equation for a system influencing its environment. Physical Review E, 2003, 68, 066112.	0.8	62
48	Microscopic chaos and chemical reactions. Physica A: Statistical Mechanics and Its Applications, 1999, 263, 315-328.	1.2	59
49	Toward a probabilistic approach to complex systems. Chaos, Solitons and Fractals, 1994, 4, 41-57.	2.5	58
50	Local birth of homoclinic chaos. Physica D: Nonlinear Phenomena, 1993, 62, 94-122.	1.3	57
51	Multivariate fluctuation relations for currents. New Journal of Physics, 2013, 15, 115014.	1.2	57
52	Solitonlike structure in the parametric distortions of bounded-system energy spectra. Physical Review Letters, 1989, 63, 930-933.	2.9	54
53	Overtone spectroscopy and dynamics in monodeuteroacetylene (C2HD). Chemical Physics, 1995, 190, 419-445.	0.9	54
54	Fluctuation theorems for capacitively coupled electronic currents. Physical Review B, 2011, 84, .	1.1	54

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55	The stochastic chemomechanics of the -ATPase molecular motor. Journal of Theoretical Biology, 2007, 247, 672-686.	0.8	52
56	Complexity in the bifurcation structure of homoclinic loops to a saddle-focus. Nonlinearity, 1997, 10, 409-423.	0.6	51
57	Molecular transition state, resonances, and periodicâ€orbit theory. Journal of Chemical Physics, 1994, 100, 6395-6411.	1.2	50
58	Nanometric chemical clocks. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3006-3010.	3.3	50
59	Generation of a countable set of homoclinic flows through bifurcation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 97, 1-4.	0.9	48
60	Oscillations and Bistability in the Catalytic Formation of Water on Rhodium in High Electric Fields. Journal of Physical Chemistry C, 2009, 113, 17045-17058.	1.5	45
61	Spin relaxation in a complex environment. Physical Review E, 2003, 68, 066113.	0.8	44
62	Heat Conduction and Fourierâ€™s Law by Consecutive Local Mixing and Thermalization. Physical Review Letters, 2008, 101, 020601.	2.9	44
63	Hamiltonian dynamics, nanosystems, and nonequilibrium statistical mechanics. Physica A: Statistical Mechanics and Its Applications, 2006, 369, 201-246.	1.2	42
64	Fractality of the Hydrodynamic Modes of Diffusion. Physical Review Letters, 2001, 86, 1506-1509.	2.9	41
65	Transport and Helfand moments in the Lennard-Jones fluid. I. Shear viscosity. Journal of Chemical Physics, 2007, 126, 184512.	1.2	41
66	CHEMOMECHANICAL COUPLING AND STOCHASTIC THERMODYNAMICS OF THEF_1-ATPase MOLECULAR MOTOR WITH AN APPLIED EXTERNAL TORQUE. Biophysical Reviews and Letters, 2010, 05, 163-208.	0.9	39
67	Non-Markovian stochastic SchrÃ¶dinger equations in different temperature regimes: A study of the spin-boson model. Journal of Chemical Physics, 2005, 122, 124106.	1.2	38
68	Parametric-curvature distribution in quantum kicked tops. Physical Review A, 1991, 44, 7841-7843.	1.0	37
69	Diffusion in uniformly hyperbolic one-dimensional maps and Appell polynomials. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 168, 13-17.	0.9	37
70	Entropy Production, Fractals, and Relaxation to Equilibrium. Physical Review Letters, 2000, 85, 1606-1609.	2.9	37
71	Thermodynamic time asymmetry in non-equilibrium fluctuations. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P01002-P01002.	0.9	36
72	Bursting oscillations from a homoclinic tangency in a time delay system. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 173, 386-391.	0.9	35

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73	Emergence of diffusion in finite quantum systems. Physical Review B, 2005, 71, .	1.1	35
74	Molecular information processing in nonequilibrium copolymerizations. Journal of Chemical Physics, 2009, 130, 014901.	1.2	35
75	Transport and Helfand moments in the Lennard-Jones fluid. II. Thermal conductivity. Journal of Chemical Physics, 2007, 126, 184513.	1.2	34
76	Heat conduction and Fourier's law in a class of many particle dispersing billiards. New Journal of Physics, 2008, 10, 103004.	1.2	34
77	Fluctuating chemohydrodynamics and the stochastic motion of self-diffusiophoretic particles. Journal of Chemical Physics, 2018, 148, 134104.	1.2	34
78	Hamiltonian mapping models of molecular fragmentation. The Journal of Physical Chemistry, 1989, 93, 6947-6957.	2.9	32
79	Transport and dynamics on open quantum graphs. Physical Review E, 2001, 65, 016205.	0.8	32
80	Trace Formula for Noisy Flows. Journal of Statistical Physics, 2002, 106, 57-96.	0.5	32
81	Kinetics and thermodynamics of first-order Markov chain copolymerization. Journal of Chemical Physics, 2014, 141, 044908.	1.2	32
82	Emergence of homochirality in large molecular systems. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	32
83	Brownian motion, dynamical randomness and irreversibility. New Journal of Physics, 2005, 7, 77-77.	1.2	31
84	Hydrogen negative ion: Semiclassical quantization and weak-magnetic-field effect. Physical Review A, 1993, 48, 54-69.	1.0	30
85	Chaos and hydrodynamics. Physica A: Statistical Mechanics and Its Applications, 1997, 240, 54-67.	1.2	28
86	Thermodynamic behavior of an area-preserving multibaker map with energy. Theoretical Chemistry Accounts, 1999, 102, 385-396.	0.5	28
87	Entropy production of diffusion in spatially periodic deterministic systems. Physical Review E, 2002, 66, 026110.	0.8	28
88	Transport properties of the Lorentz gas in terms of periodic orbits. Chaos, Solitons and Fractals, 1995, 6, 113-120.	2.5	27
89	Two-dimensional quantum spin Hamiltonians: Spectral properties. Physical Review E, 1994, 49, 79-98.	0.8	26
90	Field-assisted oxidation of rhodium. Chemical Physics Letters, 2008, 452, 133-138.	1.2	26

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91	Fluctuation theorem and mesoscopic chemical clocks. Journal of Chemical Physics, 2008, 128, 154506.	1.2	26
92	Influence of vibrational frequency mismatch on phase-space bottlenecks to intramolecular energy redistribution and molecular fragmentation. Journal of Chemical Physics, 1990, 92, 1775-1789.	1.2	25
93	The Molecular Transition State: From Regular to Chaotic Dynamics. The Journal of Physical Chemistry, 1995, 99, 2732-2752.	2.9	24
94	Viscosity in molecular dynamics with periodic boundary conditions. Physical Review E, 2003, 68, 041204.	0.8	24
95	Communication: Mechanochemical fluctuation theorem and thermodynamics of self-phoretic motors. Journal of Chemical Physics, 2017, 147, 211101.	1.2	24
96	Quantum Hall-like effect for cold atoms in non-Abelian gauge potentials. Europhysics Letters, 2007, 78, 60001.	0.7	23
97	The fluctuation theorem for currents in semi-Markov processes. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P11007.	0.9	23
98	Effective fluctuation theorems for electron transport in a double quantum dot coupled to a quantum point contact. Physical Review B, 2013, 88, .	1.1	23
99	Spectroscopy and intramolecular dynamics via molecular vibrogram analysis. Journal of Chemical Physics, 1995, 103, 5970-5978.	1.2	22
100	Fractal dimensions of the hydrodynamic modes of diffusion. Nonlinearity, 2001, 14, 339-358.	0.6	22
101	Exactly Solvable Model of Quantum Diffusion. Journal of Statistical Physics, 2005, 121, 463-496.	0.5	22
102	Temporal disorder and fluctuation theorem in chemical reactions. Physical Review E, 2008, 77, 031137.	0.8	22
103	Electric field induced oscillations in the catalytic water production on rhodium: A theoretical analysis. Surface Science, 2010, 604, 1353-1368.	0.8	22
104	Lyapunov exponent of ion motion in microplasmas. Physical Review E, 2003, 68, 056209.	0.8	21
105	Discussion on "Aperiodic Copolymers". ACS Macro Letters, 2016, 5, 1-3.	2.3	21
106	Chaotic scattering onC4vfour-disk billiards: Semiclassical and exact quantum theories. Physical Review E, 1994, 50, 2591-2596.	0.8	20
107	Nonlinear Schrödinger flow in a periodic potential. Physical Review E, 2000, 61, 5852-5863.	0.8	20
108	Catalytic Reduction of NO_2 with Hydrogen on Pt Field Emitter Tips: Kinetic Instabilities on the Nanoscale. Langmuir, 2010, 26, 16381-16391.	1.6	20

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109	Isometric Fluctuation Relations for Equilibrium States with Broken Symmetry. Physical Review Letters, 2014, 113, 240602.	2.9	20
110	Statistical approach to nonhyperbolic chaotic systems. Physical Review E, 1996, 54, 2474-2478.	0.8	19
111	Liouvillian dynamics of the Hopf bifurcation. Physical Review E, 2001, 64, 056232.	0.8	19
112	Viscosity in the escape-rate formalism. Physical Review E, 2003, 68, 041205.	0.8	19
113	Fluctuating Dynamics of Nanoscale Chemical Oscillations: Theory and Experiments. Journal of Physical Chemistry Letters, 2015, 6, 2189-2193.	2.1	19
114	Thermodynamics and statistical mechanics of chemically powered synthetic nanomotors. Advances in Physics: X, 2019, 4, 1602480.	1.5	19
115	Dynamics of Janus motors with microscopically reversible kinetics. Journal of Chemical Physics, 2018, 149, 024904.	1.2	18
116	The integrated number of vibrational states in acetylene (12C2H2,13C2H2,12C2D2). Molecular Physics, 2003, 101, 595-601.	0.8	17
117	On the derivation of Fourier's law in stochastic energy exchange systems. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P11021.	0.9	17
118	From single particle motion to collective dynamics in Janus motor systems. Journal of Chemical Physics, 2019, 150, 124110.	1.2	17
119	Îμ entropy for a time series of thermal turbulence. Physical Review A, 1992, 46, R3000-R3003.	1.0	16
120	Scaled spectroscopy of and highly excited states of helium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 1671-1686.	0.6	16
121	Entropy Production and Transports in a Conservative Multibaker Map with Energy. Journal of Statistical Physics, 2000, 101, 125-144.	0.5	16
122	Microscopic Chaos and Reaction-Diffusion Processes in the Periodic Lorentz Gas. Journal of Statistical Physics, 2000, 101, 161-186.	0.5	16
123	Spectral Properties of a Piecewise Linear Intermittent Map. Journal of Statistical Physics, 2002, 109, 803-820.	0.5	16
124	Fluctuation relations for equilibrium states with broken discrete symmetries. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P08021.	0.9	16
125	Template-Directed Copolymerization, Random Walks along Disordered Tracks, and Fractals. Physical Review Letters, 2016, 117, 238101.	2.9	16
126	When Do Tracer Particles Dominate the Lyapunov Spectrum?. Journal of Statistical Physics, 2002, 109, 671-704.	0.5	15

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127	Temporal ordering of nonequilibrium fluctuations as a corollary of the second law of thermodynamics. Comptes Rendus Physique, 2007, 8, 598-608.	0.3	15
128	Network and thermodynamic conditions for a single macroscopic current fluctuation theorem. Comptes Rendus Physique, 2007, 8, 579-590.	0.3	15
129	Information erasure in copolymers. Europhysics Letters, 2013, 103, 30004.	0.7	15
130	Kinetics and thermodynamics of DNA polymerases with exonuclease proofreading. Physical Review E, 2016, 93, 042420.	0.8	15
131	Quantum chaotic scattering. Scholarpedia Journal, 2014, 9, 9806.	0.3	15
132	Non-equilibrium surface pattern formation during catalytic reactions with nanoscale resolution: Investigations of the electric field influence. Catalysis Today, 2010, 154, 75-84.	2.2	14
133	Reaction kinetics in open reactors and serial transfers between closed reactors. Journal of Chemical Physics, 2018, 148, 144902.	1.2	14
134	Microreversibility, nonequilibrium current fluctuations, and response theory. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 355001.	0.7	14
135	Vibrational time recurrences in a model of acetylene 12C2H2. Journal of Chemical Physics, 1999, 110, 5619-5633.	1.2	13
136	Kinetics and thermodynamics of exonuclease-deficient DNA polymerases. Physical Review E, 2016, 93, 042419.	0.8	13
137	Fractals and dynamical chaos in a two-dimensional Lorentz gas with sinks. Physical Review E, 2001, 63, 036227.	0.8	12
138	Dynamical randomness, information, and Landauer's principle. Europhysics Letters, 2008, 81, 28004.	1.2	12
139	Scattering approach to the thermodynamics of quantum transport. New Journal of Physics, 2015, 17, 045001.	1.2	12
140	Microreversibility, fluctuations, and nonlinear transport in transistors. Physical Review E, 2019, 99, 012137.	0.8	12
141	Microscopic approach to the macrodynamics of matter with broken symmetries. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 103203.	0.9	12
142	Comment on Dynamical Randomness in Quantum Systems. Progress of Theoretical Physics Supplement, 1994, 116, 369-378.	0.2	12
143	Microscopic chaos from brownian motion?. Nature, 1999, 401, 876-876.	13.7	11
144	Diffusive Lorentz gases and multibaker maps are compatible with irreversible thermodynamics. Physica A: Statistical Mechanics and Its Applications, 2003, 323, 294-322.	1.2	11

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145	CO oxidation on electrically charged gold nanotips. Journal of Chemical Physics, 2006, 125, 214707.	1.2	11
146	DYNAMICAL CHAOS AND NONEQUILIBRIUM STATISTICAL MECHANICS. International Journal of Modern Physics B, 2001, 15, 209-235.	1.0	10
147	Field-induced CO adsorption and formation of carbonyl waves on gold nanotips. Journal of Chemical Physics, 2006, 125, 054704.	1.2	10
148	Heat transport in stochastic energy exchange models of locally confined hard spheres. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P08020.	0.9	10
149	Growth and Dissolution of Macromolecular Markov Chains. Journal of Statistical Physics, 2016, 164, 17-48.	0.5	10
150	Active Matter, Microreversibility, and Thermodynamics. Research, 2020, 2020, 9739231.	2.8	10
151	The fractality of the relaxation modes in reaction–diffusion systems. Physica D: Nonlinear Phenomena, 2002, 168-169, 266-291.	1.3	9
152	Noise-induced escape from bifurcating attractors: Symplectic approach in the weak-noise limit. Physical Review E, 2009, 80, 031147.	0.8	9
153	Stochastic approach and fluctuation theorem for ion transport. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P02057.	0.9	9
154	Nonequilibrium thermodynamics and boundary conditions for reaction and transport in heterogeneous media. Journal of Chemical Physics, 2018, 148, 194114.	1.2	9
155	The stochastic motion of self-thermophoretic Janus particles. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 074001.	0.9	9
156	Unimolecular Reactions Revisited. Israel Journal of Chemistry, 1990, 30, 23-37.	1.0	8
157	Tracking a colloidal particle for the measurement of dynamic entropies. Physica A: Statistical Mechanics and Its Applications, 2001, 296, 42-59.	1.2	8
158	Time Asymmetry in Nonequilibrium Statistical Mechanics. Advances in Chemical Physics, 2007, , 83-133.	0.3	8
159	Quantization of Chaos. Progress of Theoretical Physics Supplement, 1994, 116, 59-106.	0.2	8
160	Resonances in the photodissociation of CO_2: periodic-orbit and wavepacket analyses. Chemical Physics, 1997, 225, 259-298.	0.9	7
161	A two-stage approach to relaxation in billiard systems of locally confined hard spheres. Chaos, 2012, 22, 026117.	1.0	7
162	Fluctuation relations for equilibrium states with broken discrete or continuous symmetries. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P11018.	0.9	7

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163	Kinetics and thermodynamics of living copolymerization processes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160147.	1.6	7
164	Stochastic approach and fluctuation theorem for charge transport in diodes. Physical Review E, 2018, 97, 052138.	0.8	7
165	Microreversibility and nonequilibrium response theory in magnetic fields. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 025003.	0.7	7
166	Dynamical Chaos and Many-Body Quantum Systems. , 1992, , 19-42.		7
167	Counting statistics and microreversibility in stochastic models of transistors. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 103206.	0.9	7
168	Level curvatures and many-spin quantum systems. Chaos, Solitons and Fractals, 1995, 5, 1183-1193.	2.5	6
169	Dissipative quantum dynamics in terms of a reduced density matrix distributed over the environment energy. Europhysics Letters, 2004, 65, 742-748.	0.7	6
170	Entropy production in diffusion-reaction systems:â€ƒThe reactive random Lorentz gas. Physical Review E, 2005, 71, 036147.	0.8	6
171	Out-of-Equilibrium Nanosystems. Progress of Theoretical Physics Supplement, 2006, 165, 33-56.	0.2	6
172	Time-reversal symmetry relation for nonequilibrium flows ruled by the fluctuating Boltzmann equation. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 639-655.	1.2	6
173	Time-reversal Symmetry Relations for Fluctuating Currents in Nonequilibrium Systems. Acta Physica Polonica B, 2013, 44, 815.	0.3	6
174	Random paths and current fluctuations in nonequilibrium statistical mechanics. Journal of Mathematical Physics, 2014, 55, .	0.5	6
175	Cycles, randomness, and transport from chaotic dynamics to stochastic processes. Chaos, 2015, 25, 097606.	1.0	6
176	Iterated function systems for DNA replication. Physical Review E, 2017, 96, 042403.	0.8	6
177	Rotational effect on the lifetime of molecular resonances. Journal of Chemical Physics, 1995, 102, 6727-6734.	1.2	5
178	Nonlinear Dynamics and Chaos in Many-Particle Hamiltonian Systems. Progress of Theoretical Physics Supplement, 2003, 150, 64-80.	0.2	5
179	Fractals and dynamical chaos in a random 2D Lorentz gas with sinks. Physica D: Nonlinear Phenomena, 2004, 187, 146-164.	1.3	5
180	Fractality of the nonequilibrium stationary states of open volume-preserving systems. II. Galton boards. Physical Review E, 2009, 80, 021127.	0.8	5

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181	Broken $\boldsymbol{\mathbb{Z}}_2$ symmetries and fluctuations in statistical mechanics. Physica Scripta, 2012, 86, 058504.	1.2	5
182	Entropy production in the quantum measurement of continuous observables. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 181-184.	0.9	5
183	Thermodynamics of information processing at the molecular scale. European Physical Journal: Special Topics, 2015, 224, 825-838.	1.2	5
184	Force–velocity relation for copolymerization processes. New Journal of Physics, 2015, 17, 045016.	1.2	5
185	Molecular theory of Langevin dynamics for active self-diffusiophoretic colloids. Journal of Chemical Physics, 2020, 153, 124104.	1.2	5
186	Stochastic approach to entropy production in chemical chaos. Chaos, 2020, 30, 113103.	1.0	5
187	Field-theoretical model inspired by adiabatic-ansatz eigenvalue problems. Physical Review A, 1992, 46, 6311-6314.	1.0	4
188	The semiclassical regime of intramolecular vibrational dynamics. Journal of Chemical Physics, 1999, 110, 5611-5618.	1.2	4
189	Fractality of the nonequilibrium stationary states of open volume-preserving systems. I. Tagged particle diffusion. Physical Review E, 2009, 80, 021126.	0.8	4
190	Nonlinear transport effects in mass separation by effusion. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P03024.	0.9	4
191	A trace formula for activated escape in noisy maps. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P10026.	0.9	4
192	Scattering theory and thermodynamics of quantum transport. Annalen Der Physik, 2015, 527, 663-683.	0.9	4
193	Finite-time fluctuation theorem for diffusion-influenced surface reactions on spherical and Janus catalytic particles. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 123206.	0.9	4
194	Reconstructing stochastic attractors from nanoscale experiments on a non-equilibrium reaction. Physical Chemistry Chemical Physics, 2018, 20, 21302-21312.	1.3	4
195	Finite-time fluctuation theorem for diffusion-influenced surface reactions. Journal of Statistical Mechanics: Theory and Experiment, 2018, 2018, 083206.	0.9	4
196	Microreversibility and driven Brownian motion with hydrodynamic long-time correlations. Physica A: Statistical Mechanics and Its Applications, 2020, 552, 121823.	1.2	4
197	Template-directed growth of copolymers. Chaos, 2020, 30, 043114.	1.0	4
198	Microreversibility, nonequilibrium response, and Euler's polynomials. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 145002.	0.7	4

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199	A robust transition to homochirality in complex chemical reaction networks. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	4
200	Solvent Dynamics and Rrkm Theory of Clusters. Advances in Chemical Physics, 2007, , 391-408.	0.3	3
201	Kinetic theory and thermodynamics of template-directed copolymerization. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 024003.	0.9	3
202	Microreversibility and the statistics of currents in quantum transport. Physical Review E, 2020, 102, 022141.	0.8	3
203	Comment on â€œValidity of path thermodynamics in reactive systemsâ€• Physical Review E, 2021, 103, 016101.	0.8	3
204	Dynamical Systems Theory of Irreversibility. , 2005, , 107-157.		3
205	Spectral characterization of anomalous diffusion of a periodic piecewise linear intermittent map. Physica D: Nonlinear Phenomena, 2003, 183, 205-219.	1.3	2
206	Decoherence and kinetic processes in quantum nanosystems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 341, 435-440.	0.9	2
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