

Erwin Frey

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273
papers

11,787
citations

59
h-index

97
g-index

302
ext. papers

13,195
ext. citations

5.9
avg. IF

6.72
L-index

#	Paper	IF	Citations
273	Polar patterns of driven filaments. <i>Nature</i> , 2010 , 467, 73-7	50.4	536
272	Mobility promotes and jeopardizes biodiversity in rock-paper-scissors games. <i>Nature</i> , 2007 , 448, 1046-9	50.4	508
271	Statics and dynamics of single DNA molecules confined in nanochannels. <i>Physical Review Letters</i> , 2005 , 94, 196101	7.4	451
270	Phase coexistence in driven one-dimensional transport. <i>Physical Review Letters</i> , 2003 , 90, 086601	7.4	366
269	Elasticity of stiff polymer networks. <i>Physical Review Letters</i> , 2003 , 91, 108103	7.4	292
268	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	11.5	280
267	Radial Distribution Function of Semiflexible Polymers. <i>Physical Review Letters</i> , 1996 , 77, 2581-2584	7.4	254
266	Actin-binding proteins sensitively mediate F-actin bundle stiffness. <i>Nature Materials</i> , 2006 , 5, 748-53	27	199
265	Totally asymmetric simple exclusion process with Langmuir kinetics. <i>Physical Review E</i> , 2004 , 70, 046101	2.4	181
264	Entanglement, Elasticity, and Viscous Relaxation of Actin Solutions. <i>Physical Review Letters</i> , 1998 , 81, 2614-2617	7.4	179
263	Coexistence versus extinction in the stochastic cyclic Lotka-Volterra model. <i>Physical Review E</i> , 2006 , 74, 051907	2.4	177
262	Force-Extension Relation and Plateau Modulus for Wormlike Chains. <i>Physical Review Letters</i> , 1996 , 77, 306-309	7.4	173
261	Evolutionary game theory: Theoretical concepts and applications to microbial communities. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010 , 389, 4265-4298	3.3	167
260	Microrheology probes length scale dependent rheology. <i>Physical Review Letters</i> , 2006 , 96, 118104	7.4	163
259	Brownian motion: a paradigm of soft matter and biological physics. <i>Annalen Der Physik</i> , 2005 , 14, 20-50	2.6	161
258	Localization transition of the three-dimensional lorentz model and continuum percolation. <i>Physical Review Letters</i> , 2006 , 96, 165901	7.4	137
257	Two-loop renormalization-group analysis of the Burgers-Kardar-Parisi-Zhang equation. <i>Physical Review E</i> , 1994 , 50, 1024-1045	2.4	134

256	Noise and correlations in a spatial population model with cyclic competition. <i>Physical Review Letters</i> , 2007 , 99, 238105	7.4	132
255	Tracer studies on f-actin fluctuations. <i>Physical Review Letters</i> , 2002 , 89, 258101	7.4	130
254	Cytoskeletal bundle mechanics. <i>Biophysical Journal</i> , 2008 , 94, 2955-64	2.9	122
253	Self-organization of mobile populations in cyclic competition. <i>Journal of Theoretical Biology</i> , 2008 , 254, 368-83	2.3	116
252	Mechanics of bundled semiflexible polymer networks. <i>Physical Review Letters</i> , 2007 , 99, 088102	7.4	112
251	Floppy modes and nonaffine deformations in random fiber networks. <i>Physical Review Letters</i> , 2006 , 97, 105501	7.4	108
250	Interstitials, vacancies, and supersolid order in vortex crystals. <i>Physical Review B</i> , 1994 , 49, 9723-9745	3.3	104
249	Statistical mechanics of semiflexible bundles of wormlike polymer chains. <i>Physical Review Letters</i> , 2007 , 99, 048101	7.4	97
248	Nonaffine rubber elasticity for stiff polymer networks. <i>Physical Review E</i> , 2007 , 76, 031906	2.4	96
247	Magnetic Propulsion of Microswimmers with DNA-Based Flagellar Bundles. <i>Nano Letters</i> , 2016 , 16, 906-1015	11.5	94
246	Highly canalized MinD transfer and MinE sequestration explain the origin of robust MinCDE-protein dynamics. <i>Cell Reports</i> , 2012 , 1, 741-52	10.6	94
245	Long-range ordering of vibrated polar disks. <i>Physical Review Letters</i> , 2013 , 110, 208001	7.4	93
244	Zero-one survival behavior of cyclically competing species. <i>Physical Review Letters</i> , 2009 , 102, 048102	7.4	90
243	Instability of spatial patterns and its ambiguous impact on species diversity. <i>Physical Review Letters</i> , 2008 , 101, 058102	7.4	83
242	Stiff polymers, foams, and fiber networks. <i>Physical Review Letters</i> , 2006 , 96, 017802	7.4	83
241	Establishment of a robust single axis of cell polarity by coupling multiple positive feedback loops. <i>Nature Communications</i> , 2013 , 4, 1807	17.4	81
240	Rethinking pattern formation in reaction-diffusion systems. <i>Nature Physics</i> , 2018 , 14, 507-514	16.2	79
239	New class of turbulence in active fluids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 15048-53	11.5	78

238	Frozen steady states in active systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 19183-8	11.5	78
237	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	5.5	77
236	Light-Induced Melting of Colloidal Crystals in Two Dimensions. <i>Physical Review Letters</i> , 1999 , 83, 2977-2980	7.4	75
235	Self-organization principles of intracellular pattern formation. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2018 , 373,	5.8	73
234	Emergence and Persistence of Collective Cell Migration on Small Circular Micropatterns. <i>Physical Review Letters</i> , 2015 , 114, 228102	7.4	71
233	Evolutionary game theory in growing populations. <i>Physical Review Letters</i> , 2010 , 105, 178101	7.4	70
232	Exact scaling function of interface growth dynamics. <i>Physical Review A</i> , 1991 , 44, R7873-R7876	2.6	70
231	Rheology of F-actin solutions determined from thermally driven tracer motion. <i>Journal of Rheology</i> , 2000 , 44, 917-928	4.1	69
230	Mode-coupling and renormalization group results for the noisy Burgers equation. <i>Physical Review E</i> , 1996 , 53, 4424-4438	2.4	69
229	Exclusion processes with internal states. <i>Physical Review Letters</i> , 2006 , 97, 050603	7.4	68
228	Dynamics and cooperativity of microtubule decoration by the motor protein kinesin. <i>Journal of Molecular Biology</i> , 2001 , 312, 1011-26	6.5	68
227	Microtubule dynamics depart from the wormlike chain model. <i>Physical Review Letters</i> , 2008 , 100, 028102	7.4	67
226	Chemical warfare and survival strategies in bacterial range expansions. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20140172	4.1	66
225	Emergence of coexisting ordered states in active matter systems. <i>Science</i> , 2018 , 361, 255-258	33.3	65
224	Binary Mixtures of Particles with Different Diffusivities Demix. <i>Physical Review Letters</i> , 2016 , 116, 058301	7.4	64
223	Growth dynamics and the evolution of cooperation in microbial populations. <i>Scientific Reports</i> , 2012 , 2, 281	4.9	64
222	Dynamic scattering from solutions of semiflexible polymers. <i>Physical Review E</i> , 1997 , 55, 3092-3101	2.4	64
221	Bottleneck-induced transitions in a minimal model for intracellular transport. <i>Physical Review E</i> , 2006 , 74, 031906	2.4	64

220	Screened and Unscreened Phases in Sedimenting Suspensions. <i>Physical Review Letters</i> , 1998 , 81, 5944-5947	7.4	64
219	Coexistence and survival in conservative Lotka-Volterra networks. <i>Physical Review Letters</i> , 2013 , 110, 168106	7.4	63
218	On the critical dynamics of ferromagnets. <i>European Physical Journal B</i> , 1988 , 71, 355-368	1.2	61
217	Critical dynamics of ballistic and Brownian particles in a heterogeneous environment. <i>Journal of Chemical Physics</i> , 2008 , 128, 164517	3.9	60
216	Shapes of semiflexible polymer rings. <i>Physical Review Letters</i> , 2007 , 99, 198102	7.4	60
215	Microtubule length regulation by molecular motors. <i>Physical Review Letters</i> , 2012 , 108, 258104	7.4	59
214	GDI-mediated cell polarization in yeast provides precise spatial and temporal control of Cdc42 signaling. <i>PLoS Computational Biology</i> , 2013 , 9, e1003396	5	59
213	Extinction in neutrally stable stochastic Lotka-Volterra models. <i>Physical Review E</i> , 2012 , 85, 051903	2.4	58
212	High variation of fluorescence protein maturation times in closely related Escherichia coli strains. <i>PLoS ONE</i> , 2013 , 8, e75991	3.7	57
211	Polar pattern formation: hydrodynamic coupling of driven filaments. <i>Soft Matter</i> , 2011 , 7, 3213	3.6	55
210	Novel phases and reentrant melting of two-dimensional colloidal crystals. <i>Physical Review E</i> , 2001 , 63, 031503	2.4	54
209	Critical dynamics of magnets. <i>Advances in Physics</i> , 1994 , 43, 577-683	18.4	54
208	Traffic jams induced by rare switching events in two-lane transport. <i>New Journal of Physics</i> , 2007 , 9, 159-159	1.59	52
207	The localization transition of the two-dimensional Lorentz model. <i>European Physical Journal: Special Topics</i> , 2010 , 189, 103-118	2.3	51
206	Stochastic switching to competence. <i>Current Opinion in Microbiology</i> , 2008 , 11, 553-9	7.9	49
205	Active Curved Polymers Form Vortex Patterns on Membranes. <i>Physical Review Letters</i> , 2016 , 116, 178307	7.4	48
204	Renormalized field theory for the static crossover in uniaxial dipolar ferromagnets. <i>Physical Review B</i> , 1990 , 42, 8261-8273	3.3	48
203	Force distributions and force chains in random stiff fiber networks. <i>European Physical Journal E</i> , 2007 , 24, 47-53	1.5	46

202	Role of architecture in the elastic response of semiflexible polymer and fiber networks. <i>Physical Review E</i> , 2007 , 75, 011917	2.4	46
201	Crowding of molecular motors determines microtubule depolymerization. <i>Biophysical Journal</i> , 2011 , 101, 2190-200	2.9	44
200	Conformations of confined biopolymers. <i>Physical Review E</i> , 2007 , 75, 050902	2.4	44
199	Multistability and dynamic transitions of intracellular Min protein patterns. <i>Molecular Systems Biology</i> , 2016 , 12, 873	12.2	44
198	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	11.5	43
197	Critical behavior of the supersolid transition in Bose-Hubbard models. <i>Physical Review B</i> , 1997 , 55, 1050-1067	3.9	43
196	Renormalized field theory for the static crossover in isotropic dipolar ferromagnets. <i>Physical Review B</i> , 1991 , 43, 833-841	3.3	43
195	Master equations and the theory of stochastic path integrals. <i>Reports on Progress in Physics</i> , 2017 , 80, 046601	14.4	42
194	Geometry-induced protein pattern formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 548-53	11.5	42
193	Entropy production of cyclic population dynamics. <i>Physical Review Letters</i> , 2010 , 104, 218102	7.4	42
192	Zero-field muon-spin-relaxation depolarization rate of paramagnets near the Curie temperature. <i>Physical Review B</i> , 1993 , 47, 796-809	3.3	42
191	Flow and diffusion in channel-guided cell migration. <i>Biophysical Journal</i> , 2014 , 107, 1054-1064	2.9	41
190	Tension dynamics in semiflexible polymers. I. Coarse-grained equations of motion. <i>Physical Review E</i> , 2007 , 75, 031905	2.4	41
189	Propagation and relaxation of tension in stiff polymers. <i>Physical Review Letters</i> , 2005 , 94, 077804	7.4	41
188	Polar Pattern Formation in Driven Filament Systems Require Non-Binary Particle Collisions. <i>Nature Physics</i> , 2015 , 11, 839-843	16.2	40
187	Exact results for the Kardar-Parisi-Zhang equation with spatially correlated noise. <i>European Physical Journal B</i> , 1999 , 9, 491-511	1.2	40
186	Understanding collective dynamics of soft active colloids by binary scattering. <i>Physical Review E</i> , 2013 , 88, 052309	2.4	39
185	Entropic forces generated by grafted semiflexible polymers. <i>Physical Review E</i> , 2006 , 74, 041803	2.4	39

184	Gliding Mechanism in the Late Permian Reptile Coelurosauravus. <i>Science</i> , 1997 , 275, 1450-1452	33.3	38
183	Statics and dynamics of the wormlike bundle model. <i>Physical Review E</i> , 2010 , 81, 021904	2.4	37
182	The edge of neutral evolution in social dilemmas. <i>New Journal of Physics</i> , 2009 , 11, 093029	2.9	36
181	Depinning of semiflexible polymers. <i>Physical Review E</i> , 2003 , 67, 051108	2.4	36
180	Critical dynamics of dipolar ferromagnets. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987 , 123, 49-53	2.3	36
179	Evolution of a Fluctuating Population in a Randomly Switching Environment. <i>Physical Review Letters</i> , 2017 , 119, 158301	7.4	35
178	Unconventional salt trend from soft to stiff in single neurofilament biopolymers. <i>Langmuir</i> , 2010 , 26, 18595-9	4	35
177	Internal motility in stiffening actin-myosin networks. <i>Physical Review Letters</i> , 2004 , 93, 268101	7.4	35
176	The PomXYZ Proteins Self-Organize on the Bacterial Nucleoid to Stimulate Cell Division. <i>Developmental Cell</i> , 2017 , 41, 299-314.e13	10.2	34
175	Random bursts determine dynamics of active filaments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 10703-7	11.5	34
174	Predictive modeling of non-viral gene transfer. <i>Biotechnology and Bioengineering</i> , 2010 , 105, 805-13	4.9	34
173	Dynamic correlation functions and Boltzmann-Langevin approach for driven one-dimensional lattice gas. <i>Physical Review E</i> , 2005 , 72, 036123	2.4	34
172	Buckling of stiff polymer rings in weak spherical confinement. <i>Physical Review E</i> , 2010 , 81, 061802	2.4	32
171	Kinetics of genetic switching into the state of bacterial competence. <i>Biophysical Journal</i> , 2009 , 96, 1178-88	11.5	32
170	Quantitative tube model for semiflexible polymer solutions. <i>European Physical Journal E</i> , 2007 , 24, 35-46	11.5	32
169	Dynamics of semiflexible polymers in a flow field. <i>Physical Review E</i> , 2006 , 74, 041911	2.4	32
168	Force-velocity relations of a two-state crossbridge model for molecular motors. <i>Europhysics Letters</i> , 1999 , 45, 283-289	1.6	32
167	Evolutionary games of condensates in coupled birth-death processes. <i>Nature Communications</i> , 2015 , 6, 6977	17.4	31

166	Defect-mediated phase transitions in active soft matter. <i>Physical Review Letters</i> , 2014 , 112, 168301	7.4	31
165	Evolutionary and population dynamics: a coupled approach. <i>Physical Review E</i> , 2011 , 84, 051921	2.4	31
164	Scaling regimes and critical dimensions in the Kardar-Parisi-Zhang problem. <i>Europhysics Letters</i> , 1999 , 47, 14-20	1.6	31
163	Dynamics of a semiflexible polymer or polymer ring in shear flow. <i>Physical Review E</i> , 2014 , 89, 022606	2.4	30
162	Elastically coupled molecular motors. <i>European Physical Journal B</i> , 1998 , 3, 535-546	1.2	29
161	Velocity oscillations in actin-based motility. <i>New Journal of Physics</i> , 2008 , 10, 033022	2.9	29
160	Spontaneous unknotting of a polymer confined in a nanochannel. <i>Nano Letters</i> , 2008 , 8, 4518-22	11.5	29
159	How turbulence regulates biodiversity in systems with cyclic competition. <i>Physical Review E</i> , 2015 , 91, 033009	2.4	28
158	Persistent memory for a Brownian walker in a random array of obstacles. <i>Chemical Physics</i> , 2010 , 375, 540-547	2.3	28
157	Spin models for orientational ordering of colloidal molecular crystals. <i>Physical Review E</i> , 2007 , 75, 021402.4	2.4	28
156	Dynamics of flat membranes and flickering in red blood cells. <i>Journal De Physique, I</i> , 1991 , 1, 1715-1757		27
155	Global attractors and extinction dynamics of cyclically competing species. <i>Physical Review E</i> , 2013 , 87, 052710	2.4	26
154	Critical assessment of the Boltzmann approach to active systems. <i>Physical Review Letters</i> , 2013 , 111, 190601	7.4	26
153	Excluded volume effects on semiflexible ring polymers. <i>Nano Letters</i> , 2010 , 10, 1445-9	11.5	26
152	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	26
151	Enhanced diffusion of a needle in a planar array of point obstacles. <i>Physical Review Letters</i> , 2008 , 101, 120605	7.4	26
150	Bulk-driven nonequilibrium phase transitions in a mesoscopic ring. <i>Physical Review Letters</i> , 2006 , 97, 095701	7.4	26
149	Tension dynamics in semiflexible polymers. II. Scaling solutions and applications. <i>Physical Review E</i> , 2007 , 75, 031906	2.4	26

148	Anomalous relaxation kinetics of biological lattice- β gand binding models. <i>Chemical Physics</i> , 2002 , 284, 287-310	2.3	26
147	Melting of colloidal molecular crystals on triangular lattices. <i>Physical Review Letters</i> , 2005 , 95, 088302	7.4	26
146	Effective Perrin theory for the anisotropic diffusion of a strongly hindered rod. <i>Europhysics Letters</i> , 2009 , 85, 30003	1.6	24
145	Entangled dynamics of a stiff polymer. <i>Physical Review E</i> , 2008 , 77, 060904	2.4	24
144	Anomalous finite-size effects in the Battle of the Sexes. <i>European Physical Journal B</i> , 2008 , 63, 373-380	1.2	23
143	Phase behaviour of colloids in confining geometry. <i>Journal of Physics Condensed Matter</i> , 2001 , 13, R321-R336	3.3	23
142	Shape functions of dipolar ferromagnets at and above the Curie point. <i>Physical Review B</i> , 1989 , 40, 7199-7213	3.3	23
141	Bridging the gap between single-cell migration and collective dynamics. <i>ELife</i> , 2019 , 8,	8.9	23
140	Crossover from isotropic to directed percolation. <i>Physical Review E</i> , 1994 , 49, 5058-5072	2.4	22
139	Disentangling entanglements in biopolymer solutions. <i>Nature Communications</i> , 2018 , 9, 494	17.4	21
138	Mobility-dependent selection of competing strategy associations. <i>Physical Review E</i> , 2014 , 89, 012721	2.4	21
137	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	3.3	21
136	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	2.3	21
135	Driven lattice gas of dimers coupled to a bulk reservoir. <i>Physical Review E</i> , 2006 , 74, 031920	2.4	20
134	Transverse fluctuations of grafted polymers. <i>Physical Review E</i> , 2004 , 69, 021801	2.4	20
133	Oscillations in molecular motor assemblies. <i>Journal of Physics Condensed Matter</i> , 2005 , 17, S3901-11	1.8	20
132	Range expansion of heterogeneous populations. <i>Physical Review Letters</i> , 2014 , 112, 148103	7.4	19
131	Driven transport on parallel lanes with particle exclusion and obstruction. <i>Physical Review E</i> , 2011 , 83, 031923	2.4	19

130	Stretching dynamics of semiflexible polymers. <i>European Physical Journal E</i> , 2007 , 23, 375-88	1.5	19
129	Kinetic theory of flux-line hydrodynamics: Liquid phase with disorder. <i>Physical Review B</i> , 1993 , 48, 10357-10381	3.1	19
128	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	3.7	19
127	Mobility, fitness collection, and the breakdown of cooperation. <i>Physical Review E</i> , 2013 , 87, 042711	2.4	18
126	Threefold way to extinction in populations of cyclically competing species. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2011 , 2011, L01003	1.9	18
125	Coexistence in a one-dimensional cyclic dominance process. <i>Physical Review E</i> , 2010 , 81, 060901	2.4	18
124	Physics in cell biology: on the physics of biopolymers and molecular motors. <i>ChemPhysChem</i> , 2002 , 3, 270-5	3.2	18
123	Universality classes in the anisotropic Kardar-Parisi-Zhang model. <i>Europhysics Letters</i> , 2002 , 59, 655-661	1.6	18
122	Phase diagrams, critical, and multicritical behavior of hard-core Bose-Hubbard models. <i>Physical Review B</i> , 1998 , 57, 13712-13728	3.3	18
121	Generic Transport Mechanisms for Molecular Traffic in Cellular Protrusions. <i>Physical Review Letters</i> , 2017 , 118, 128101	7.4	17
120	Tension dynamics and viscoelasticity of extensible wormlike chains. <i>Physical Review E</i> , 2009 , 80, 040801	2.4	17
119	Ecological feedback in quorum-sensing microbial populations can induce heterogeneous production of autoinducers. <i>ELife</i> , 2017 , 6,	8.9	17
118	Eco-evolutionary dynamics of a population with randomly switching carrying capacity. <i>Journal of the Royal Society Interface</i> , 2018 , 15,	4.1	16
117	Molecular mechanisms for microtubule length regulation by kinesin-8 and XMAP215 proteins. <i>Interface Focus</i> , 2014 , 4, 20140031	3.9	16
116	Role of particle conservation in self-propelled particle systems. <i>New Journal of Physics</i> , 2013 , 15, 045014	2.9	16
115	Confinement induces conformational transition of semiflexible polymer rings to figure eight form. <i>Soft Matter</i> , 2010 , 6, 3467	3.6	16
114	Direct observation of the tube model in F-actin solutions: Tube dimensions and curvatures. <i>Europhysics Letters</i> , 2009 , 86, 26003	1.6	16
113	Determination of the Universality Class of Gadolinium. <i>Physical Review Letters</i> , 1997 , 79, 5142-5145	7.4	16

112	Linear response of a grafted semiflexible polymer to a uniform force field. <i>Physical Review E</i> , 2004 , 70, 051806	2.4	16
111	Design of biochemical pattern forming systems from minimal motifs. <i>ELife</i> , 2019 , 8,	8.9	16
110	Geometric cues stabilise long-axis polarisation of PAR protein patterns in <i>C. elegans</i> . <i>Nature Communications</i> , 2020 , 11, 539	17.4	15
109	Numerical Treatment of the Boltzmann Equation for Self-Propelled Particle Systems. <i>Physical Review X</i> , 2014 , 4,	9.1	15
108	Molecular self-organization: Predicting the pattern diversity and lowest energy state of competing ordering motifs. <i>Physical Review B</i> , 2010 , 82,	3.3	15
107	Molecular jigsaw: pattern diversity encoded by elementary geometrical features. <i>Nano Letters</i> , 2010 , 10, 833-7	11.5	15
106	Validity of the law of mass action in three-dimensional coagulation processes. <i>Physical Review Letters</i> , 2012 , 108, 108301	7.4	15
105	Fluctuating semiflexible polymer ribbon constrained to a ring. <i>European Physical Journal E</i> , 2007 , 24, 185-91	1.5	15
104	Domain wall delocalization, dynamics and fluctuations in an exclusion process with two internal states. <i>European Physical Journal E</i> , 2008 , 27, 47-56	1.5	15
103	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	11.5	14
102	Stability of localized wave fronts in bistable systems. <i>Physical Review Letters</i> , 2013 , 110, 038102	7.4	14
101	Probing Longitudinal and Transverse Spin Dynamics of Paramagnets Near T C by Zero-Field BR Measurements. <i>Europhysics Letters</i> , 1993 , 21, 93-98	1.6	14
100	Collective phenomena in intracellular processes. <i>Genome Informatics</i> , 2004 , 15, 46-55		14
99	Freely relaxing polymers remember how they were straightened. <i>Physical Review E</i> , 2009 , 79, 021804	2.4	13
98	Longitudinal response of confined semiflexible polymers. <i>Physical Review E</i> , 2011 , 83, 021802	2.4	13
97	Critical dynamics of a uniaxial and dipolar ferromagnet. <i>Physical Review B</i> , 1999 , 60, 9630-9649	3.3	13
96	Reply to "Comment on Utwo-loop renormalization-group analysis of the Burgers-Kardar-Parisi-Zhang equationU". <i>Physical Review E</i> , 1995 , 51, 6319-6322	2.4	13
95	Crowding and Pausing Strongly Affect Dynamics of Kinesin-1 Motors along Microtubules. <i>Biophysical Journal</i> , 2018 , 115, 1068-1081	2.9	13

94	Cooperation in Microbial Populations: Theory and Experimental Model Systems. <i>Journal of Molecular Biology</i> , 2019 , 431, 4599-4644	6.5	12
93	The emergence of cooperation from a single mutant during microbial life cycles. <i>Journal of the Royal Society Interface</i> , 2015 , 12, 20150171	4.1	12
92	Cooperative effects enhance the transport properties of molecular spider teams. <i>Physical Review E</i> , 2013 , 87,	2.4	12
91	Quantitative predictions on auxin-induced polar distribution of PIN proteins during vein formation in leaves. <i>European Physical Journal E</i> , 2010 , 33, 165-73	1.5	12
90	Interactions mediated by a public good transiently increase cooperativity in growing <i>Pseudomonas putida</i> metapopulations. <i>Scientific Reports</i> , 2018 , 8, 4093	4.9	11
89	Multiple scales in metapopulations of public goods producers. <i>Physical Review E</i> , 2018 , 97, 042307	2.4	11
88	CsrA and its regulators control the time-point of ColicinE2 release in <i>Escherichia coli</i> . <i>Scientific Reports</i> , 2018 , 8, 6537	4.9	11
87	Non-Selective Evolution of Growing Populations. <i>PLoS ONE</i> , 2015 , 10, e0134300	3.7	11
86	Dipolar interactions in superconductor-ferromagnet heterostructures. <i>Physical Review B</i> , 2001 , 63,	3.3	11
85	Viscoelasticity of biopolymer networks and statistical mechanics of semiflexible polymers. <i>Advances in Structural Biology</i> , 1999 , 135-168		11
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