

# Erwin Frey

## List of Publications by Year in descending order

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275  
papers

14,255  
citations

18482

62  
h-index

28297

105  
g-index

303  
all docs

303  
docs citations

303  
times ranked

8446  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polar patterns of driven filaments. <i>Nature</i> , 2010, 467, 73-77.	27.8	658
2	Mobility promotes and jeopardizes biodiversity in rock-paper-scissors games. <i>Nature</i> , 2007, 448, 1046-1049.	27.8	616
3	Statics and Dynamics of Single DNA Molecules Confined in Nanochannels. <i>Physical Review Letters</i> , 2005, 94, 196101.	7.8	480
4	Phase Coexistence in Driven One-Dimensional Transport. <i>Physical Review Letters</i> , 2003, 90, 086601.	7.8	408
5	Elasticity of Stiff Polymer Networks. <i>Physical Review Letters</i> , 2003, 91, 108103.	7.8	321
6	Thermal fluctuations of grafted microtubules provide evidence of a length-dependent persistence length. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 10248-10253.	7.1	316
7	Radial Distribution Function of Semiflexible Polymers. <i>Physical Review Letters</i> , 1996, 77, 2581-2584.	7.8	272
8	Actin-binding proteins sensitively mediate F-actin bundle stiffness. <i>Nature Materials</i> , 2006, 5, 748-753.	27.5	240
9	Totally asymmetric simple exclusion process with Langmuir kinetics. <i>Physical Review E</i> , 2004, 70, 046101.	2.1	218
10	Evolutionary game theory: Theoretical concepts and applications to microbial communities. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010, 389, 4265-4298.	2.6	214
11	Coexistence versus extinction in the stochastic cyclic Lotka-Volterra model. <i>Physical Review E</i> , 2006, 74, 051907.	2.1	212
12	Entanglement, Elasticity, and Viscous Relaxation of Actin Solutions. <i>Physical Review Letters</i> , 1998, 81, 2614-2617.	7.8	205
13	Force-Extension Relation and Plateau Modulus for Wormlike Chains. <i>Physical Review Letters</i> , 1996, 77, 306-309.	7.8	185
14	Brownian motion: a paradigm of soft matter and biological physics. <i>Annalen Der Physik</i> , 2005, 14, 20-50.	2.4	180
15	Microrheology Probes Length Scale Dependent Rheology. <i>Physical Review Letters</i> , 2006, 96, 118104.	7.8	177
16	Cytoskeletal Bundle Mechanics. <i>Biophysical Journal</i> , 2008, 94, 2955-2964.	0.5	150
17	Two-loop renormalization-group analysis of the Burgers-Kardar-Parisi-Zhang equation. <i>Physical Review E</i> , 1994, 50, 1024-1045.	2.1	147
18	Localization Transition of the Three-Dimensional Lorentz Model and Continuum Percolation. <i>Physical Review Letters</i> , 2006, 96, 165901.	7.8	147

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19	Noise and Correlations in a Spatial Population Model with Cyclic Competition. <i>Physical Review Letters</i> , 2007, 99, 238105.	7.8	146
20	Tracer Studies on F-Actin Fluctuations. <i>Physical Review Letters</i> , 2002, 89, 258101.	7.8	143
21	Self-organization of mobile populations in cyclic competition. <i>Journal of Theoretical Biology</i> , 2008, 254, 368-383.	1.7	135
22	Rethinking pattern formation in reaction-diffusion systems. <i>Nature Physics</i> , 2018, 14, 507-514.	16.7	135
23	Mechanics of Bundled Semiflexible Polymer Networks. <i>Physical Review Letters</i> , 2007, 99, 088102.	7.8	127
24	Self-organization principles of intracellular pattern formation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2018, 373, 20170107.	4.0	126
25	Floppy Modes and Nonaffine Deformations in Random Fiber Networks. <i>Physical Review Letters</i> , 2006, 97, 105501.	7.8	123
26	Magnetic Propulsion of Microswimmers with DNA-Based Flagellar Bundles. <i>Nano Letters</i> , 2016, 16, 906-910.	9.1	122
27	Highly Canalized MinD Transfer and MinE Sequestration Explain the Origin of Robust MinCDE-Protein Dynamics. <i>Cell Reports</i> , 2012, 1, 741-752.	6.4	120
28	Long-Range Ordering of Vibrated Polar Disks. <i>Physical Review Letters</i> , 2013, 110, 208001.	7.8	117
29	New class of turbulence in active fluids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 15048-15053.	7.1	117
30	Statistical Mechanics of Semiflexible Bundles of Wormlike Polymer Chains. <i>Physical Review Letters</i> , 2007, 99, 048101.	7.8	109
31	Interstitials, vacancies, and supersolid order in vortex crystals. <i>Physical Review B</i> , 1994, 49, 9723-9745.	3.2	108
32	Zero-One Survival Behavior of Cyclically Competing Species. <i>Physical Review Letters</i> , 2009, 102, 048102.	7.8	101
33	Emergence and Persistence of Collective Cell Migration on Small Circular Micropatterns. <i>Physical Review Letters</i> , 2015, 114, 228102.	7.8	101
34	Nonaffine rubber elasticity for stiff polymer networks. <i>Physical Review E</i> , 2007, 76, 031906.	2.1	100
35	Establishment of a robust single axis of cell polarity by coupling multiple positive feedback loops. <i>Nature Communications</i> , 2013, 4, 1807.	12.8	99
36	Evolutionary Game Theory in Growing Populations. <i>Physical Review Letters</i> , 2010, 105, 178101.	7.8	95

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37	Instability of Spatial Patterns and Its Ambiguous Impact on Species Diversity. <i>Physical Review Letters</i> , 2008, 101, 058102.	7.8	94
38	Stiff Polymers, Foams, and Fiber Networks. <i>Physical Review Letters</i> , 2006, 96, 017802.	7.8	93
39	Emergence of coexisting ordered states in active matter systems. <i>Science</i> , 2018, 361, 255-258.	12.6	93
40	Chemical warfare and survival strategies in bacterial range expansions. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140172.	3.4	90
41	Binary Mixtures of Particles with Different Diffusivities Demix. <i>Physical Review Letters</i> , 2016, 116, 058301.	7.8	90
42	Growth dynamics and the evolution of cooperation in microbial populations. <i>Scientific Reports</i> , 2012, 2, 281.	3.3	88
43	Frozen steady states in active systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 19183-19188.	7.1	86
44	Dynamic Light Scattering from Semidilute Actin Solutions: A Study of Hydrodynamic Screening, Filament Bending Stiffness, and the Effect of Tropomyosin/Troponin-Binding. <i>Macromolecules</i> , 1996, 29, 30-36.	4.8	85
45	Dynamics and cooperativity of microtubule decoration by the motor protein kinesin11 Edited by W. Baumeister. <i>Journal of Molecular Biology</i> , 2001, 312, 1011-1026.	4.2	83
46	High Variation of Fluorescence Protein Maturation Times in Closely Related <i>Escherichia coli</i> Strains. <i>PLoS ONE</i> , 2013, 8, e75991.	2.5	83
47	Light-Induced Melting of Colloidal Crystals in Two Dimensions. <i>Physical Review Letters</i> , 1999, 83, 2977-2980.	7.8	79
48	Bottleneck-induced transitions in a minimal model for intracellular transport. <i>Physical Review E</i> , 2006, 74, 031906.	2.1	76
49	Exclusion Processes with Internal States. <i>Physical Review Letters</i> , 2006, 97, 050603.	7.8	74
50	Mode-coupling and renormalization group results for the noisy Burgers equation. <i>Physical Review E</i> , 1996, 53, 4424-4438.	2.1	73
51	Rheology of F-actin solutions determined from thermally driven tracer motion. <i>Journal of Rheology</i> , 2000, 44, 917-928.	2.6	73
52	Coexistence and Survival in Conservative Lotka-Volterra Networks. <i>Physical Review Letters</i> , 2013, 110, 168106.	7.8	73
53	GDI-Mediated Cell Polarization in Yeast Provides Precise Spatial and Temporal Control of Cdc42 Signaling. <i>PLoS Computational Biology</i> , 2013, 9, e1003396.	3.2	73
54	Exact scaling function of interface growth dynamics. <i>Physical Review A</i> , 1991, 44, R7873-R7876.	2.5	72

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55	Dynamic scattering from solutions of semiflexible polymers. <i>Physical Review E</i> , 1997, 55, 3092-3101.	2.1	71
56	Shapes of Semiflexible Polymer Rings. <i>Physical Review Letters</i> , 2007, 99, 198102.	7.8	71
57	Screened and Unscreened Phases in Sedimenting Suspensions. <i>Physical Review Letters</i> , 1998, 81, 5944-5947.	7.8	70
58	Microtubule Length Regulation by Molecular Motors. <i>Physical Review Letters</i> , 2012, 108, 258104.	7.8	70
59	Microtubule Dynamics Depart from the Wormlike Chain Model. <i>Physical Review Letters</i> , 2008, 100, 028102.	7.8	69
60	Extinction in neutrally stable stochastic Lotka-Volterra models. <i>Physical Review E</i> , 2012, 85, 051903.	2.1	69
61	Critical dynamics of magnets. <i>Advances in Physics</i> , 1994, 43, 577-683.	14.4	67
62	Active Curved Polymers Form Vortex Patterns on Membranes. <i>Physical Review Letters</i> , 2016, 116, 178301.	7.8	66
63	Critical dynamics of ballistic and Brownian particles in a heterogeneous environment. <i>Journal of Chemical Physics</i> , 2008, 128, 164517.	3.0	65
64	MinE conformational switching confers robustness on self-organized Min protein patterns. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4553-4558.	7.1	65
65	The PomXYZ Proteins Self-Organize on the Bacterial Nucleoid to Stimulate Cell Division. <i>Developmental Cell</i> , 2017, 41, 299-314.e13.	7.0	62
66	On the critical dynamics of ferromagnets. <i>European Physical Journal B</i> , 1988, 71, 355-368.	1.5	61
67	Master equations and the theory of stochastic path integrals. <i>Reports on Progress in Physics</i> , 2017, 80, 046601.	20.1	61
68	Novel phases and reentrant melting of two-dimensional colloidal crystals. <i>Physical Review E</i> , 2001, 63, 031503.	2.1	60
69	Flow and Diffusion in Channel-Guided Cell Migration. <i>Biophysical Journal</i> , 2014, 107, 1054-1064.	0.5	60
70	Crowding of Molecular Motors Determines Microtubule Depolymerization. <i>Biophysical Journal</i> , 2011, 101, 2190-2200.	0.5	58
71	Traffic jams induced by rare switching events in two-lane transport. <i>New Journal of Physics</i> , 2007, 9, 159-159.	2.9	57
72	Polar pattern formation: hydrodynamic coupling of driven filaments. <i>Soft Matter</i> , 2011, 7, 3213.	2.7	57

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73	Geometry-induced protein pattern formation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 548-553.	7.1	57
74	Stochastic switching to competence. Current Opinion in Microbiology, 2008, 11, 553-559.	5.1	56
75	Evolution of a Fluctuating Population in a Randomly Switching Environment. Physical Review Letters, 2017, 119, 158301.	7.8	56
76	The localization transition of the two-dimensional Lorentz model. European Physical Journal: Special Topics, 2010, 189, 103-118.	2.6	55
77	Multistability and dynamic transitions of intracellular Min protein patterns. Molecular Systems Biology, 2016, 12, 873.	7.2	54
78	A diffusiophoretic mechanism for ATP-driven transport without motor proteins. Nature Physics, 2021, 17, 850-858.	16.7	53
79	Force distributions and force chains in random stiff fiber networks. European Physical Journal E, 2007, 24, 47-53.	1.6	52
80	Polar pattern formation in driven filament systems requires non-binary particle collisions. Nature Physics, 2015, 11, 839-843.	16.7	52
81	Renormalized field theory for the static crossover in uniaxial dipolar ferromagnets. Physical Review B, 1990, 42, 8261-8273.	3.2	50
82	Kinetics of Genetic Switching into the State of Bacterial Competence. Biophysical Journal, 2009, 96, 1178-1188.	0.5	50
83	Role of architecture in the elastic response of semiflexible polymer and fiber networks. Physical Review E, 2007, 75, 011917.	2.1	49
84	Entropy Production of Cyclic Population Dynamics. Physical Review Letters, 2010, 104, 218102.	7.8	48
85	Random bursts determine dynamics of active filaments. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10703-10707.	7.1	48
86	Critical behavior of the supersolid transition in Bose-Hubbard models. Physical Review B, 1997, 55, 1050-1067.	3.2	47
87	Exact results for the Kardar-Parisi-Zhang equation with spatially correlated noise. European Physical Journal B, 1999, 9, 491-511.	1.5	47
88	Entropic forces generated by grafted semiflexible polymers. Physical Review E, 2006, 74, 041803.	2.1	47
89	Conformations of confined biopolymers. Physical Review E, 2007, 75, 050902.	2.1	47
90	Tension dynamics in semiflexible polymers. I. Coarse-grained equations of motion. Physical Review E, 2007, 75, 031905.	2.1	47

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91	Gliding Mechanism in the Late Permian Reptile <i>Coelurosauravus</i> . <i>Science</i> , 1997, 275, 1450-1452.	12.6	46
92	Bridging the gap between single-cell migration and collective dynamics. <i>ELife</i> , 2019, 8, .	6.0	46
93	Renormalized field theory for the static crossover in isotropic dipolar ferromagnets. <i>Physical Review B</i> , 1991, 43, 833-841.	3.2	45
94	Zero-field muon-spin-relaxation depolarization rate of paramagnets near the Curie temperature. <i>Physical Review B</i> , 1993, 47, 796-809.	3.2	45
95	Propagation and Relaxation of Tension in Stiff Polymers. <i>Physical Review Letters</i> , 2005, 94, 077804.	7.8	44
96	Depinning of semiflexible polymers. <i>Physical Review E</i> , 2003, 67, 051108.	2.1	43
97	Evolutionary and population dynamics: A coupled approach. <i>Physical Review E</i> , 2011, 84, 051921.	2.1	43
98	Statics and dynamics of the wormlike bundle model. <i>Physical Review E</i> , 2010, 81, 021904.	2.1	42
99	Predictive modeling of non-viral gene transfer. <i>Biotechnology and Bioengineering</i> , 2010, 105, 805-813.	3.3	41
100	The edge of neutral evolution in social dilemmas. <i>New Journal of Physics</i> , 2009, 11, 093029.	2.9	40
101	Force-velocity relations of a two-state crossbridge model for molecular motors. <i>Europhysics Letters</i> , 1999, 45, 283-289.	2.0	39
102	Dynamics of semiflexible polymers in a flow field. <i>Physical Review E</i> , 2006, 74, 041911.	2.1	39
103	Unconventional Salt Trend from Soft to Stiff in Single Neurofilament Biopolymers. <i>Langmuir</i> , 2010, 26, 18595-18599.	3.5	39
104	Understanding collective dynamics of soft active colloids by binary scattering. <i>Physical Review E</i> , 2013, 88, 052309.	2.1	39
105	Dynamic correlation functions and Boltzmann-Langevin approach for driven one-dimensional lattice gas. <i>Physical Review E</i> , 2005, 72, 036123.	2.1	38
106	Buckling of stiff polymer rings in weak spherical confinement. <i>Physical Review E</i> , 2010, 81, 061802.	2.1	38
107	Evolutionary games of condensates in coupled birth-death processes. <i>Nature Communications</i> , 2015, 6, 6977.	12.8	38
108	Internal Motility in Stiffening Actin-Myosin Networks. <i>Physical Review Letters</i> , 2004, 93, 268101.	7.8	37

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109	Critical dynamics of dipolar ferromagnets. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 123, 49-53.	2.1	36
110	Quantitative tube model for semiflexible polymer solutions. <i>European Physical Journal E</i> , 2007, 24, 35-46.	1.6	36
111	Dynamics of a semiflexible polymer or polymer ring in shear flow. <i>Physical Review E</i> , 2014, 89, 022606.	2.1	35
112	Elastically coupled molecular motors. <i>European Physical Journal B</i> , 1998, 3, 535-546.	1.5	34
113	Scaling regimes and critical dimensions in the Kardar-Parisi-Zhang problem. <i>Europhysics Letters</i> , 1999, 47, 14-20.	2.0	34
114	Spin models for orientational ordering of colloidal molecular crystals. <i>Physical Review E</i> , 2007, 75, 021402.	2.1	34
115	Defect-Mediated Phase Transitions in Active Soft Matter. <i>Physical Review Letters</i> , 2014, 112, 168301.	7.8	34
116	Geometric cues stabilise long-axis polarisation of PAR protein patterns in <i>C. elegans</i> . <i>Nature Communications</i> , 2020, 11, 539.	12.8	34
117	Velocity oscillations in actin-based motility. <i>New Journal of Physics</i> , 2008, 10, 033022.	2.9	33
118	Enhanced Diffusion of a Needle in a Planar Array of Point Obstacles. <i>Physical Review Letters</i> , 2008, 101, 120605.	7.8	33
119	Dynamics of flat membranes and flickering in red blood cells. <i>Journal De Physique, I</i> , 1991, 1, 1715-1757.	1.2	33
120	Range expansion with mutation and selection: dynamical phase transition in a two-species Eden model. <i>New Journal of Physics</i> , 2011, 13, 113013.	2.9	32
121	Eco-evolutionary dynamics of a population with randomly switching carrying capacity. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180343.	3.4	32
122	Effective Perrin theory for the anisotropic diffusion of a strongly hindered rod. <i>Europhysics Letters</i> , 2009, 85, 30003.	2.0	31
123	Persistent memory for a Brownian walker in a random array of obstacles. <i>Chemical Physics</i> , 2010, 375, 540-547.	1.9	31
124	A hierarchy of protein patterns robustly decodes cell shape information. <i>Nature Physics</i> , 2021, 17, 578-584.	16.7	31
125	Design of biochemical pattern forming systems from minimal motifs. <i>ELife</i> , 2019, 8, .	6.0	31
126	Global attractors and extinction dynamics of cyclically competing species. <i>Physical Review E</i> , 2013, 87, 052710.	2.1	30



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127	How turbulence regulates biodiversity in systems with cyclic competition. <i>Physical Review E</i> , 2015, 91, 033009.	2.1	30
128	Cooperation in Microbial Populations: Theory and Experimental Model Systems. <i>Journal of Molecular Biology</i> , 2019, 431, 4599-4644.	4.2	30
129	Anomalous relaxation kinetics of biological latticeâ€“ligand binding models. <i>Chemical Physics</i> , 2002, 284, 287-310.	1.9	29
130	Bulk-Driven Nonequilibrium Phase Transitions in a Mesoscopic Ring. <i>Physical Review Letters</i> , 2006, 97, 095701.	7.8	29
131	Spontaneous Unknotting of a Polymer Confined in a Nanochannel. <i>Nano Letters</i> , 2008, 8, 4518-4522.	9.1	29
132	Disentangling entanglements in biopolymer solutions. <i>Nature Communications</i> , 2018, 9, 494.	12.8	29
133	Tension dynamics in semiflexible polymers. II. Scaling solutions and applications. <i>Physical Review E</i> , 2007, 75, 031906.	2.1	28
134	Entangled dynamics of a stiff polymer. <i>Physical Review E</i> , 2008, 77, 060904.	2.1	28
135	Excluded Volume Effects on Semiflexible Ring Polymers. <i>Nano Letters</i> , 2010, 10, 1445-1449.	9.1	28
136	Crowding and Pausing Strongly Affect Dynamics of Kinesin-1 Motors along Microtubules. <i>Biophysical Journal</i> , 2018, 115, 1068-1081.	0.5	28
137	Ecological feedback in quorum-sensing microbial populations can induce heterogeneous production of autoinducers. <i>ELife</i> , 2017, 6, .	6.0	28
138	Melting of Colloidal Molecular Crystals on Triangular Lattices. <i>Physical Review Letters</i> , 2005, 95, 088302.	7.8	27
139	Critical Assessment of the Boltzmann Approach to Active Systems. <i>Physical Review Letters</i> , 2013, 111, 190601.	7.8	27
140	Bulk-surface coupling identifies the mechanistic connection between Min-protein patterns in vivo and in vitro. <i>Nature Communications</i> , 2021, 12, 3312.	12.8	26
141	Amount of Colicin Release in <i>Escherichia coli</i> Is Regulated by Lysis Gene Expression of the Colicin E2 Operon. <i>PLoS ONE</i> , 2015, 10, e0119124.	2.5	26
142	Shape functions of dipolar ferromagnets at and above the Curie point. <i>Physical Review B</i> , 1989, 40, 7199-7213.	3.2	25
143	Phase behaviour of colloids in confining geometry. <i>Journal of Physics Condensed Matter</i> , 2001, 13, R321-R336.	1.8	25
144	Phase-Space Geometry of Mass-Conserving Reaction-Diffusion Dynamics. <i>Physical Review X</i> , 2020, 10, .	8.9	25

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145	Wavelength Selection by Interrupted Coarsening in Reaction-Diffusion Systems. <i>Physical Review Letters</i> , 2021, 126, 104101.	7.8	25
146	Crossover from isotropic to directed percolation. <i>Physical Review E</i> , 1994, 49, 5058-5072.	2.1	24
147	Oscillations in molecular motor assemblies. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S3901-S3911.	1.8	24
148	Driven lattice gas of dimers coupled to a bulk reservoir. <i>Physical Review E</i> , 2006, 74, 031920.	2.1	24
149	Anomalous finite-size effects in the Battle of the Sexes. <i>European Physical Journal B</i> , 2008, 63, 373-380.	1.5	24
150	Molecular mechanisms for microtubule length regulation by kinesin-8 and XMAP215 proteins. <i>Interface Focus</i> , 2014, 4, 20140031.	3.0	24
151	Wave-vector region probed by zero-field muon-spin-relaxation measurements in paramagnets near the Curie temperature. <i>Physical Review B</i> , 1994, 50, 3033-3036.	3.2	23
152	Transverse fluctuations of grafted polymers. <i>Physical Review E</i> , 2004, 69, 021801.	2.1	23
153	Physics in Cell Biology: On the Physics of Biopolymers and Molecular Motors. <i>ChemPhysChem</i> , 2002, 3, 270.	2.1	22
154	Tension dynamics and viscoelasticity of extensible wormlike chains. <i>Physical Review E</i> , 2009, 80, 040801.	2.1	22
155	Surface-tension-induced budding drives alveologensis in human mammary gland organoids. <i>Nature Physics</i> , 2021, 17, 1130-1136.	16.7	22
156	Shape functions of dipolar ferromagnets at the Curie point. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1988, 129, 343-349.	2.1	21
157	Kinetic theory of flux-line hydrodynamics: Liquid phase with disorder. <i>Physical Review B</i> , 1993, 48, 10357-10381.	3.2	21
158	Universality classes in the anisotropic Kardar-Parisi-Zhang model. <i>Europhysics Letters</i> , 2002, 59, 655-661.	2.0	21
159	Stretching dynamics of semiflexible polymers. <i>European Physical Journal E</i> , 2007, 23, 375-388.	1.6	21
160	Stability of Localized Wave Fronts in Bistable Systems. <i>Physical Review Letters</i> , 2013, 110, 038102.	7.8	21
161	Mobility-dependent selection of competing strategy associations. <i>Physical Review E</i> , 2014, 89, 012721.	2.1	21
162	The emergence of cooperation from a single mutant during microbial life cycles. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150171.	3.4	21

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163	Generic Transport Mechanisms for Molecular Traffic in Cellular Protrusions. <i>Physical Review Letters</i> , 2017, 118, 128101.	7.8	21
164	Phase diagrams, critical, and multicritical behavior of hard-core Bose-Hubbard models. <i>Physical Review B</i> , 1998, 57, 13712-13728.	3.2	20
165	Domain wall delocalization, dynamics and fluctuations in an exclusion process with two internal states. <i>European Physical Journal E</i> , 2008, 27, 47-56.	1.6	20
166	Driven transport on parallel lanes with particle exclusion and obstruction. <i>Physical Review E</i> , 2011, 83, 031923.	2.1	20
167	Mobility, fitness collection, and the breakdown of cooperation. <i>Physical Review E</i> , 2013, 87, 042711.	2.1	20
168	Interactions mediated by a public good transiently increase cooperativity in growing <i>Pseudomonas putida</i> metapopulations. <i>Scientific Reports</i> , 2018, 8, 4093.	3.3	20
169	Topological Phase Transition in Coupled Rock-Paper-Scissors Cycles. <i>Physical Review Letters</i> , 2020, 125, 258301.	7.8	20
170	Coexistence in a one-dimensional cyclic dominance process. <i>Physical Review E</i> , 2010, 81, 060901.	2.1	19
171	Threefold way to extinction in populations of cyclically competing species. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2011, 2011, L01003.	2.3	19
172	Role of particle conservation in self-propelled particle systems. <i>New Journal of Physics</i> , 2013, 15, 045014.	2.9	19
173	Range Expansion of Heterogeneous Populations. <i>Physical Review Letters</i> , 2014, 112, 148103.	7.8	19
174	Numerical Treatment of the Boltzmann Equation for Self-Propelled Particle Systems. <i>Physical Review X</i> , 2014, 4, .	8.9	19
175	Direct observation of the tube model in F-actin solutions: Tube dimensions and curvatures. <i>Europhysics Letters</i> , 2009, 86, 26003.	2.0	18
176	Cell-Based Strain Remodeling of a Nonfibrous Matrix as an Organizing Principle for Vasculogenesis. <i>Cell Reports</i> , 2020, 32, 108015.	6.4	18
177	Pattern-induced local symmetry breaking in active-matter systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 31623-31630.	7.1	18
178	Viscoelasticity of biopolymer networks and statistical mechanics of semiflexible polymers. <i>Advances in Structural Biology</i> , 1999, , 135-168.	0.3	17
179	Linear response of a grafted semiflexible polymer to a uniform force field. <i>Physical Review E</i> , 2004, 70, 051806.	2.1	17
180	Confinement induces conformational transition of semiflexible polymer rings to figure eight form. <i>Soft Matter</i> , 2010, 6, 3467.	2.7	17

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181	Effective 2D model does not account for geometry sensing by self-organized proteins patterns. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1817-E1817.	7.1	17
182	Non-Selective Evolution of Growing Populations. PLoS ONE, 2015, 10, e0134300.	2.5	17
183	Molecular underpinnings of cytoskeletal cross-talk. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3944-3952.	7.1	17
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