Udo Seifert

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61 15,275 193 120 h-index g-index citations papers 7.6 198 17,113 4.1 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
193	Stochastic thermodynamics, fluctuation theorems and molecular machines. <i>Reports on Progress in Physics</i> , 2012 , 75, 126001	14.4	1677
192	Configurations of fluid membranes and vesicles. <i>Advances in Physics</i> , 1997 , 46, 13-137	18.4	1290
191	Entropy production along a stochastic trajectory and an integral fluctuation theorem. <i>Physical Review Letters</i> , 2005 , 95, 040602	7.4	935
190	Shape transformations of vesicles: Phase diagram for spontaneous- curvature and bilayer-coupling models. <i>Physical Review A</i> , 1991 , 44, 1182-1202	2.6	699
189	Adhesion of vesicles. <i>Physical Review A</i> , 1990 , 42, 4768-4771	2.6	420
188	Budding transitions of fluid-bilayer vesicles: The effect of area-difference elasticity. <i>Physical Review E</i> , 1994 , 49, 5389-5407	2.4	396
187	Thermodynamic uncertainty relation for biomolecular processes. <i>Physical Review Letters</i> , 2015 , 114, 158	8 1 7041	348
186	Stochastic thermodynamics: principles and perspectives. <i>European Physical Journal B</i> , 2008 , 64, 423-431	1.2	316
185	Fluid Vesicles in Shear Flow. <i>Physical Review Letters</i> , 1996 , 77, 3685-3688	7.4	274
184	Shape Transformations of Giant Vesicles: Extreme Sensitivity to Bilayer Asymmetry. <i>Europhysics Letters</i> , 1990 , 13, 659-664	1.6	215
183	Rupture of multiple parallel molecular bonds under dynamic loading. <i>Physical Review Letters</i> , 2000 , 84, 2750-3	7.4	210
182	Viscous Modes of Fluid Bilayer Membranes. <i>Europhysics Letters</i> , 1993 , 23, 71-76	1.6	210
181	Optimal finite-time processes in stochastic thermodynamics. <i>Physical Review Letters</i> , 2007 , 98, 108301	7.4	205
180	Restoring a fluctuation-dissipation theorem in a nonequilibrium steady state. <i>Europhysics Letters</i> , 2006 , 74, 391-396	1.6	184
179	Mapping vesicle shapes into the phase diagram: A comparison of experiment and theory. <i>Physical Review E</i> , 1997 , 55, 4458-4474	2.4	179
178	Fluctuation-dissipation theorem in nonequilibrium steady states. Europhysics Letters, 2010, 89, 10007	1.6	165
177	Curvature-induced lateral phase segregation in two-component vesicles. <i>Physical Review Letters</i> , 1993 , 70, 1335-1338	7.4	162

176	Universal Trade-Off between Power, Efficiency, and Constancy in Steady-State Heat Engines. <i>Physical Review Letters</i> , 2018 , 120, 190602	7.4	158
175	Adhesion of Vesicles and Membranes. <i>Molecular Crystals and Liquid Crystals</i> , 1991 , 202, 17-25		138
174	Universal bounds on current fluctuations. <i>Physical Review E</i> , 2016 , 93, 052145	2.4	135
173	Strong bounds on Onsager coefficients and efficiency for three-terminal thermoelectric transport in a magnetic field. <i>Physical Review Letters</i> , 2013 , 110, 070603	7.4	124
172	Experimental test of the fluctuation theorem for a driven two-level system with time-dependent rates. <i>Physical Review Letters</i> , 2005 , 94, 180602	7.4	119
171	Einstein relation generalized to nonequilibrium. <i>Physical Review Letters</i> , 2007 , 98, 210601	7.4	118
170	Stochastic thermodynamics of chemical reaction networks. Journal of Chemical Physics, 2007, 126, 0441	0 319	115
169	Dynamical Theory of the Pearling Instability in Cylindrical Vesicles. <i>Physical Review Letters</i> , 1995 , 74, 33	8 ქ. 承38	7 ₁₁₃
168	Adhesion of vesicles in two dimensions. <i>Physical Review A</i> , 1991 , 43, 6803-6814	2.6	111
167	Extracting work from a single heat bath through feedback. <i>Europhysics Letters</i> , 2011 , 94, 10001	1.6	110
166	First and Second Law of Thermodynamics at Strong Coupling. <i>Physical Review Letters</i> , 2016 , 116, 02060	1 7.4	109
165	Stochastic thermodynamics of bipartite systems: transfer entropy inequalities and a Maxwell demon interpretation. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014 , 2014, P02016	1.9	105
164	Influence of shear flow on vesicles near a wall: A numerical study. <i>Physical Review E</i> , 2001 , 64, 011916	2.4	105
163	Efficiency of autonomous soft nanomachines at maximum power. <i>Physical Review Letters</i> , 2011 , 106, 020601	7.4	104
162	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, 6906-11	11.5	104
161	Finite-time generalization of the thermodynamic uncertainty relation. <i>Physical Review E</i> , 2017 , 96, 0121	0±14	102
160	Thermodynamics of Micro- and Nano-Systems Driven by Periodic Temperature Variations. <i>Physical Review X</i> , 2015 , 5,	9.1	101
159	Efficiency of cellular information processing. <i>New Journal of Physics</i> , 2014 , 16, 103024	2.9	101

158	Swinging and tumbling of elastic capsules in shear flow. <i>Journal of Fluid Mechanics</i> , 2008 , 605, 207-226	3.7	101
157	Efficiency of molecular motors at maximum power. Europhysics Letters, 2008, 83, 30005	1.6	93
156	Thermodynamics of genuine nonequilibrium states under feedback control. <i>Physical Review Letters</i> , 2012 , 108, 030601	7.4	83
155	Dynamics and efficiency of a self-propelled, diffusiophoretic swimmer. <i>Journal of Chemical Physics</i> , 2012 , 136, 064508	3.9	82
154	Stochastic thermodynamics of single enzymes and molecular motors. <i>European Physical Journal E</i> , 2011 , 34, 26	1.5	80
153	An autonomous and reversible Maxwell's demon. <i>Europhysics Letters</i> , 2013 , 101, 60001	1.6	79
152	Shape equations for axisymmetric vesicles: A clarification. <i>Physical Review E</i> , 1994 , 49, 4728-4731	2.4	78
151	Universal bound on the efficiency of molecular motors. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2016 , 2016, 124004	1.9	78
150	Optimal protocols for minimal work processes in underdamped stochastic thermodynamics. <i>Journal of Chemical Physics</i> , 2008 , 129, 024114	3.9	77
149	Fluctuation theorem for a single enzym or molecular motor. <i>Europhysics Letters</i> , 2005 , 70, 36-41	1.6	77
148	Starfish vesicles. <i>Europhysics Letters</i> , 1996 , 33, 403-408	1.6	76
147	Negative Poisson ratio in two-dimensional networks under tension. <i>Physical Review E</i> , 1993 , 48, 4274-42	2834	76
146	Cost and Precision of Brownian Clocks. <i>Physical Review X</i> , 2016 , 6,	9.1	76
145	Role of Bilayer Tilt Difference in Equilibrium Membrane Shapes. <i>Physical Review Letters</i> , 1996 , 77, 5237	-5 /2.4 0	75
144	Fluid vesicles in flow. Advances in Colloid and Interface Science, 2014, 208, 129-41	14.3	73
143	Hydrodynamic Lift on Bound Vesicles. <i>Physical Review Letters</i> , 1999 , 83, 876-879	7.4	71
142	Role of hidden slow degrees of freedom in the fluctuation theorem. <i>Physical Review Letters</i> , 2012 , 108, 220601	7.4	70
141	Dynamic strength of adhesion molecules: Role of rebinding and self-consistent rates. <i>Europhysics Letters</i> , 2002 , 58, 792-798	1.6	70

140	Distribution of work in isothermal nonequilibrium processes. <i>Physical Review E</i> , 2004 , 70, 066112	2.4	69
139	Vesicles of toroidal topology. <i>Physical Review Letters</i> , 1991 , 66, 2404-2407	7.4	68
138	Adhesion of membranes: a theoretical perspective. <i>Langmuir</i> , 1991 , 7, 1867-1873	4	68
137	Periodic thermodynamics of open quantum systems. <i>Physical Review E</i> , 2016 , 93, 062134	2.4	66
136	From Stochastic Thermodynamics to Thermodynamic Inference. <i>Annual Review of Condensed Matter Physics</i> , 2019 , 10, 171-192	19.7	65
135	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	63
134	Universal bound on the Fano factor in enzyme kinetics. <i>Journal of Physical Chemistry B</i> , 2015 , 119, 6555	-6314	62
133	Lateral diffusion of a protein on a fluctuating membrane. <i>Europhysics Letters</i> , 2005 , 71, 859-865	1.6	62
132	Stochastic thermodynamics of resetting. <i>Europhysics Letters</i> , 2016 , 113, 60009	1.6	60
131	Distribution of entropy production for a colloidal particle in a nonequilibrium steady state. <i>Europhysics Letters</i> , 2007 , 79, 30002	1.6	60
130	Vesicular instabilities: The prolate-to-oblate transition and other shape instabilities of fluid bilayer membranes. <i>Physical Review E</i> , 1995 , 52, 6623-6634	2.4	60
129	Self-consistent theory of bound vesicles. <i>Physical Review Letters</i> , 1995 , 74, 5060-5063	7.4	59
128	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	1.9	58
127	Universal Coherence-Induced Power Losses of Quantum Heat Engines in Linear Response. <i>Physical Review Letters</i> , 2017 , 119, 170602	7-4	57
126	Single-molecule measurement of the effective temperature in non-equilibrium steady states. <i>Nature Physics</i> , 2015 , 11, 971-977	16.2	56
125	Dynamics of specific vesicle-substrate adhesion: from local events to global dynamics. <i>Physical Review Letters</i> , 2008 , 101, 208103	7.4	55
124	Pulling tethers from adhered vesicles. <i>Physical Review Letters</i> , 2004 , 92, 208101	7.4	54
123	Large deviation function for entropy production in driven one-dimensional systems. <i>Physical Review E</i> , 2008 , 78, 011123	2.4	53

122	Probing molecular free energy landscapes by periodic loading. <i>Physical Review Letters</i> , 2004 , 93, 158105	7.4	52
121	A generalization of the thermodynamic uncertainty relation to periodically driven systems. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019 , 52, 02LT02	2	52
120	Membrane fluctuations mediate lateral interaction between cadherin bonds. <i>Nature Physics</i> , 2017 , 13, 906-913	16.2	51
119	Straightening of Thermal Fluctuations in Semiflexible Polymers by Applied Tension. <i>Physical Review Letters</i> , 1996 , 77, 5389-5392	7.4	50
118	Entropy production of active particles and for particles in active baths. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018 , 51, 01LT01	2	50
117	Nucleation of ligand-receptor domains in membrane adhesion. <i>Physical Review Letters</i> , 2012 , 109, 25810	071.4	49
116	Front Progagation in the Pearling Instability of Tubular Vesicles. <i>Journal De Physique II</i> , 1996 , 6, 767-796		49
115	Conformal degeneracy and conformal diffusion of vesicles. <i>Physical Review Letters</i> , 1993 , 71, 452-455	7.4	49
114	Nonlinear, electrocatalytic swimming in the presence of salt. <i>Journal of Chemical Physics</i> , 2012 , 136, 214	507	48
113	Optimal performance of periodically driven, stochastic heat engines under limited control. <i>Physical Review E</i> , 2016 , 93, 042112	2.4	47
112	Dual network model for red blood cell membranes. <i>Physical Review Letters</i> , 1992 , 69, 3405-3408	7.4	47
111	Entropy Production for Mechanically or Chemically Driven Biomolecules. <i>Journal of Statistical Physics</i> , 2007 , 128, 77-93	1.5	45
110	Thermally induced proliferation of pores in a model fluid membrane. <i>Biophysical Journal</i> , 1998 , 74, 1754	-166	45
109	Coherence-enhanced efficiency of feedback-driven quantum engines. <i>New Journal of Physics</i> , 2015 , 17, 065006	2.9	44
108	Stochastic thermodynamics with information reservoirs. <i>Physical Review E</i> , 2014 , 90, 042150	2.4	44
107	Efficiency of surface-driven motion: nanoswimmers beat microswimmers. <i>Physical Review Letters</i> , 2010 , 105, 218103	7.4	44
106	Extended fluctuation-dissipation theorem for soft matter in stationary flow. <i>Physical Review E</i> , 2009 , 79, 040102	2.4	44
105	Gravity-Induced Shape Transformations of Vesicles. <i>Europhysics Letters</i> , 1995 , 32, 431-436	1.6	44

104	Dynamics of a bound membrane. <i>Physical Review E</i> , 1994 , 49, 3124-3127	2.4	44	
103	Vesicles as a model for controlled (de-)adhesion of cells: a thermodynamic approach. <i>Soft Matter</i> , 2007 , 3, 275-289	3.6	43	
102	Two-dimensional fluctuating vesicles in linear shear flow. European Physical Journal E, 2008, 25, 309-21	1.5	43	
101	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	42	
100	Efficiency of a Brownian information machine. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012 , 45, 162001	2	42	
99	Wrinkling of microcapsules in shear flow. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, L185-L191	1.8	42	
98	Fluctuation theorem for birthdeath or chemical master equations with time-dependent rates. <i>Journal of Physics A</i> , 2004 , 37, L517-L521		42	
97	Effective adhesion strength of specifically bound vesicles. <i>Physical Review E</i> , 2005 , 71, 061902	2.4	42	
96	Bound on thermoelectric power in a magnetic field within linear response. <i>Physical Review E</i> , 2015 , 91, 012121	2.4	40	
95	Role of external flow and frame invariance in stochastic thermodynamics. <i>Physical Review Letters</i> , 2008 , 100, 178302	7.4	40	
94	Hybrid simulations of lateral diffusion in fluctuating membranes. <i>Physical Review E</i> , 2007 , 75, 011908	2.4	40	
93	Spinodal fluctuations of budding vesicles. <i>Physical Review Letters</i> , 1995 , 75, 3360-3363	7.4	38	
92	Hydrodynamics of membranes: the bilayer aspect and adhesion. <i>Biophysical Chemistry</i> , 1994 , 49, 13-22	3.5	37	
91	Sensory capacity: An information theoretical measure of the performance of a sensor. <i>Physical Review E</i> , 2016 , 93, 022116	2.4	36	
90	Stochastic thermodynamics: From principles to the cost of precision. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018 , 504, 176-191	3.3	36	
89	Operationally Accessible Bounds on Fluctuations and Entropy Production in Periodically Driven Systems. <i>Physical Review Letters</i> , 2019 , 122, 230601	7.4	35	
88	Diffusing proteins on a fluctuating membrane: analytical theory and simulations. <i>Physical Review E</i> , 2010 , 81, 031903	2.4	35	
87	Nonequilibrium sensing and its analogy to kinetic proofreading. <i>New Journal of Physics</i> , 2015 , 17, 05502	26 .9	34	

86	Classical Nernst engine. <i>Physical Review Letters</i> , 2014 , 112, 140601	7.4	34
85	Autonomous Engines Driven by Active Matter: Energetics and Design Principles. <i>Physical Review X</i> , 2019 , 9,	9.1	34
84	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	1.9	33
83	Curvature coupling dependence of membrane protein diffusion coefficients. <i>Langmuir</i> , 2008 , 24, 1254-	614	32
82	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		32
81	Large deviation function for a driven underdamped particle in a periodic potential. <i>Physical Review E</i> , 2018 , 97, 022143	2.4	31
80	Experimental accessibility of generalized fluctuation-dissipation relations for nonequilibrium steady states. <i>Physical Review E</i> , 2010 , 82, 032401	2.4	31
79	Effect of a magnetic field on the thermodynamic uncertainty relation. <i>Physical Review E</i> , 2019 , 99, 0421	2:84	29
78	Rate of Mutual Information Between Coarse-Grained Non-Markovian Variables. <i>Journal of Statistical Physics</i> , 2013 , 153, 460-478	1.5	29
77	Antagonist-induced deadhesion of specifically adhered vesicles. <i>Biophysical Journal</i> , 2006 , 90, 1064-80	2.9	29
76	Thermodynamic Uncertainty Relation for Time-Dependent Driving. <i>Physical Review Letters</i> , 2020 , 125, 260604	7.4	29
75	Escape from a metastable well under a time-ramped force. <i>Physical Review E</i> , 1998 , 57, 7301-7304	2.4	27
74	Deformation of phospholipid vesicles in an optical stretcher. Soft Matter, 2015, 11, 6075-88	3.6	26
73	Generalized Einstein or Green-Kubo relations for active biomolecular transport. <i>Physical Review Letters</i> , 2010 , 104, 138101	7.4	26
72	Extreme fluctuations of active Brownian motion. New Journal of Physics, 2016, 18, 052001	2.9	26
71	Affinity- and topology-dependent bound on current fluctuations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016 , 49, 34LT01	2	26
70	Coherence of biochemical oscillations is bounded by driving force and network topology. <i>Physical Review E</i> , 2017 , 95, 062409	2.4	25
69	Approximate thermodynamic structure for driven lattice gases in contact. <i>Physical Review E</i> , 2011 , 84, 041104	2.4	25

68	Relaxation modes of an adhering bilayer membrane. <i>Journal De Physique II</i> , 1994 , 4, 1117-1134		25
67	Stochastic Thermodynamics of Learning. <i>Physical Review Letters</i> , 2017 , 118, 010601	7.4	24
66	Effective rates from thermodynamically consistent coarse-graining of models for molecular motors with probe particles. <i>Physical Review E</i> , 2015 , 91, 022709	2.4	24
65	Crystallization in a sheared colloidal suspension. <i>Journal of Chemical Physics</i> , 2013 , 138, 224907	3.9	24
64	Specific adhesion of membranes: Mapping to an effective bond lattice gas. <i>Physical Review E</i> , 2010 , 82, 021923	2.4	24
63	Thermodynamic cost of external control. New Journal of Physics, 2017, 19, 073021	2.9	22
62	Nonequilibrium steady states in contact: approximate thermodynamic structure and zeroth law for driven lattice gases. <i>Physical Review Letters</i> , 2010 , 105, 150601	7.4	22
61	Two intertwined facets of adherent membranes: membrane roughness and correlations between ligandfeceptors bonds. <i>New Journal of Physics</i> , 2011 , 13, 025003	2.9	22
60	Multiscale approaches to protein-mediated interactions between membranesDelating microscopic and macroscopic dynamics in radially growing adhesions. <i>New Journal of Physics</i> , 2015 , 17, 083016	2.9	21
59	Phase transition in thermodynamically consistent biochemical oscillators. <i>Journal of Chemical Physics</i> , 2018 , 149, 045101	3.9	20
58	Noisy nonlinear dynamics of vesicles in flow. <i>Physical Review Letters</i> , 2013 , 110, 238103	7.4	20
57	Switching from ultraweak to strong adhesion. <i>Advanced Materials</i> , 2011 , 23, 2622-6	24	20
56	Effective tension and fluctuations in active membranes. <i>Physical Review E</i> , 2012 , 85, 031913	2.4	20
55	Coexistence of dilute and densely packed domains of ligand-receptor bonds in membrane adhesion. <i>Europhysics Letters</i> , 2012 , 99, 38003	1.6	20
54	Highly Ordered Size-Dispersive Packings of Polydisperse Microgel Spheres. <i>Langmuir</i> , 2000 , 16, 7634-76	i3p	20
53	Nonmonotonic fluctuation spectra of membranes pinned or tethered discretely to a substrate. <i>Physical Review E</i> , 2006 , 73, 010401	2.4	19
52	Phase diagrams and shape transformations of toroidal vesicles. <i>Journal De Physique II</i> , 1993 , 3, 1681-170	05	18
51	Association rates of membrane-coupled cell adhesion molecules. <i>Biophysical Journal</i> , 2014 , 107, L33-6	2.9	17

50	Fine-structured large deviations and the fluctuation theorem: Molecular motors and beyond. <i>Europhysics Letters</i> , 2014 , 107, 20002	1.6	16
49	Communications: Can one identify nonequilibrium in a three-state system by analyzing two-state trajectories?. <i>Journal of Chemical Physics</i> , 2010 , 132, 041102	3.9	16
48	Crowding of receptors induces ring-like adhesions in model membranes. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2015 , 1853, 2984-91	4.9	15
47	Optimal potentials for temperature ratchets. <i>Physical Review E</i> , 2009 , 79, 031118	2.4	15
46	Optimal protocols for Hamiltonian and Schrödinger dynamics. <i>Journal of Statistical Mechanics:</i> Theory and Experiment, 2009 , 2009, P07013	1.9	15
45	Thermal shape fluctuations of fluid-phase phospholipid-bilayer membranes and vesicles. <i>Journal of Molecular Liquids</i> , 1997 , 71, 195-207	6	14
44	Skewness and Kurtosis in Statistical Kinetics. <i>Physical Review Letters</i> , 2015 , 115, 188103	7.4	13
43	Nanometric thermal fluctuations of weakly confined biomembranes measured with microsecond time-resolution. <i>Soft Matter</i> , 2016 , 12, 4755-68	3.6	13
42	Fluctuations of apparent entropy production in networks with hidden slow degrees of freedom. Journal of Statistical Mechanics: Theory and Experiment, 2018 , 2018, 023203	1.9	11
41	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	2.4	11
40	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	2.4	11
39	Thermodynamic Bounds on the Ultra- and Infra-affinity of Hsp70 for Its Substrates. <i>Biophysical Journal</i> , 2017 , 113, 362-370	2.9	10
38	Effect of thermal noise on vesicles and capsules in shear flow. <i>Physical Review E</i> , 2012 , 86, 010902	2.4	10
37	Morphology and dynamics of vesicles. Current Opinion in Colloid and Interface Science, 1996, 1, 350-357	7.6	10
36	Field-Theoretic Thermodynamic Uncertainty Relation. Journal of Statistical Physics, 2020, 178, 1142-117	4 1.5	9
35	Adhesion of microcapsules. <i>Langmuir</i> , 2006 , 22, 7117-9	4	9
34	Statistical Mechanics of an Elastically Pinned Membrane: Static Profile and Correlations. <i>Biophysical Journal</i> , 2019 , 116, 283-295	2.9	9
33	Subharmonic oscillations in stochastic systems under periodic driving. <i>Physical Review E</i> , 2019 , 100, 012	13.5	8

32	Mesh Collapse in Two-Dimensional Elastic Networks under Compression. <i>Journal De Physique, I</i> , 1997 , 7, 1097-1111		8	
31	Force-induced de-adhesion of specifically bound vesicles: strong adhesion in competition with tether extraction. <i>Langmuir</i> , 2005 , 21, 11357-67	4	8	
30	Free diffusion bounds the precision of currents in underdamped dynamics. <i>Physical Review E</i> , 2020 , 102, 012120	2.4	8	
29	Energetics of synchronization in coupled oscillators rotating on circular trajectories. <i>Physical Review E</i> , 2016 , 94, 052221	2.4	8	
28	Optimized finite-time information machine. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014 , 2014, P09010	1.9	7	
27	Force spectroscopy of single multidomain biopolymers: a master equation approach. <i>European Physical Journal E</i> , 2005 , 18, 1-13	1.5	7	
26	Modeling nonlinear red cell elasticity. <i>Biophysical Journal</i> , 1998 , 75, 1141-2	2.9	7	
25	Force-dependent diffusion coefficient of molecular Brownian ratchets. <i>Physical Review E</i> , 2018 , 98, 022	4 <u>9</u> .2	6	
24	Thermodynamic efficiency of learning a rule in neural networks. New Journal of Physics, 2017, 19, 11300	01 .9	6	
23	Thermodynamic theory of phase transitions in driven lattice gases. <i>Physical Review E</i> , 2011 , 84, 051130	2.4	5	
22	Exponential volume dependence of entropy-current fluctuations at first-order phase transitions in chemical reaction networks. <i>Physical Review E</i> , 2020 , 102, 022101	2.4	5	
21	Interlinked GTPase cascades provide a motif for both robust switches and oscillators. <i>Journal of the Royal Society Interface</i> , 2019 , 16, 20190198	4.1	4	
20	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,	9.1	4	
19	Wrinkling instability of vesicles in steady linear flow. <i>Europhysics Letters</i> , 2014 , 107, 28001	1.6	4	
18	Stochastic thermodynamics of chemical reactions coupled to finite reservoirs: A case study for the Brusselator. <i>Journal of Chemical Physics</i> , 2020 , 152, 235101	3.9	3	
17	Radial Growth in 2D Revisited: The Effect of Finite Density, Binding Affinity, Reaction Rates, and Diffusion. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1600310	4.6	3	
16	Stochastic Discrete Time Crystals: Entropy Production and Subharmonic Synchronization. <i>Physical Review Letters</i> , 2021 , 126, 020603	7.4	3	
15	Numerical Study of the Thermodynamic Uncertainty Relation for the KPZ-Equation. <i>Journal of Statistical Physics</i> , 2021 , 182, 1	1.5	3	

14	Optimal inference strategies and their implications for the linear noise approximation. <i>Physical Review E</i> , 2016 , 94, 042416	2.4	2
13	Statistical Mechanics of an Elastically Pinned Membrane: Equilibrium Dynamics and Power Spectrum. <i>Biophysical Journal</i> , 2019 , 117, 542-552	2.9	2
12	Dynamics of Giant Vesicles. <i>Molecular Crystals and Liquid Crystals</i> , 1997 , 292, 213-225		2
11	Optimality of nonconservative driving for finite-time processes with discrete states. <i>Physical Review E</i> , 2021 , 103, L050105	2.4	2
10	Entropy and the second law for driven, or quenched, thermally isolated systems. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020 , 552, 121822	3.3	2
9	The Two Scaling Regimes of the Thermodynamic Uncertainty Relation for the KPZ-Equation. <i>Journal of Statistical Physics</i> , 2022 , 186, 1	1.5	1
8	Quality of the thermodynamic uncertainty relation for fast and slow driving. <i>Journal of Physics A:</i> Mathematical and Theoretical, 2021 , 54, 414005	2	1
7	Operationally accessible uncertainty relations for thermodynamically consistent semi-Markov processes <i>Physical Review E</i> , 2022 , 105, 044113	2.4	1
6	Propagator for a driven Brownian particle in step potentials. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021 , 54, 065002	2	0
5	Phase shift in periodically driven non-equilibrium systems: its identification and a bound. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2022 , 2022, 033207	1.9	O
4	Affinity-dependent bound on the spectrum of stochastic matrices. <i>Journal of Physics A:</i> Mathematical and Theoretical, 2019 , 52, 405002	2	
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