

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	The time complexity of self-assembly. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	11
2	Subdiffusive Activity Spreading in the Diffusive Epidemic Process. Physical Review Letters, 2022, 128, 078302.	7.8	5
3	Control of protein-based pattern formation via guiding cues. Nature Reviews Physics, 2022, 4, 511-527.	26.6	10
4	A hierarchy of protein patterns robustly decodes cell shape information. Nature Physics, 2021, 17, 578-584.	16.7	31
5	Optically transparent vertical silicon nanowire arrays for live-cell imaging. Journal of Nanobiotechnology, 2021, 19, 51.	9.1	15
6	Drag-induced directionality switching of kinesin-5 Cin8 revealed by cluster-motility analysis. Science Advances, 2021, 7, .	10.3	13
7	Diffusive coupling of two well-mixed compartments elucidates elementary principles of protein-based pattern formation. Physical Review Research, 2021, 3, .	3.6	5
8	Wavelength Selection by Interrupted Coarsening in Reaction-Diffusion Systems. Physical Review Letters, 2021, 126, 104101.	7.8	25
9	Microphase separation in active filament systems maintained by cyclic dynamics of cluster size and order. Physical Review Research, 2021, 3, .	3.6	2
10	A diffusiphoretic mechanism for ATP-driven transport without motor proteins. Nature Physics, 2021, 17, 850-858.	16.7	53
11	Dynamics of the Bacillus subtilis Min System. MBio, 2021, 12, .	4.1	12
12	Bulk-surface coupling identifies the mechanistic connection between Min-protein patterns in vivo and in vitro. Nature Communications, 2021, 12, 3312.	12.8	26
13	Theory of Active Intracellular Transport by DNA Relaying. Physical Review Letters, 2021, 127, 138101.	7.8	4
14	Snowdrift game induces pattern formation in systems of self-propelled particles. Physical Review E, 2021, 104, 044408.	2.1	3
15	Surface-tension-induced budding drives alveologenesis in human mammary gland organoids. Nature Physics, 2021, 17, 1130-1136.	16.7	22
16	A Mechanistic View of Collective Filament Motion in Active Nematic Networks. Biophysical Journal, 2020, 118, 313-324.	0.5	7
17	Cell-Based Strain Remodeling of a Nonfibrous Matrix as an Organizing Principle for Vasculogenesis. Cell Reports, 2020, 32, 108015.	6.4	18
18	Pattern-induced local symmetry breaking in active-matter systems. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31623-31630.	7.1	18

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19	Topological Phase Transition in Coupled Rock-Paper-Scissors Cycles. <i>Physical Review Letters</i> , 2020, 125, 258301.	7.8	20
20	Phase-Space Geometry of Mass-Conserving Reaction-Diffusion Dynamics. <i>Physical Review X</i> , 2020, 10, .	8.9	25
21	Flow Induced Symmetry Breaking in a Conceptual Polarity Model. <i>Cells</i> , 2020, 9, 1524.	4.1	11
22	Molecular underpinnings of cytoskeletal cross-talk. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 3944-3952.	7.1	17
23	Pattern localization to a domain edge. <i>Physical Review E</i> , 2020, 101, 022414.	2.1	15
24	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
25	Quasi-periodic migration of single cells on short microlanes. <i>PLoS ONE</i> , 2020, 15, e0230679.	2.5	5
26	Stochastic yield catastrophes and robustness in self-assembly. <i>ELife</i> , 2020, 9, .	6.0	6
27	Can a Flux-Based Mechanism Explain Protein Cluster Positioning in a Three-Dimensional Cell Geometry?. <i>Biophysical Journal</i> , 2019, 117, 420-428.	0.5	5
28	Reconstitution reveals how myosin-VI self-organises to generate a dynamic mechanism of membrane sculpting. <i>Nature Communications</i> , 2019, 10, 3305.	12.8	8
29	Cooperation in Microbial Populations: Theory and Experimental Model Systems. <i>Journal of Molecular Biology</i> , 2019, 431, 4599-4644.	4.2	30
30	Protein Recruitment through Indirect Mechanochemical Interactions. <i>Physical Review Letters</i> , 2019, 123, 178101.	7.8	12
31	Active matter invasion. <i>Soft Matter</i> , 2019, 15, 7538-7546.	2.7	15
32	Coevolution of nodes and links: Diversity-driven coexistence in cyclic competition of three species. <i>Physical Review E</i> , 2019, 99, 022309.	2.1	4
33	Bridging the gap between single-cell migration and collective dynamics. <i>ELife</i> , 2019, 8, .	6.0	46
34	Design of biochemical pattern forming systems from minimal motifs. <i>ELife</i> , 2019, 8, .	6.0	31
35	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
36	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

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37	Limited Resources Induce Bistability in Microtubule Length Regulation. <i>Physical Review Letters</i> , 2018, 120, 148101.	7.8	15
38	Self-organization principles of intracellular pattern formation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2018, 373, 20170107.	4.0	126
39	Multiple scales in metapopulations of public goods producers. <i>Physical Review E</i> , 2018, 97, 042307.	2.1	14
40	Rethinking pattern formation in reaction-diffusion systems. <i>Nature Physics</i> , 2018, 14, 507-514.	16.7	135
41	Disentangling entanglements in biopolymer solutions. <i>Nature Communications</i> , 2018, 9, 494.	12.8	29
42	Topologically robust zero-sum games and Pfaffian orientation: How network topology determines the long-time dynamics of the antisymmetric Lotka-Volterra equation. <i>Physical Review E</i> , 2018, 98, .	2.1	7
43	Protein Pattern Formation. , 2018, , 229-260.		16
44	Delays in Fitness Adjustment Can Lead to Coexistence of Hierarchically Interacting Species. <i>Physical Review Letters</i> , 2018, 121, 268101.	7.8	4
45	Crowding and Pausing Strongly Affect Dynamics of Kinesin-1 Motors along Microtubules. <i>Biophysical Journal</i> , 2018, 115, 1068-1081.	0.5	28
46	Regulation of Pom cluster dynamics in <i>Myxococcus xanthus</i> . <i>PLoS Computational Biology</i> , 2018, 14, e1006358.	3.2	12
47	Two-Species Active Transport along Cylindrical Biofilaments is Limited by Emergent Topological Hindrance. <i>Physical Review X</i> , 2018, 8, .	8.9	4
48	Emergence of coexisting ordered states in active matter systems. <i>Science</i> , 2018, 361, 255-258.	12.6	93
49	Delayed adaptation in stochastic metapopulation models. <i>Europhysics Letters</i> , 2018, 122, 68002.	2.0	6
50	Self-organized system-size oscillation of a stochastic lattice-gas model. <i>Physical Review E</i> , 2018, 98, 012410.	2.1	3
51	CsrA and its regulators control the time-point of ColicinE2 release in <i>Escherichia coli</i> . <i>Scientific Reports</i> , 2018, 8, 6537.	3.3	14
52	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
53	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
54	Generic Transport Mechanisms for Molecular Traffic in Cellular Protrusions. <i>Physical Review Letters</i> , 2017, 118, 128101.	7.8	21

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55	Master equations and the theory of stochastic path integrals. Reports on Progress in Physics, 2017, 80, 046601.	20.1	61
56	Evolution of a Fluctuating Population in a Randomly Switching Environment. Physical Review Letters, 2017, 119, 158301.	7.8	56
57	Exploiting ecology in drug pulse sequences in favour of population reduction. PLoS Computational Biology, 2017, 13, e1005747.	3.2	8
58	Ecological feedback in quorum-sensing microbial populations can induce heterogeneous production of autoinducers. ELife, 2017, 6, .	6.0	28
59	Multistability and dynamic transitions of intracellular Min protein patterns. Molecular Systems Biology, 2016, 12, 873.	7.2	54
60	Nonequilibrium Diffusion and Capture Mechanism Ensures Tip Localization of Regulating Proteins on Dynamic Filaments. Physical Review Letters, 2016, 117, 078102.	7.8	10
61	Active Curved Polymers Form Vortex Patterns on Membranes. Physical Review Letters, 2016, 116, 178301.	7.8	66
62	Binary Mixtures of Particles with Different Diffusivities Demix. Physical Review Letters, 2016, 116, 058301.	7.8	90
63	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
64	Magnetic Propulsion of Microswimmers with DNA-Based Flagellar Bundles. Nano Letters, 2016, 16, 906-910.	9.1	122
65	In pursuit of turbulence. Nature Physics, 2016, 12, 204-205.	16.7	2
66	Hierarchical Post-transcriptional Regulation of Colicin E2 Expression in Escherichia coli. PLoS Computational Biology, 2016, 12, e1005243.	3.2	13
67	The emergence of cooperation from a single mutant during microbial life cycles. Journal of the Royal Society Interface, 2015, 12, 20150171.	3.4	21
68	Focus on soft mesoscopics: physics for biology at a mesoscopic scale. New Journal of Physics, 2015, 17, 110203.	2.9	5
69	Non-Selective Evolution of Growing Populations. PLoS ONE, 2015, 10, e0134300.	2.5	17
70	Quantifying Protein Diffusion and Capture on Filaments. Biophysical Journal, 2015, 108, 787-790.	0.5	4
71	How turbulence regulates biodiversity in systems with cyclic competition. Physical Review E, 2015, 91, 033009.	2.1	30
72	Emergence and Persistence of Collective Cell Migration on Small Circular Micropatterns. Physical Review Letters, 2015, 114, 228102.	7.8	101

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73	Evolutionary games of condensates in coupled birth–death processes. <i>Nature Communications</i> , 2015, 6, 6977.	12.8	38
74	Polar pattern formation in driven filament systems requires non-binary particle collisions. <i>Nature Physics</i> , 2015, 11, 839-843.	16.7	52
75	Random bursts determine dynamics of active filaments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10703-10707.	7.1	48
76	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
77	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
78	Periodic versus Intermittent Adaptive Cycles in Quasispecies Coevolution. <i>Physical Review Letters</i> , 2014, 113, 128101.	7.8	3
79	Dynamics of a semiflexible polymer or polymer ring in shear flow. <i>Physical Review E</i> , 2014, 89, 022606.	2.1	35
80	Specialization and Bet Hedging in Heterogeneous Populations. <i>Physical Review Letters</i> , 2014, 113, 108102.	7.8	9
81	Range Expansion of Heterogeneous Populations. <i>Physical Review Letters</i> , 2014, 112, 148103.	7.8	19
82	Molecular mechanisms for microtubule length regulation by kinesin-8 and XMAP215 proteins. <i>Interface Focus</i> , 2014, 4, 20140031.	3.0	24
83	Mobility-dependent selection of competing strategy associations. <i>Physical Review E</i> , 2014, 89, 012721.	2.1	21
84	Numerical Treatment of the Boltzmann Equation for Self-Propelled Particle Systems. <i>Physical Review X</i> , 2014, 4, .	8.9	19
85	Chemical warfare and survival strategies in bacterial range expansions. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140172.	3.4	90
86	Flow and Diffusion in Channel-Guided Cell Migration. <i>Biophysical Journal</i> , 2014, 107, 1054-1064.	0.5	60
87	Effective 2D model does not account for geometry sensing by self-organized proteins patterns. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E1817-E1817.	7.1	17
88	Defect-Mediated Phase Transitions in Active Soft Matter. <i>Physical Review Letters</i> , 2014, 112, 168301.	7.8	34
89	Global attractors and extinction dynamics of cyclically competing species. <i>Physical Review E</i> , 2013, 87, 052710.	2.1	30
90	Stability of Localized Wave Fronts in Bistable Systems. <i>Physical Review Letters</i> , 2013, 110, 038102.	7.8	21

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91	Coexistence and Survival in Conservative Lotka-Volterra Networks. <i>Physical Review Letters</i> , 2013, 110, 168106.	7.8	73
92	Long-range and many-body effects in coagulation processes. <i>Physical Review E</i> , 2013, 87, 022136.	2.1	6
93	Long-Range Ordering of Vibrated Polar Disks. <i>Physical Review Letters</i> , 2013, 110, 208001.	7.8	117
94	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
95	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
96	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
97	Role of particle conservation in self-propelled particle systems. <i>New Journal of Physics</i> , 2013, 15, 045014.	2.9	19
98	Cooperative effects enhance the transport properties of molecular spider teams. <i>Physical Review E</i> , 2013, 87, .	2.1	13
99	Critical Assessment of the Boltzmann Approach to Active Systems. <i>Physical Review Letters</i> , 2013, 111, 190601.	7.8	27
100	Fluctuation effects in the pair-annihilation process with Lévy dynamics. <i>Physical Review E</i> , 2013, 88, 012111.	2.1	1
101	Mobility, fitness collection, and the breakdown of cooperation. <i>Physical Review E</i> , 2013, 87, 042711.	2.1	20
102	Understanding collective dynamics of soft active colloids by binary scattering. <i>Physical Review E</i> , 2013, 88, 052309.	2.1	39
103	Language change in a multiple group society. <i>Physical Review E</i> , 2013, 88, 022814.	2.1	4
104	Validity of the Law of Mass Action in Three-Dimensional Coagulation Processes. <i>Physical Review Letters</i> , 2012, 108, 108301.	7.8	16
105	Nucleation-induced transition to collective motion in active systems. <i>Physical Review E</i> , 2012, 86, 030901.	2.1	10
106	Extinction in neutrally stable stochastic Lotka-Volterra models. <i>Physical Review E</i> , 2012, 85, 051903.	2.1	69
107	Growth dynamics and the evolution of cooperation in microbial populations. <i>Scientific Reports</i> , 2012, 2, 281.	3.3	88
108	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

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109	Microtubule Length Regulation by Molecular Motors. <i>Physical Review Letters</i> , 2012, 108, 258104.	7.8	70
110	Polar pattern formation: hydrodynamic coupling of driven filaments. <i>Soft Matter</i> , 2011, 7, 3213.	2.7	57
111	Crowding of Molecular Motors Determines Microtubule Depolymerization. <i>Biophysical Journal</i> , 2011, 101, 2190-2200.	0.5	58
112	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
113	Social dynamics with peer support on heterogeneous networks. <i>European Physical Journal B</i> , 2011, 83, 507-518.	1.5	5
114	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
115	Current reversal and exclusion processes with history-dependent random walks. <i>Europhysics Letters</i> , 2011, 95, 30004.	2.0	6
116	Evolutionary and population dynamics: A coupled approach. <i>Physical Review E</i> , 2011, 84, 051921.	2.1	43
117	Longitudinal response of confined semiflexible polymers. <i>Physical Review E</i> , 2011, 83, 021802.	2.1	14
118	Driven transport on parallel lanes with particle exclusion and obstruction. <i>Physical Review E</i> , 2011, 83, 031923.	2.1	20
119	Hinsch, Reese, and Frey Reply:. <i>Physical Review Letters</i> , 2011, 106, .	7.8	2
120	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
121	Bacterial Games. <i>The Frontiers Collection</i> , 2011, , 297-329.	0.2	7
122	The effect of internal and global modes on the radial distribution function of confined semiflexible polymers. <i>Europhysics Letters</i> , 2010, 91, 38004.	2.0	9
123	Quantitative predictions on auxin-induced polar distribution of PIN proteins during vein formation in leaves. <i>European Physical Journal E</i> , 2010, 33, 165-173.	1.6	14
124	The localization transition of the two-dimensional Lorentz model. <i>European Physical Journal: Special Topics</i> , 2010, 189, 103-118.	2.6	55
125	Statics and dynamics of the wormlike bundle model. <i>Physical Review E</i> , 2010, 81, 021904.	2.1	42
126	Unconventional Salt Trend from Soft to Stiff in Single Neurofilament Biopolymers. <i>Langmuir</i> , 2010, 26, 18595-18599.	3.5	39

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127	Predictive modeling of non-viral gene transfer. <i>Biotechnology and Bioengineering</i> , 2010, 105, 805-813.	3.3	41
128	Error thresholds for self- and cross-specific enzymatic replication. <i>Journal of Theoretical Biology</i> , 2010, 267, 653-662.	1.7	10
129	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
130	Persistent memory for a Brownian walker in a random array of obstacles. <i>Chemical Physics</i> , 2010, 375, 540-547.	1.9	31
131	Polar patterns of driven filaments. <i>Nature</i> , 2010, 467, 73-77.	27.8	658
132	Evolutionary Game Theory in Growing Populations. <i>Physical Review Letters</i> , 2010, 105, 178101.	7.8	95
133	Buckling of stiff polymer rings in weak spherical confinement. <i>Physical Review E</i> , 2010, 81, 061802.	2.1	38
134	Molecular self-organization: Predicting the pattern diversity and lowest energy state of competing ordering motifs. <i>Physical Review B</i> , 2010, 82, .	3.2	15
135	Molecular Jigsaw: Pattern Diversity Encoded by Elementary Geometrical Features. <i>Nano Letters</i> , 2010, 10, 833-837.	9.1	15
136	Excluded Volume Effects on Semiflexible Ring Polymers. <i>Nano Letters</i> , 2010, 10, 1445-1449.	9.1	28
137	Coexistence in a one-dimensional cyclic dominance process. <i>Physical Review E</i> , 2010, 81, 060901.	2.1	19
138	Entropy Production of Cyclic Population Dynamics. <i>Physical Review Letters</i> , 2010, 104, 218102.	7.8	48
139	Confinement induces conformational transition of semiflexible polymer rings to figure eight form. <i>Soft Matter</i> , 2010, 6, 3467.	2.7	17
140	Tension dynamics and viscoelasticity of extensible wormlike chains. <i>Physical Review E</i> , 2009, 80, 040801.	2.1	22
141	Freely relaxing polymers remember how they were straightened. <i>Physical Review E</i> , 2009, 79, 021804.	2.1	15
142	Escalation of error catastrophe for enzymatic self-replicators. <i>Europhysics Letters</i> , 2009, 88, 48006.	2.0	7
143	The edge of neutral evolution in social dilemmas. <i>New Journal of Physics</i> , 2009, 11, 093029.	2.9	40
144	Conformations of Entangled Semiflexible Polymers: Entropic Trapping and Transient Non-Equilibrium Distributions. <i>ChemPhysChem</i> , 2009, 10, 2891-2899.	2.1	7

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145	Zero-One Survival Behavior of Cyclically Competing Species. <i>Physical Review Letters</i> , 2009, 102, 048102.	7.8	101
146	Kinetics of Genetic Switching into the State of Bacterial Competence. <i>Biophysical Journal</i> , 2009, 96, 1178-1188.	0.5	50
147	Scaling and universality in coupled driven diffusive models. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P08013.	2.3	13
148	Quantification of Leaf Vein Patterning. <i>Biophysical Journal</i> , 2009, 96, 631a.	0.5	2
149	Effective Perrin theory for the anisotropic diffusion of a strongly hindered rod. <i>Europhysics Letters</i> , 2009, 85, 30003.	2.0	31
150	Direct observation of the tube model in F-actin solutions: Tube dimensions and curvatures. <i>Europhysics Letters</i> , 2009, 86, 26003.	2.0	18
151	Self-organization of mobile populations in cyclic competition. <i>Journal of Theoretical Biology</i> , 2008, 254, 368-383.	1.7	135
152	Anomalous finite-size effects in the Battle of the Sexes. <i>European Physical Journal B</i> , 2008, 63, 373-380.	1.5	24
153	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
154	Spontaneous Unknotting of a Polymer Confined in a Nanochannel. <i>Nano Letters</i> , 2008, 8, 4518-4522.	9.1	29
155	Cytoskeletal Bundle Mechanics. <i>Biophysical Journal</i> , 2008, 94, 2955-2964.	0.5	150
156	Microtubule Dynamics Depart from the Wormlike Chain Model. <i>Physical Review Letters</i> , 2008, 100, 028102.	7.8	69
157	Stochastic switching to competence. <i>Current Opinion in Microbiology</i> , 2008, 11, 553-559.	5.1	56
158	Velocity oscillations in actin-based motility. <i>New Journal of Physics</i> , 2008, 10, 033022.	2.9	33
159	Critical dynamics of ballistic and Brownian particles in a heterogeneous environment. <i>Journal of Chemical Physics</i> , 2008, 128, 164517.	3.0	65
160	Publisher's Note: Entangled dynamics of a stiff polymer [Phys. Rev. E77, 060904 (2008)]. <i>Physical Review E</i> , 2008, 78, .	2.1	0
161	Enhanced Diffusion of a Needle in a Planar Array of Point Obstacles. <i>Physical Review Letters</i> , 2008, 101, 120605.	7.8	33
162	Instability of Spatial Patterns and Its Ambiguous Impact on Species Diversity. <i>Physical Review Letters</i> , 2008, 101, 058102.	7.8	94

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163	Entangled dynamics of a stiff polymer. <i>Physical Review E</i> , 2008, 77, 060904.	2.1	28
164	Cytoskeletal Bundle Mechanics. , 2007, , 265.		0
165	Traffic jams induced by rare switching events in two-lane transport. <i>New Journal of Physics</i> , 2007, 9, 159-159.	2.9	57
166	Noise and Correlations in a Spatial Population Model with Cyclic Competition. <i>Physical Review Letters</i> , 2007, 99, 238105.	7.8	146
167	Optimal Flexibility for Conformational Transitions in Macromolecules. <i>Physical Review Letters</i> , 2007, 99, 178101.	7.8	1
168	Role of architecture in the elastic response of semiflexible polymer and fiber networks. <i>Physical Review E</i> , 2007, 75, 011917.	2.1	49
169	Statistical Mechanics of Semiflexible Bundles of Wormlike Polymer Chains. <i>Physical Review Letters</i> , 2007, 99, 048101.	7.8	109
170	Conformations of confined biopolymers. <i>Physical Review E</i> , 2007, 75, 050902.	2.1	47
171	Mechanics of Bundled Semiflexible Polymer Networks. <i>Physical Review Letters</i> , 2007, 99, 088102.	7.8	127
172	Nonaffine rubber elasticity for stiff polymer networks. <i>Physical Review E</i> , 2007, 76, 031906.	2.1	100
173	Spin models for orientational ordering of colloidal molecular crystals. <i>Physical Review E</i> , 2007, 75, 021402.	2.1	34
174	Tension dynamics in semiflexible polymers. I. Coarse-grained equations of motion. <i>Physical Review E</i> , 2007, 75, 031905.	2.1	47
175	Tension dynamics in semiflexible polymers. II. Scaling solutions and applications. <i>Physical Review E</i> , 2007, 75, 031906.	2.1	28
176	Shapes of Semiflexible Polymer Rings. <i>Physical Review Letters</i> , 2007, 99, 198102.	7.8	71
177	Mobility promotes and jeopardizes biodiversity in rock-paper-scissors games. <i>Nature</i> , 2007, 448, 1046-1049.	27.8	616
178	Stretching dynamics of semiflexible polymers. <i>European Physical Journal E</i> , 2007, 23, 375-388.	1.6	21
179	Quantitative tube model for semiflexible polymer solutions. <i>European Physical Journal E</i> , 2007, 24, 35-46.	1.6	36
180	Force distributions and force chains in random stiff fiber networks. <i>European Physical Journal E</i> , 2007, 24, 47-53.	1.6	52

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181	Fluctuating semiflexible polymer ribbon constrained to a ring. <i>European Physical Journal E</i> , 2007, 24, 185-191.	1.6	16
182	From Intracellular Traffic to a Novel Class of Driven Lattice Gas Models. , 2007, , 205-222.		4
183	Entropic forces generated by grafted semiflexible polymers. <i>Physical Review E</i> , 2006, 74, 041803.	2.1	47
184	Actin-binding proteins sensitively mediate F-actin bundle stiffness. <i>Nature Materials</i> , 2006, 5, 748-753.	27.5	240
185	Floppy Modes and Nonaffine Deformations in Random Fiber Networks. <i>Physical Review Letters</i> , 2006, 97, 105501.	7.8	123
186	Driven lattice gas of dimers coupled to a bulk reservoir. <i>Physical Review E</i> , 2006, 74, 031920.	2.1	24
187	Coexistence versus extinction in the stochastic cyclic Lotka-Volterra model. <i>Physical Review E</i> , 2006, 74, 051907.	2.1	212
188	Exclusion Processes with Internal States. <i>Physical Review Letters</i> , 2006, 97, 050603.	7.8	74
189	Stiff Polymers, Foams, and Fiber Networks. <i>Physical Review Letters</i> , 2006, 96, 017802.	7.8	93
190	Bottleneck-induced transitions in a minimal model for intracellular transport. <i>Physical Review E</i> , 2006, 74, 031906.	2.1	76
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