

Udo Seifert

List of Publications by Year in descending order

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198
papers

18,721
citations

13098

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133
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198
all docs

198
docs citations

198
times ranked

7200
citing authors

#	ARTICLE	IF	CITATIONS
1	Stochastic thermodynamics, fluctuation theorems and molecular machines. Reports on Progress in Physics, 2012, 75, 126001.	20.1	2,247
2	Configurations of fluid membranes and vesicles. Advances in Physics, 1997, 46, 13-137.	14.4	1,444
3	Entropy Production along a Stochastic Trajectory and an Integral Fluctuation Theorem. Physical Review Letters, 2005, 95, 040602.	7.8	1,129
4	Shape transformations of vesicles: Phase diagram for spontaneous- curvature and bilayer-coupling models. Physical Review A, 1991, 44, 1182-1202.	2.5	796
5	Thermodynamic Uncertainty Relation for Biomolecular Processes. Physical Review Letters, 2015, 114, 158101.	7.8	571
6	Adhesion of vesicles. Physical Review A, 1990, 42, 4768-4771.	2.5	457
7	Budding transitions of fluid-bilayer vesicles: The effect of area-difference elasticity. Physical Review E, 1994, 49, 5389-5407.	2.1	440
8	Stochastic thermodynamics: principles and perspectives. European Physical Journal B, 2008, 64, 423-431.	1.5	383
9	Fluid Vesicles in Shear Flow. Physical Review Letters, 1996, 77, 3685-3688.	7.8	324
10	Optimal Finite-Time Processes In Stochastic Thermodynamics. Physical Review Letters, 2007, 98, 108301.	7.8	273
11	Universal Trade-Off between Power, Efficiency, and Constancy in Steady-State Heat Engines. Physical Review Letters, 2018, 120, 190602.	7.8	253
12	Viscous Modes of Fluid Bilayer Membranes. Europhysics Letters, 1993, 23, 71-76.	2.0	249
13	Rupture of Multiple Parallel Molecular Bonds under Dynamic Loading. Physical Review Letters, 2000, 84, 2750-2753.	7.8	231
14	Shape Transformations of Giant Vesicles: Extreme Sensitivity to Bilayer Asymmetry. Europhysics Letters, 1990, 13, 659-664.	2.0	230
15	Mapping vesicle shapes into the phase diagram: A comparison of experiment and theory. Physical Review E, 1997, 55, 4458-4474.	2.1	201
16	Fluctuation-dissipation theorem in nonequilibrium steady states. Europhysics Letters, 2010, 89, 10007.	2.0	201
17	Restoring a fluctuation-dissipation theorem in a nonequilibrium steady state. Europhysics Letters, 2006, 74, 391-396.	2.0	200
18	Universal bounds on current fluctuations. Physical Review E, 2016, 93, 052145.	2.1	184

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19	Curvature-induced lateral phase segregation in two-component vesicles. <i>Physical Review Letters</i> , 1993, 70, 1335-1338.	7.8	171
20	Adhesion of Vesicles and Membranes. <i>Molecular Crystals and Liquid Crystals</i> , 1991, 202, 17-25.	0.7	157
21	Finite-time generalization of the thermodynamic uncertainty relation. <i>Physical Review E</i> , 2017, 96, 012101.	2.1	156
22	Strong Bounds on Onsager Coefficients and Efficiency for Three-Terminal Thermoelectric Transport in a Magnetic Field. <i>Physical Review Letters</i> , 2013, 110, 070603.	7.8	140
23	First and Second Law of Thermodynamics at Strong Coupling. <i>Physical Review Letters</i> , 2016, 116, 020601.	7.8	138
24	Einstein Relation Generalized to Nonequilibrium. <i>Physical Review Letters</i> , 2007, 98, 210601.	7.8	137
25	Stochastic thermodynamics of chemical reaction networks. <i>Journal of Chemical Physics</i> , 2007, 126, 044101.	3.0	136
26	Stochastic thermodynamics of bipartite systems: transfer entropy inequalities and a Maxwell's demon interpretation. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014, 2014, P02016.	2.3	136
27	Thermodynamics of Micro- and Nano-Systems Driven by Periodic Temperature Variations. <i>Physical Review X</i> , 2015, 5, .	8.9	136
28	Experimental Test of the Fluctuation Theorem for a Driven Two-Level System with Time-Dependent Rates. <i>Physical Review Letters</i> , 2005, 94, 180602.	7.8	131
29	From Stochastic Thermodynamics to Thermodynamic Inference. <i>Annual Review of Condensed Matter Physics</i> , 2019, 10, 171-192.	14.5	127
30	Force-induced growth of adhesion domains is controlled by receptor mobility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 6906-6911.	7.1	124
31	Adhesion of vesicles in two dimensions. <i>Physical Review A</i> , 1991, 43, 6803-6814.	2.5	123
32	Extracting work from a single heat bath through feedback. <i>Europhysics Letters</i> , 2011, 94, 10001.	2.0	123
33	Dynamical Theory of the Pearling Instability in Cylindrical Vesicles. <i>Physical Review Letters</i> , 1995, 74, 3384-3387.	7.8	122
34	Efficiency of cellular information processing. <i>New Journal of Physics</i> , 2014, 16, 103024.	2.9	120
35	Universal bound on the efficiency of molecular motors. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2016, 2016, 124004.	2.3	115
36	Efficiency of Autonomous Soft Nanomachines at Maximum Power. <i>Physical Review Letters</i> , 2011, 106, 020601.	7.8	114

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37	Influence of shear flow on vesicles near a wall: A numerical study. <i>Physical Review E</i> , 2001, 64, 011916.	2.1	113
38	Efficiency of molecular motors at maximum power. <i>Europhysics Letters</i> , 2008, 83, 30005.	2.0	111
39	Swinging and tumbling of elastic capsules in shear flow. <i>Journal of Fluid Mechanics</i> , 2008, 605, 207-226.	3.4	111
40	Optimal protocols for minimal work processes in underdamped stochastic thermodynamics. <i>Journal of Chemical Physics</i> , 2008, 129, 024114.	3.0	101
41	Cost and Precision of Brownian Clocks. <i>Physical Review X</i> , 2016, 6, .	8.9	99
42	Thermodynamics of Genuine Nonequilibrium States under Feedback Control. <i>Physical Review Letters</i> , 2012, 108, 030601.	7.8	97
43	Shape equations for axisymmetric vesicles: A clarification. <i>Physical Review E</i> , 1994, 49, 4728-4731.	2.1	96
44	Stochastic thermodynamics of resetting. <i>Europhysics Letters</i> , 2016, 113, 60009.	2.0	94
45	Periodic thermodynamics of open quantum systems. <i>Physical Review E</i> , 2016, 93, 062134.	2.1	93
46	Universal Coherence-Induced Power Losses of Quantum Heat Engines in Linear Response. <i>Physical Review Letters</i> , 2017, 119, 170602.	7.8	93
47	Stochastic thermodynamics of single enzymes and molecular motors. <i>European Physical Journal E</i> , 2011, 34, 26.	1.6	92
48	Dynamics and efficiency of a self-propelled, diffusiophoretic swimmer. <i>Journal of Chemical Physics</i> , 2012, 136, 064508.	3.0	92
49	Negative Poisson ratio in two-dimensional networks under tension. <i>Physical Review E</i> , 1993, 48, 4274-4283.	2.1	87
50	An autonomous and reversible Maxwell's demon. <i>Europhysics Letters</i> , 2013, 101, 60001.	2.0	86
51	Thermodynamic Uncertainty Relation for Time-Dependent Driving. <i>Physical Review Letters</i> , 2020, 125, 260604.	7.8	86
52	Entropy production of active particles and for particles in active baths. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 01LT01.	2.1	85
53	Fluid vesicles in flow. <i>Advances in Colloid and Interface Science</i> , 2014, 208, 129-141.	14.7	84
54	Membrane fluctuations mediate lateral interaction between cadherin bonds. <i>Nature Physics</i> , 2017, 13, 906-913.	16.7	84

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55	Role of Bilayer Tilt Difference in Equilibrium Membrane Shapes. <i>Physical Review Letters</i> , 1996, 77, 5237-5240.	7.8	82
56	Role of Hidden Slow Degrees of Freedom in the Fluctuation Theorem. <i>Physical Review Letters</i> , 2012, 108, 220601.	7.8	82
57	Starfish vesicles. <i>Europhysics Letters</i> , 1996, 33, 403-408.	2.0	81
58	Fluctuation theorem for a single enzyme or molecular motor. <i>Europhysics Letters</i> , 2005, 70, 36-41.	2.0	81
59	Distribution of work in isothermal nonequilibrium processes. <i>Physical Review E</i> , 2004, 70, 066112.	2.1	80
60	Adhesion of membranes: a theoretical perspective. <i>Langmuir</i> , 1991, 7, 1867-1873.	3.5	79
61	A generalization of the thermodynamic uncertainty relation to periodically driven systems. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019, 52, 02LT02.	2.1	77
62	Hydrodynamic Lift on Bound Vesicles. <i>Physical Review Letters</i> , 1999, 83, 876-879.	7.8	76
63	Multi-terminal thermoelectric transport in a magnetic field: bounds on Onsager coefficients and efficiency. <i>New Journal of Physics</i> , 2013, 15, 105003.	2.9	75
64	Dynamic strength of adhesion molecules: Role of rebinding and self-consistent rates. <i>Europhysics Letters</i> , 2002, 58, 792-798.	2.0	74
65	Vesicles of toroidal topology. <i>Physical Review Letters</i> , 1991, 66, 2404-2407.	7.8	73
66	Vesicular instabilities: The prolate-to-oblate transition and other shape instabilities of fluid bilayer membranes. <i>Physical Review E</i> , 1995, 52, 6623-6634.	2.1	72
67	The Jarzynski relation, fluctuation theorems, and stochastic thermodynamics for non-Markovian processes. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2007, 2007, L09002-L09002.	2.3	72
68	Universal Bound on the Fano Factor in Enzyme Kinetics. <i>Journal of Physical Chemistry B</i> , 2015, 119, 6555-6561.	2.6	72
69	Lateral diffusion of a protein on a fluctuating membrane. <i>Europhysics Letters</i> , 2005, 71, 859-865.	2.0	71
70	Coherence-enhanced efficiency of feedback-driven quantum engines. <i>New Journal of Physics</i> , 2015, 17, 065006.	2.9	71
71	Distribution of entropy production for a colloidal particle in a nonequilibrium steady state. <i>Europhysics Letters</i> , 2007, 79, 30002.	2.0	69
72	Pulling Tethers from Adhered Vesicles. <i>Physical Review Letters</i> , 2004, 92, 208101.	7.8	67

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73	Single-molecule measurement of the effective temperature in non-equilibrium steady states. Nature Physics, 2015, 11, 971-977.	16.7	66
74	Stochastic thermodynamics: From principles to the cost of precision. Physica A: Statistical Mechanics and Its Applications, 2018, 504, 176-191.	2.6	66
75	Self-Consistent Theory of Bound Vesicles. Physical Review Letters, 1995, 74, 5060-5063.	7.8	65
76	Large deviation function for entropy production in driven one-dimensional systems. Physical Review E, 2008, 78, 011123.	2.1	63
77	Autonomous Engines Driven by Active Matter: Energetics and Design Principles. Physical Review X, 2019, 9, .	8.9	62
78	Optimal performance of periodically driven, stochastic heat engines under limited control. Physical Review E, 2016, 93, 042112.	2.1	61
79	Operationally Accessible Bounds on Fluctuations and Entropy Production in Periodically Driven Systems. Physical Review Letters, 2019, 122, 230601.	7.8	61
80	Dynamics of Specific Vesicle-Substrate Adhesion: From Local Events to Global Dynamics. Physical Review Letters, 2008, 101, 208103.	7.8	60
81	Stochastic thermodynamics with information reservoirs. Physical Review E, 2014, 90, 042150.	2.1	59
82	Dual network model for red blood cell membranes. Physical Review Letters, 1992, 69, 3405-3408.	7.8	58
83	Probing Molecular Free Energy Landscapes by Periodic Loading. Physical Review Letters, 2004, 93, 158105.	7.8	57
84	Nucleation of Ligand-Receptor Domains in Membrane Adhesion. Physical Review Letters, 2012, 109, 258101.	7.8	56
85	Front Propagation in the Pearling Instability of Tubular Vesicles. Journal De Physique II, 1996, 6, 767-796.	0.9	55
86	Straightening of Thermal Fluctuations in Semiflexible Polymers by Applied Tension. Physical Review Letters, 1996, 77, 5389-5392.	7.8	55
87	Efficiency of a Brownian information machine. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 162001.	2.1	53
88	Conformal degeneracy and conformal diffusion of vesicles. Physical Review Letters, 1993, 71, 452-455.	7.8	51
89	Thermally Induced Proliferation of Pores in a Model Fluid Membrane. Biophysical Journal, 1998, 74, 1754-1766.	0.5	51
90	Two-dimensional fluctuating vesicles in linear shear flow. European Physical Journal E, 2008, 25, 309-321.	1.6	51

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91	Nonlinear, electrocatalytic swimming in the presence of salt. <i>Journal of Chemical Physics</i> , 2012, 136, 214507.	3.0	51
92	Gravity-Induced Shape Transformations of Vesicles. <i>Europhysics Letters</i> , 1995, 32, 431-436.	2.0	50
93	Efficiency of Surface-Driven Motion: Nanoswimmers Beat Microswimmers. <i>Physical Review Letters</i> , 2010, 105, 218103.	7.8	50
94	Entropy Production for Mechanically or Chemically Driven Biomolecules. <i>Journal of Statistical Physics</i> , 2007, 128, 77-93.	1.2	49
95	Fluctuation theorem for birth-death or chemical master equations with time-dependent rates. <i>Journal of Physics A</i> , 2004, 37, L517-L521.	1.6	48
96	Role of External Flow and Frame Invariance in Stochastic Thermodynamics. <i>Physical Review Letters</i> , 2008, 100, 178302.	7.8	47
97	Extended fluctuation-dissipation theorem for soft matter in stationary flow. <i>Physical Review E</i> , 2009, 79, 040102.	2.1	47
98	Sensory capacity: An information theoretical measure of the performance of a sensor. <i>Physical Review E</i> , 2016, 93, 022116.	2.1	47
99	Dynamics of a bound membrane. <i>Physical Review E</i> , 1994, 49, 3124-3127.	2.1	46
100	Effective adhesion strength of specifically bound vesicles. <i>Physical Review E</i> , 2005, 71, 061902.	2.1	46
101	Vesicles as a model for controlled (de-)adhesion of cells: a thermodynamic approach. <i>Soft Matter</i> , 2007, 3, 275-289.	2.7	46
102	Diffusing proteins on a fluctuating membrane: Analytical theory and simulations. <i>Physical Review E</i> , 2010, 81, 031903.	2.1	46
103	Bound on thermoelectric power in a magnetic field within linear response. <i>Physical Review E</i> , 2015, 91, 012121.	2.1	46
104	Spinodal Fluctuations of Budding Vesicles. <i>Physical Review Letters</i> , 1995, 75, 3360-3363.	7.8	45
105	Wrinkling of microcapsules in shear flow. <i>Journal of Physics Condensed Matter</i> , 2006, 18, L185-L191.	1.8	45
106	Efficiencies of a molecular motor: a generic hybrid model applied to the F1-ATPase. <i>New Journal of Physics</i> , 2012, 14, 103023.	2.9	45
107	Hydrodynamics of membranes: the bilayer aspect and adhesion. <i>Biophysical Chemistry</i> , 1994, 49, 13-22.	2.8	44
108	Nonequilibrium sensing and its analogy to kinetic proofreading. <i>New Journal of Physics</i> , 2015, 17, 055026.	2.9	44

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109	Effect of a magnetic field on the thermodynamic uncertainty relation. <i>Physical Review E</i> , 2019, 99, 042128.	2.1	44
110	Hybrid simulations of lateral diffusion in fluctuating membranes. <i>Physical Review E</i> , 2007, 75, 011908.	2.1	43
111	Large deviation function for a driven underdamped particle in a periodic potential. <i>Physical Review E</i> , 2018, 97, 022143.	2.1	42
112	The large deviation function for entropy production: the optimal trajectory and the role of fluctuations. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2012, 2012, P12001.	2.3	41
113	Stochastic Thermodynamics of Learning. <i>Physical Review Letters</i> , 2017, 118, 010601.	7.8	39
114	Experimental accessibility of generalized fluctuation-dissipation relations for nonequilibrium steady states. <i>Physical Review E</i> , 2010, 82, 032401.	2.1	38
115	Deformation of phospholipid vesicles in an optical stretcher. <i>Soft Matter</i> , 2015, 11, 6075-6088.	2.7	38
116	Effects of Fully and Partially Solubilized Amphiphiles on Bilayer Bending Stiffness and Temperature Dependence of the Effective Tension of Giant Vesicles. <i>Journal De Physique II</i> , 1997, 7, 1141-1157.	0.9	37
117	Curvature Coupling Dependence of Membrane Protein Diffusion Coefficients. <i>Langmuir</i> , 2008, 24, 1254-1261.	3.5	36
118	Coherence of biochemical oscillations is bounded by driving force and network topology. <i>Physical Review E</i> , 2017, 95, 062409.	2.1	36
119	Classical Nernst engine. <i>Physical Review Letters</i> , 2014, 112, 140601.	7.8	35
120	Affinity- and topology-dependent bound on current fluctuations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 34LT01.	2.1	35
121	Rate of Mutual Information Between Coarse-Grained Non-Markovian Variables. <i>Journal of Statistical Physics</i> , 2013, 153, 460-478.	1.2	33
122	Escape from a metastable well under a time-ramped force. <i>Physical Review E</i> , 1998, 57, 7301-7304.	2.1	30
123	Specific adhesion of membranes: Mapping to an effective bond lattice gas. <i>Physical Review E</i> , 2010, 82, 021923.	2.1	30
124	Effective tension and fluctuations in active membranes. <i>Physical Review E</i> , 2012, 85, 031913.	2.1	30
125	Antagonist-Induced Deadhesion of Specifically Adhered Vesicles. <i>Biophysical Journal</i> , 2006, 90, 1064-1080.	0.5	29
126	Generalized Einstein or Green-Kubo Relations for Active Biomolecular Transport. <i>Physical Review Letters</i> , 2010, 104, 138101.	7.8	29

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127	Approximate thermodynamic structure for driven lattice gases in contact. <i>Physical Review E</i> , 2011, 84, 041104.	2.1	29
128	Effective rates from thermodynamically consistent coarse-graining of models for molecular motors with probe particles. <i>Physical Review E</i> , 2015, 91, 022709.	2.1	29
129	Extreme fluctuations of active Brownian motion. <i>New Journal of Physics</i> , 2016, 18, 052001.	2.9	29
130	Crystallization in a sheared colloidal suspension. <i>Journal of Chemical Physics</i> , 2013, 138, 224907.	3.0	28
131	Phase transition in thermodynamically consistent biochemical oscillators. <i>Journal of Chemical Physics</i> , 2018, 149, 045101.	3.0	28
132	Thermodynamic cost of external control. <i>New Journal of Physics</i> , 2017, 19, 073021.	2.9	27
133	Relaxation modes of an adhering bilayer membrane. <i>Journal De Physique II</i> , 1994, 4, 1117-1134.	0.9	26
134	Two intertwined facets of adherent membranes: membrane roughness and correlations between ligand-receptor bonds. <i>New Journal of Physics</i> , 2011, 13, 025003.	2.9	25
135	Multiscale approaches to protein-mediated interactions between membranes relating microscopic and macroscopic dynamics in radially growing adhesions. <i>New Journal of Physics</i> , 2015, 17, 083016.	2.9	25
136	Switching from Ultraweak to Strong Adhesion. <i>Advanced Materials</i> , 2011, 23, 2622-2626.	21.0	24
137	Coexistence of dilute and densely packed domains of ligand-receptor bonds in membrane adhesion. <i>Europhysics Letters</i> , 2012, 99, 38003.	2.0	24
138	Noisy Nonlinear Dynamics of Vesicles in Flow. <i>Physical Review Letters</i> , 2013, 110, 238103.	7.8	24
139	Nonequilibrium Steady States in Contact: Approximate Thermodynamic Structure and Zeroth Law for Driven Lattice Gases. <i>Physical Review Letters</i> , 2010, 105, 150601.	7.8	22
140	Phase diagrams and shape transformations of toroidal vesicles. <i>Journal De Physique II</i> , 1993, 3, 1681-1705.	0.9	22
141	Highly Ordered Size-Dispersive Packings of Polydisperse Microgel Spheres. <i>Langmuir</i> , 2000, 16, 7634-7639.	3.5	21
142	Nanometric thermal fluctuations of weakly confined biomembranes measured with microsecond time-resolution. <i>Soft Matter</i> , 2016, 12, 4755-4768.	2.7	21
143	Nonmonotonic fluctuation spectra of membranes pinned or tethered discretely to a substrate. <i>Physical Review E</i> , 2006, 73, 010401.	2.1	20
144	Fine-structured large deviations and the fluctuation theorem: Molecular motors and beyond. <i>Europhysics Letters</i> , 2014, 107, 20002.	2.0	20

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145	Skewness and Kurtosis in Statistical Kinetics. <i>Physical Review Letters</i> , 2015, 115, 188103.	7.8	20
146	Fluctuations of apparent entropy production in networks with hidden slow degrees of freedom. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2018, 2018, 023203.	2.3	20
147	Association Rates of Membrane-Coupled Cell Adhesion Molecules. <i>Biophysical Journal</i> , 2014, 107, L33-L36.	0.5	19
148	Free diffusion bounds the precision of currents in underdamped dynamics. <i>Physical Review E</i> , 2020, 102, 012120.	2.1	19
149	Communications: Can one identify nonequilibrium in a three-state system by analyzing two-state trajectories?. <i>Journal of Chemical Physics</i> , 2010, 132, 041102.	3.0	18
150	Optimal potentials for temperature ratchets. <i>Physical Review E</i> , 2009, 79, 031118.	2.1	16
151	Optimal protocols for Hamiltonian and Schrödinger dynamics. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P07013.	2.3	16
152	Crowding of receptors induces ring-like adhesions in model membranes. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2015, 1853, 2984-2991.	4.1	16
153	Field-Theoretic Thermodynamic Uncertainty Relation. <i>Journal of Statistical Physics</i> , 2020, 178, 1142-1174.	1.2	16
154	Thermal shape fluctuations of fluid-phase phospholipid-bilayer membranes and vesicles. <i>Journal of Molecular Liquids</i> , 1997, 71, 195-207.	4.9	15
155	Dispersion for two classes of random variables: General theory and application to inference of an external ligand concentration by a cell. <i>Physical Review E</i> , 2015, 92, 032127.	2.1	13
156	Focus on stochastic thermodynamics. <i>New Journal of Physics</i> , 2016, 18, 020401.	2.9	13
157	Effective confinement as origin of the equivalence of kinetic temperature and fluctuation-dissipation ratio in a dense shear-driven suspension. <i>Physical Review E</i> , 2012, 85, 021103.	2.1	12
158	Thermodynamic Bounds on the Ultra- and Infra-affinity of Hsp70 for Its Substrates. <i>Biophysical Journal</i> , 2017, 113, 362-370.	0.5	12
159	Statistical Mechanics of an Elastically Pinned Membrane: Static Profile and Correlations. <i>Biophysical Journal</i> , 2019, 116, 283-295.	0.5	12
160	Morphology and dynamics of vesicles. <i>Current Opinion in Colloid and Interface Science</i> , 1996, 1, 350-357.	7.4	11
161	Effect of thermal noise on vesicles and capsules in shear flow. <i>Physical Review E</i> , 2012, 86, 010902.	2.1	11
162	Optimality of nonconservative driving for finite-time processes with discrete states. <i>Physical Review E</i> , 2021, 103, L050105.	2.1	11

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163	Adhesion of Microcapsules. <i>Langmuir</i> , 2006, 22, 7117-7119.	3.5	10
164	Signature of a Nonharmonic Potential as Revealed from a Consistent Shape and Fluctuation Analysis of an Adherent Membrane. <i>Physical Review X</i> , 2014, 4, .	8.9	10
165	Energetics of synchronization in coupled oscillators rotating on circular trajectories. <i>Physical Review E</i> , 2016, 94, 052221.	2.1	10
166	Subharmonic oscillations in stochastic systems under periodic driving. <i>Physical Review E</i> , 2019, 100, 012135.	2.1	10
167	Mesh Collapse in Two-Dimensional Elastic Networks under Compression. <i>Journal De Physique, I</i> , 1997, 7, 1097-1111.	1.2	9
168	Optimized finite-time information machine. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014, 2014, P09010.	2.3	9
169	Universal minimal cost of coherent biochemical oscillations. <i>Physical Review E</i> , 2022, 106, .	2.1	9
170	Modeling Nonlinear Red Cell Elasticity. <i>Biophysical Journal</i> , 1998, 75, 1141-1142.	0.5	8
171	Force-Induced De-Adhesion of Specifically Bound Vesicles: A Strong Adhesion in Competition with Tether Extraction. <i>Langmuir</i> , 2005, 21, 11357-11367.	3.5	8
172	Exponential volume dependence of entropy-current fluctuations at first-order phase transitions in chemical reaction networks. <i>Physical Review E</i> , 2020, 102, 022101.	2.1	8
173	Force spectroscopy of single multidomain biopolymers: A master equation approach. <i>European Physical Journal E</i> , 2005, 18, 1-13.	1.6	7
174	Optimal inference strategies and their implications for the linear noise approximation. <i>Physical Review E</i> , 2016, 94, 042416.	2.1	7
175	Thermodynamic efficiency of learning a rule in neural networks. <i>New Journal of Physics</i> , 2017, 19, 113001.	2.9	7
176	Stochastic Discrete Time Crystals: Entropy Production and Subharmonic Synchronization. <i>Physical Review Letters</i> , 2021, 126, 020603.	7.8	7
177	Operationally accessible uncertainty relations for thermodynamically consistent semi-Markov processes. <i>Physical Review E</i> , 2022, 105, 044113.	2.1	7
178	Force-dependent diffusion coefficient of molecular Brownian ratchets. <i>Physical Review E</i> , 2018, 98, 022402.	2.1	6
179	Interlinked GTPase cascades provide a motif for both robust switches and oscillators. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190198.	3.4	6
180	Statistical Mechanics of an Elastically Pinned Membrane: Equilibrium Dynamics and Power Spectrum. <i>Biophysical Journal</i> , 2019, 117, 542-552.	0.5	6

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181	Stochastic thermodynamics of chemical reactions coupled to finite reservoirs: A case study for the Brusselator. <i>Journal of Chemical Physics</i> , 2020, 152, 235101.	3.0	6
182	Numerical Study of the Thermodynamic Uncertainty Relation for the KPZ-Equation. <i>Journal of Statistical Physics</i> , 2021, 182, 1.	1.2	6
183	Thermodynamic theory of phase transitions in driven lattice gases. <i>Physical Review E</i> , 2011, 84, 051130.	2.1	5
184	The Two Scaling Regimes of the Thermodynamic Uncertainty Relation for the KPZ-Equation. <i>Journal of Statistical Physics</i> , 2022, 186, 1.	1.2	5
185	Wrinkling instability of vesicles in steady linear flow. <i>Europhysics Letters</i> , 2014, 107, 28001.	2.0	4
186	Radial Growth in 2D Revisited: The Effect of Finite Density, Binding Affinity, Reaction Rates, and Diffusion. <i>Advanced Materials Interfaces</i> , 2017, 4, 1600310.	3.7	4
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