

Davide Marenduzzo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9083914/publications.pdf>

Version: 2024-02-01

252
papers

11,946
citations

22099

59
h-index

39575

94
g-index

279
all docs

279
docs citations

279
times ranked

7382
citing authors

#	ARTICLE	IF	CITATIONS
1	Predictive Polymer Models for 3D Chromosome Organization. <i>Methods in Molecular Biology</i> , 2022, 2301, 267-291.	0.4	1
2	Universal properties of active membranes. <i>Physical Review E</i> , 2022, 105, L012604.	0.8	3
3	Cholesteric Shells: Two-Dimensional Blue Fog and Finite Quasicrystals. <i>Physical Review Letters</i> , 2022, 128, 027801.	2.9	9
4	Renormalization group study of the dynamics of active membranes: Universality classes and scaling laws. <i>Physical Review E</i> , 2022, 105, 014610.	0.8	1
5	Simulations of DNA denaturation dynamics under constrained conditions. <i>Journal of Physics Condensed Matter</i> , 2022, , .	0.7	0
6	Bridging-induced phase separation induced by cohesin SMC protein complexes. <i>Science Advances</i> , 2021, 7, .	4.7	95
7	Nonequilibrium dynamics and action at a distance in transcriptionally driven DNA supercoiling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	14
8	Investigating site-selection mechanisms of retroviral integration in supercoiled DNA braids. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20210229.	1.5	2
9	Complex small-world regulatory networks emerge from the 3D organisation of the human genome. <i>Nature Communications</i> , 2021, 12, 5756.	5.8	15
10	RNA polymerase II is required for spatial chromatin reorganization following exit from mitosis. <i>Science Advances</i> , 2021, 7, eabg8205.	4.7	70
11	Simplifying topological entanglements by entropic competition of slip-links. <i>Physical Review Research</i> , 2021, 3, .	1.3	1
12	Predicting genome organisation and function with mechanistic modelling. <i>Trends in Genetics</i> , 2021, , .	2.9	9
13	Mechanisms for destabilisation of RNA viruses at air-water and liquid-liquid interfaces. <i>Nature Communications</i> , 2021, 12, 6812.	5.8	3
14	Soft channel formation and symmetry breaking in exotic active emulsions. <i>Scientific Reports</i> , 2020, 10, 15936.	1.6	11
15	Solid-Liquid Transition of Deformable and Overlapping Active Particles. <i>Physical Review Letters</i> , 2020, 125, 038003.	2.9	42
16	Actomyosin Contraction Induces In-Bulk Motility of Cells and Droplets. <i>Biophysical Journal</i> , 2020, 119, 1025-1032.	0.2	4
17	Chaotic and periodical dynamics of active chiral droplets. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 559, 125025.	1.2	12
18	Electrostatic potential between charged particles at an oil-water interface. <i>Physical Review E</i> , 2020, 102, 020801.	0.8	3

#	ARTICLE	IF	CITATIONS
19	Soft matter science and the COVID-19 pandemic. <i>Soft Matter</i> , 2020, 16, 8310-8324.	1.2	51
20	Pattern formation in active model C with anchoring: bands, aster networks, and foams. <i>Soft Matter</i> , 2020, 16, 8775-8781.	1.2	7
21	Swimming Suppresses Correlations in Dilute Suspensions of Pusher Microorganisms. <i>Physical Review X</i> , 2020, 10, .	2.8	8
22	Darcy's Law without Friction in Active Nematic Rheology. <i>Physical Review Letters</i> , 2020, 124, 187801.	2.9	6
23	Nonequilibrium Strategy for Fast Target Search on the Genome. <i>Physical Review Letters</i> , 2020, 124, 198101.	2.9	4
24	Mechanistic modeling of chromatin folding to understand function. <i>Nature Methods</i> , 2020, 17, 767-775.	9.0	62
25	Chromosome compaction and chromatin stiffness enhance diffusive loop extrusion by slip-link proteins. <i>Soft Matter</i> , 2020, 16, 2406-2414.	1.2	7
26	Bridging-induced microphase separation: photobleaching experiments, chromatin domains and the need for active reactions. <i>Briefings in Functional Genomics</i> , 2020, 19, 111-118.	1.3	28
27	Kinetic roughening in active interfaces. <i>EPJ Web of Conferences</i> , 2020, 230, 00001.	0.1	4
28	Competition between local erasure and long-range spreading of a single biochemical mark leads to epigenetic bistability. <i>Physical Review E</i> , 2020, 101, 042408.	0.8	12
29	Interaction between nearly hard colloidal spheres at an oil-water interface. <i>Physical Review Research</i> , 2020, 2, .	1.3	8
30	Dynamic clustering and re-dispersion in concentrated colloid-active gel composites. <i>Soft Matter</i> , 2019, 15, 6896-6902.	1.2	3
31	Non-equilibrium effects of molecular motors on polymers. <i>Soft Matter</i> , 2019, 15, 5995-6005.	1.2	38
32	Dry active turbulence in a model for microtubule-motor mixtures. <i>Soft Matter</i> , 2019, 15, 6038-6043.	1.2	7
33	Rotation and propulsion in 3D active chiral droplets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 22065-22070.	3.3	40
34	Hydrodynamics of contraction-based motility in a compressible active fluid. <i>Europhysics Letters</i> , 2019, 127, 58001.	0.7	8
35	Pressure-Induced Miscibility Increase of CH ₄ in H ₂ O: A Computational Study Using Classical Potentials. <i>Journal of Physical Chemistry B</i> , 2019, 123, 8091-8095.	1.2	5
36	Polymer Modeling Predicts Chromosome Reorganization in Senescence. <i>Cell Reports</i> , 2019, 28, 3212-3223.e6.	2.9	60

#	ARTICLE	IF	CITATIONS
37	capC-MAP: software for analysis of Capture-C data. <i>Bioinformatics</i> , 2019, 35, 4773-4775.	1.8	15
38	Plectoneme dynamics and statistics in braided polymers. <i>Physical Review E</i> , 2019, 99, 052503.	0.8	8
39	Transcriptional Bursts in a Nonequilibrium Model for Gene Regulation by Supercoiling. <i>Biophysical Journal</i> , 2019, 117, 369-376.	0.2	20
40	Statistical mechanics of a single active slider on a fluctuating interface. <i>Physical Review E</i> , 2019, 99, 042124.	0.8	7
41	Lamellar ordering, droplet formation and phase inversion in exotic active emulsions. <i>Scientific Reports</i> , 2019, 9, 2801.	1.6	20
42	Synergy of topoisomerase and structural-maintenance-of-chromosomes proteins creates a universal pathway to simplify genome topology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 8149-8154.	3.3	51
43	Physical principles of retroviral integration in the human genome. <i>Nature Communications</i> , 2019, 10, 575.	5.8	38
44	Nucleosome positions alone can be used to predict domains in yeast chromosomes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 17307-17315.	3.3	28
45	Nonequilibrium Theory of Epigenomic Microphase Separation in the Cell Nucleus. <i>Physical Review Letters</i> , 2019, 123, 228101.	2.9	27
46	Magnetic polymer models for epigenetics-driven chromosome folding. <i>Physical Review E</i> , 2019, 100, 052410.	0.8	14
47	A simulation study of aggregation mediated by production of cohesive molecules. <i>Soft Matter</i> , 2019, 15, 9120-9132.	1.2	3
48	Kinetic theory of pattern formation in mixtures of microtubules and molecular motors. <i>Physical Review E</i> , 2018, 97, 022412.	0.8	12
49	Non-equilibrium phase transition in a model for supercoiling-dependent DNA transcription. <i>Soft Matter</i> , 2018, 14, 3632-3639.	1.2	3
50	Extrusion without a motor: a new take on the loop extrusion model of genome organization. <i>Nucleus</i> , 2018, 9, 95-103.	0.6	38
51	Shaping epigenetic memory via genomic bookmarking. <i>Nucleic Acids Research</i> , 2018, 46, 83-93.	6.5	73
52	HMGB2 Loss upon Senescence Entry Disrupts Genomic Organization and Induces CTCF Clustering across Cell Types. <i>Molecular Cell</i> , 2018, 70, 730-744.e6.	4.5	164
53	Rheology and microrheology of deformable droplet suspensions. <i>Soft Matter</i> , 2018, 14, 9361-9367.	1.2	10
54	Transcription-driven genome organization: a model for chromosome structure and the regulation of gene expression tested through simulations. <i>Nucleic Acids Research</i> , 2018, 46, 9895-9906.	6.5	92

#	ARTICLE	IF	CITATIONS
55	A growing bacterial colony in two dimensions as an active nematic. Nature Communications, 2018, 9, 4190.	5.8	120
56	Polymer Simulations of Heteromorphic Chromatin Predict the 3D Folding of Complex Genomic Loci. Molecular Cell, 2018, 72, 786-797.e11.	4.5	131
57	Mixtures of Blue Phase Liquid Crystal with Simple Liquids: Elastic Emulsions and Cubic Fluid Cylinders. Physical Review Letters, 2018, 121, 037802.	2.9	6
58	Active Growth and Pattern Formation in Membrane-Protein Systems. Physical Review Letters, 2018, 120, 258001.	2.9	20
59	Hydrodynamic bifurcation in electro-osmotically driven periodic flows. Physical Review Fluids, 2018, 3, .	1.0	2
60	Genome organization: experiments and modeling. Chromosome Research, 2017, 25, 1-4.	1.0	9
61	The secret of the blue fog. Physics World, 2017, 30, 25-29.	0.0	5
62	Contractile and chiral activities codetermine the helicity of swimming droplet trajectories. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4631-4636.	3.3	44
63	Hydrodynamic instabilities in active cholesteric liquid crystals. European Physical Journal E, 2017, 40, 50.	0.7	28
64	Ephemeral Protein Binding to DNA Shapes Stable Nuclear Bodies and Chromatin Domains. Biophysical Journal, 2017, 112, 1085-1093.	0.2	77
65	Self-assembly of knots and links. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 034003.	0.9	4
66	Dynamical Scaling and Phase Coexistence in Topologically Constrained DNA Melting. Physical Review Letters, 2017, 119, 118002.	2.9	8
67	Nonequilibrium Chromosome Looping via Molecular Slip Links. Physical Review Letters, 2017, 119, 138101.	2.9	105
68	Entropic elasticity and dynamics of the bacterial chromosome: A simulation study. Journal of Chemical Physics, 2017, 147, 044908.	1.2	12
69	Anchoring-driven spontaneous rotations in active gel droplets. Soft Matter, 2017, 13, 5933-5941.	1.2	10
70	Motility of active nematic films driven by "active anchoring". Soft Matter, 2017, 13, 6137-6144.	1.2	18
71	Switching dynamics in cholesteric liquid crystal emulsions. Journal of Chemical Physics, 2017, 147, 064903.	1.2	4
72	Flow of Deformable Droplets: Discontinuous Shear Thinning and Velocity Oscillations. Physical Review Letters, 2017, 119, 208002.	2.9	32

#	ARTICLE	IF	CITATIONS
73	Role of Correlations in the Collective Behavior of Microswimmer Suspensions. <i>Physical Review Letters</i> , 2017, 119, 028005.	2.9	74
74	Colloidal Spherocylinders at an Interface: Flipper Dynamics and Bilayer Formation. <i>Physical Review Letters</i> , 2017, 119, 018001.	2.9	18
75	Phoretic Interactions Generically Induce Dynamic Clusters and Wave Patterns in Active Colloids. <i>Physical Review Letters</i> , 2017, 118, 268001.	2.9	81
76	Ring Polymers: Threadings, Knot Electrophoresis and Topological Glasses. <i>Polymers</i> , 2017, 9, 349.	2.0	23
77	Epigenetic Transitions and Knotted Solitons in Stretched Chromatin. <i>Scientific Reports</i> , 2017, 7, 14642.	1.6	13
78	Pattern Formation in Polymerizing Actin Flocks: Spirals, Spots, and Waves without Nonlinear Chemistry. <i>Physical Review Letters</i> , 2016, 117, 238002.	2.9	13
79	Exploiting native forces to capture chromosome conformation in mammalian cell nuclei. <i>Molecular Systems Biology</i> , 2016, 12, 891.	3.2	52
80	Polymer model with Epigenetic Recoloring Reveals a Pathway for the <i>de novo</i> Establishment and 3D Organization of Chromatin Domains. <i>Physical Review X</i> , 2016, 6, .	2.8	42
81	Glass transitions in the cellular Potts model. <i>Europhysics Letters</i> , 2016, 116, 28009.	0.7	41
82	An introduction to the statistical physics of active matter: motility-induced phase separation and the generic instability of active gels. <i>European Physical Journal: Special Topics</i> , 2016, 225, 2065-2077.	1.2	13
83	Light-induced self-assembly of active rectification devices. <i>Science Advances</i> , 2016, 2, e1501850.	4.7	105
84	Simulated binding of transcription factors to active and inactive regions folds human chromosomes into loops, rosettes and topological domains. <i>Nucleic Acids Research</i> , 2016, 44, 3503-3512.	6.5	157
85	Pattern formation in chemically interacting active rotors with self-propulsion. <i>Soft Matter</i> , 2016, 12, 7259-7264.	1.2	58
86	Shear dynamics of an inverted nematic emulsion. <i>Soft Matter</i> , 2016, 12, 8195-8213.	1.2	6
87	Hydrodynamic oscillations and variable swimming speed in squirmers close to repulsive walls. <i>Soft Matter</i> , 2016, 12, 7959-7968.	1.2	65
88	Stochastic Model of Supercoiling-Dependent Transcription. <i>Physical Review Letters</i> , 2016, 117, 018101.	2.9	49
89	Simulating topological domains in human chromosomes with a fitting-free model. <i>Nucleus</i> , 2016, 7, 453-461.	0.6	7
90	Microfluidic flow of cholesteric liquid crystals. <i>Soft Matter</i> , 2016, 12, 9223-9237.	1.2	18

#	ARTICLE	IF	CITATIONS
91	A single nucleotide resolution model for large-scale simulations of double stranded DNA. <i>Soft Matter</i> , 2016, 12, 9458-9470.	1.2	17
92	Predicting the three-dimensional folding of cis-regulatory regions in mammalian genomes using bioinformatic data and polymer models. <i>Genome Biology</i> , 2016, 17, 59.	3.8	97
93	Spontaneous flow in polar active fluids: the effect of a phenomenological self propulsion-like term. <i>European Physical Journal E</i> , 2016, 39, 1.	0.7	48
94	Curvature-driven positioning of Turing patterns in phase-separating curved membranes. <i>Soft Matter</i> , 2016, 12, 3888-3896.	1.2	15
95	A one-dimensional statistical mechanics model for nucleosome positioning on genomic DNA. <i>Physical Biology</i> , 2016, 13, 016004.	0.8	3
96	Active Model H: Scalar Active Matter in a Momentum-Conserving Fluid. <i>Physical Review Letters</i> , 2015, 115, 188302.	2.9	73
97	Clustering and Pattern Formation in Chemorepulsive Active Colloids. <i>Physical Review Letters</i> , 2015, 115, 258301.	2.9	111
98	Motility-induced phase separation and coarsening in active matter. <i>Comptes Rendus Physique</i> , 2015, 16, 316-331.	0.3	77
99	A minimal physical model captures the shapes of crawling cells. <i>Nature Communications</i> , 2015, 6, 5420.	5.8	103
100	A simple model for DNA bridging proteins and bacterial or human genomes: bridging-induced attraction and genome compaction. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 064119.	0.7	24
101	Self-assembling knots of controlled topology by designing the geometry of patchy templates. <i>Nature Communications</i> , 2015, 6, 6423.	5.8	31
102	Topological constraints strongly affect chromatin reconstitution in silico. <i>Nucleic Acids Research</i> , 2015, 43, 63-73.	6.5	26
103	Activity-Induced Phase Separation and Self-Assembly in Mixtures of Active and Passive Particles. <i>Physical Review Letters</i> , 2015, 114, 018301.	2.9	254
104	Interfacial self-assembly of a bacterial hydrophobin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5419-5424.	3.3	68
105	Electric Field Controlled Columnar and Planar Patterning of Cholesteric Colloids. <i>Physical Review Letters</i> , 2015, 114, 177801.	2.9	10
106	The Bacterial Hydrophobin BslA is a Switchable Ellipsoidal Janus Nanocolloid. <i>Langmuir</i> , 2015, 31, 11558-11563.	1.6	28
107	Topological patterns in two-dimensional gel electrophoresis of DNA knots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E5471-7.	3.3	16
108	Is the kinetoplast DNA a percolating network of linked rings at its critical point?. <i>Physical Biology</i> , 2015, 12, 036001.	0.8	33

#	ARTICLE	IF	CITATIONS
109	An introduction to the physics of active matter. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2015, 418, 65-77.	1.2	50
110	Modelling the effect of myosin X motors on filopodia growth. <i>Physical Biology</i> , 2014, 11, 016005.	0.8	10
111	Motility-induced phase separation in an active dumbbell fluid. <i>Europhysics Letters</i> , 2014, 108, 56004.	0.7	66
112	Spiral and never-settling patterns in active systems. <i>Physical Review E</i> , 2014, 89, 012711.	0.8	19
113	Filling an Emulsion Drop with Motile Bacteria. <i>Physical Review Letters</i> , 2014, 113, 268101.	2.9	61
114	Active polar fluid flow in finite droplets. <i>European Physical Journal E</i> , 2014, 37, 8.	0.7	28
115	The dynamics of colloidal intrusions in liquid crystals: a simulation perspective. <i>Liquid Crystals Reviews</i> , 2014, 2, 1-27.	1.1	36
116	Spontaneous motility of passive emulsion droplets in polar active gels. <i>Soft Matter</i> , 2014, 10, 7826-7837.	1.2	13
117	Dynamics of self-threading ring polymers in a gel. <i>Soft Matter</i> , 2014, 10, 5936-5944.	1.2	30
118	Activity-induced clustering in model dumbbell swimmers: The role of hydrodynamic interactions. <i>Physical Review E</i> , 2014, 90, 022303.	0.8	27
119	Phase behaviour of active Brownian particles: the role of dimensionality. <i>Soft Matter</i> , 2014, 10, 1489-1499.	1.2	282
120	Enhanced diffusion of tracer particles in dilute bacterial suspensions. <i>Soft Matter</i> , 2014, 10, 2748.	1.2	71
121	Chemotactic clusters in confined run-and-tumble bacteria: a numerical investigation. <i>Soft Matter</i> , 2014, 10, 157-165.	1.2	15
122	Switching hydrodynamics in liquid crystal devices: a simulation perspective. <i>Soft Matter</i> , 2014, 10, 4580.	1.2	13
123	Scalar ∇^4 field theory for active-particle phase separation. <i>Nature Communications</i> , 2014, 5, 4351.	5.8	247
124	Models for twistable elastic polymers in Brownian dynamics, and their implementation for LAMMPS. <i>Journal of Chemical Physics</i> , 2014, 140, 135103.	1.2	35
125	Threading Dynamics of Ring Polymers in a Gel. <i>ACS Macro Letters</i> , 2014, 3, 255-259.	2.3	69
126	Self-assembly of colloid-cholesteric composites provides a possible route to switchable optical materials. <i>Nature Communications</i> , 2014, 5, 3954.	5.8	60

#	ARTICLE	IF	CITATIONS
127	Intracellular Facilitated Diffusion: Searchers, Crowders, and Blockers. <i>Physical Review Letters</i> , 2013, 111, 108101.	2.9	66
128	Rheology of cubic blue phases. <i>Soft Matter</i> , 2013, 9, 10243.	1.2	18
129	Continuum Theory of Phase Separation Kinetics for Active Brownian Particles. <i>Physical Review Letters</i> , 2013, 111, 145702.	2.9	303
130	Nonspecific bridging-induced attraction drives clustering of DNA-binding proteins and genome organization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E3605-11.	3.3	219
131	Topological friction strongly affects viral DNA ejection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 20081-20086.	3.3	103
132	Domain formation on curved membranes: phase separation or Turing patterns?. <i>Soft Matter</i> , 2013, 9, 9311.	1.2	17
133	Phase separation dynamics on curved surfaces. <i>Soft Matter</i> , 2013, 9, 1178-1187.	1.2	28
134	Sedimentation of knotted polymers. <i>Physical Review E</i> , 2013, 87, 012728.	0.8	4
135	Flexoelectric switching in cholesteric blue phases. <i>Soft Matter</i> , 2013, 9, 4831.	1.2	9
136	Colloidal Templating at a Cholesteric-Oil Interface: Assembly Guided by an Array of Disclination Lines. <i>Physical Review Letters</i> , 2013, 110, 187801.	2.9	29
137	Effect of DNA conformation on facilitated diffusion. <i>Biochemical Society Transactions</i> , 2013, 41, 582-588.	1.6	8
138	Space exploration by the promoter of a long human gene during one transcription cycle. <i>Nucleic Acids Research</i> , 2013, 41, 2216-2227.	6.5	26
139	Mechanically Driven Growth of Quasi-Two-Dimensional Microbial Colonies. <i>Physical Review Letters</i> , 2013, 111, 168101.	2.9	132
140	The knotted strands of life. <i>Physics World</i> , 2013, 26, 30-34.	0.0	3
141	Quantifying Disorder through Conditional Entropy: An Application to Fluid Mixing. <i>PLoS ONE</i> , 2013, 8, e65617.	1.1	32
142	Chemotactic Sensing towards Ambient and Secreted Attractant Drives Collective Behaviour of <i>E. coli</i> . <i>PLoS ONE</i> , 2013, 8, e74878.	1.1	16
143	Cytoplasmic streaming in plant cells: the role of wall slip. <i>Journal of the Royal Society Interface</i> , 2012, 9, 1398-1408.	1.5	21
144	Facilitated diffusion on confined DNA. <i>Physical Review E</i> , 2012, 85, 021919.	0.8	18

#	ARTICLE	IF	CITATIONS
145	Facilitated Diffusion on Mobile DNA: Configurational Traps and Sequence Heterogeneity. <i>Physical Review Letters</i> , 2012, 109, 168103.	2.9	59
146	Colloids in Active Fluids: Anomalous Microrheology and Negative Drag. <i>Physical Review Letters</i> , 2012, 109, 028103.	2.9	27
147	Phase separation and rotor self-assembly in active particle suspensions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 4052-4057.	3.3	258
148	Pattern Formation in Self-Propelled Particles with Density-Dependent Motility. <i>Physical Review Letters</i> , 2012, 108, 248101.	2.9	227
149	Rheology of lamellar liquid crystals in two and three dimensions: a simulation study. <i>Soft Matter</i> , 2012, 8, 3817.	1.2	16
150	Spontaneous symmetry breaking in active droplets provides a generic route to motility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 12381-12386.	3.3	183
151	Bulk rheology and microrheology of active fluids. <i>European Physical Journal E</i> , 2012, 35, 98.	0.7	27
152	Equilibrium and dynamical behavior in the Vicsek model for self-propelled particles under shear. <i>Open Physics</i> , 2012, 10, .	0.8	5
153	Confined cubic blue phases under shear. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 284127.	0.7	8
154	Colloidal particles at the interface between an isotropic liquid and a chiral liquid crystal. <i>Soft Matter</i> , 2012, 8, 8422.	1.2	23
155	Defect hydrodynamics in 2D polar active fluids. <i>Soft Matter</i> , 2011, 7, 3177.	1.2	34
156	Nonequilibrium steady states in polar active fluids. <i>Soft Matter</i> , 2011, 7, 7453.	1.2	45
157	Switching dynamics in cholesteric blue phases. <i>Soft Matter</i> , 2011, 7, 3295.	1.2	49
158	Self-Assembly and Nonlinear Dynamics of Dimeric Colloidal Rotors in Cholesterics. <i>Physical Review Letters</i> , 2011, 107, 267802.	2.9	25
159	Structure of Blue Phase III of Cholesteric Liquid Crystals. <i>Physical Review Letters</i> , 2011, 106, 107801.	2.9	123
160	Colloids in a bacterial bath: simulations and experiments. <i>Soft Matter</i> , 2011, 7, 5228.	1.2	99
161	Lateral Dynamics of Proteins with Polybasic Domain on Anionic Membranes: A Dynamic Monte-Carlo Study. <i>Biophysical Journal</i> , 2011, 100, 1261-1270.	0.2	29
162	A Self-Quenched Defect Glass in a Colloid-Nematic Liquid Crystal Composite. <i>Science</i> , 2011, 334, 79-83.	6.0	139

#	ARTICLE	IF	CITATIONS
163	Simulations of Viral DNA Packaging and Ejection: Geometrical Order and Topological Disorder. <i>Biophysical Journal</i> , 2011, 100, 235a.	0.2	0
164	Non-specific (entropic) forces as major determinants of the structure of mammalian chromosomes. <i>Chromosome Research</i> , 2011, 19, 53-61.	1.0	34
165	Polymers with spatial or topological constraints: Theoretical and computational results. <i>Physics Reports</i> , 2011, 504, 1-73.	10.3	202
166	Lateral dynamics of charged lipids and peripheral proteins in spatially heterogeneous membranes: Comparison of continuous and Monte Carlo approaches. <i>Journal of Chemical Physics</i> , 2011, 135, 155103.	1.2	9
167	Bistable Defect Structures In Blue Phase Devices. <i>Physical Review Letters</i> , 2011, 107, 237803.	2.9	28
168	Shearing self-propelled suspensions: Arrest of coarsening and suppression of giant density fluctuations. <i>Physical Review E</i> , 2011, 84, 031930.	0.8	12
169	Influence of ions on genome packaging and ejection: A molecular dynamics study. <i>Journal of Chemical Physics</i> , 2011, 135, 095101.	1.2	17
170	Nonlinear dynamics and rheology of active fluids: Simulations in two dimensions. <i>Physical Review E</i> , 2011, 83, 041910.	0.8	84
171	Monte Carlo and event-driven dynamics of Brownian particles with orientational degrees of freedom. <i>Journal of Chemical Physics</i> , 2011, 135, 124106.	1.2	32
172	The role of noise and advection in absorbing state phase transitions. <i>Europhysics Letters</i> , 2010, 90, 16003.	0.7	3
173	Domain growth in cholesteric blue phases: Hybrid lattice Boltzmann simulations. <i>Computers and Mathematics With Applications</i> , 2010, 59, 2360-2369.	1.4	14
174	Switching and defect dynamics in multistable liquid crystal devices. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	15
175	Dynamic Monte Carlo versus Brownian dynamics: A comparison for self-diffusion and crystallization in colloidal fluids. <i>Journal of Chemical Physics</i> , 2010, 132, 194102.	1.2	109
176	Different pulling modes in DNA overstretching: A theoretical analysis. <i>Physical Review E</i> , 2010, 81, 051926.	0.8	14
177	Thermodynamics of blue phases in electric fields. <i>Physical Review E</i> , 2010, 81, 031706.	0.8	27
178	Arrested phase separation in reproducing bacteria creates a generic route to pattern formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 11715-11720.	3.3	241
179	Ordering dynamics of blue phases entails kinetic stabilization of amorphous networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 13212-13215.	3.3	40
180	Colloids in Cholesterics: Size-Dependent Defects and Non-Stokesian Microrheology. <i>Physical Review Letters</i> , 2010, 105, 178302.	2.9	76

#	ARTICLE	IF	CITATIONS
181	Colloids in liquid crystals: a lattice Boltzmann study. <i>Journal of Materials Chemistry</i> , 2010, 20, 10547.	6.7	49
182	Biopolymer organization upon confinement. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 283102.	0.7	79
183	Non-equilibrium dynamics of an active colloidal "œchucker" Journal of Chemical Physics, 2010, 132, 204904.	1.2	12
184	Hydrodynamics of non-homogeneous active gels. <i>Soft Matter</i> , 2010, 6, 774.	1.2	9
185	DNA"DNA interactions in bacteriophage capsids are responsible for the observed DNA knotting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22269-22274.	3.3	173
186	Localisation of DivIVA by targeting to negatively curved membranes. <i>EMBO Journal</i> , 2009, 28, 2272-2282.	3.5	292
187	Entropic organization of interphase chromosomes. <i>Journal of Cell Biology</i> , 2009, 186, 825-834.	2.3	144
188	Lattice Boltzmann simulations of liquid crystalline fluids: active gels and blue phases. <i>Soft Matter</i> , 2009, 5, 3791.	1.2	79
189	Phase diagrams for DNA denaturation under stretching forces. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, L04001.	0.9	11
190	Statistics of confined polymers and the melting of a DNA spool. <i>Europhysics Letters</i> , 2009, 85, 38005.	0.7	8
191	Topological and entropic repulsion in biopolymers. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, L09002.	0.9	17
192	Lattice Boltzmann simulations of spontaneous flow in active liquid crystals: The role of boundary conditions. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2008, 149, 56-62.	1.0	21
193	Hydrodynamic of Active Liquid Crystals: A Hybrid Lattice Boltzmann Approach. <i>Molecular Crystals and Liquid Crystals</i> , 2008, 494, 293-308.	0.4	10
194	Ejection Dynamics of Polymeric Chains from Viral Capsids: Effect of Solvent Quality. <i>Biophysical Journal</i> , 2008, 94, 4159-4164.	0.2	40
195	Simulations of Knotting in Confined Circular DNA. <i>Biophysical Journal</i> , 2008, 95, 3591-3599.	0.2	69
196	Computer Simulations of DNA Packing inside Bacteriophages: Elasticity, Electrostatics and Entropy. <i>Computational and Mathematical Methods in Medicine</i> , 2008, 9, 317-325.	0.7	14
197	Cubic blue phases in electric fields. <i>Europhysics Letters</i> , 2008, 81, 66004.	0.7	35
198	Shearing Active Gels Close to the Isotropic-Nematic Transition. <i>Physical Review Letters</i> , 2008, 101, 068102.	2.9	137

#	ARTICLE	IF	CITATIONS
199	Nonequilibrium Phase Transition in the Sedimentation of Reproducing Particles. <i>Physical Review Letters</i> , 2008, 101, 100602.	2.9	14
200	Dynamics of an Anchored Polymer Molecule under an Oscillating Force. <i>Physical Review Letters</i> , 2007, 98, 088101.	2.9	11
201	Steady-state hydrodynamic instabilities of active liquid crystals: Hybrid lattice Boltzmann simulations. <i>Physical Review E</i> , 2007, 76, 031921.	0.8	227
202	Nonequilibrium-Driven Motion in Actin Networks: Comet Tails and Moving Beads. <i>Physical Review Letters</i> , 2007, 98, 238302.	2.9	17
203	Hydrodynamics and Rheology of Active Liquid Crystals: A Numerical Investigation. <i>Physical Review Letters</i> , 2007, 98, 118102.	2.9	97
204	Dynamics of fibers growing inside soft vesicles. <i>Europhysics Letters</i> , 2007, 80, 48004.	0.7	15
205	Viscoelastic Flows of Cholesteric Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 465, 1-14.	0.4	4
206	Kinetics of Solute Partitioning into Ultrathin Nafion Films on Electrode Surfaces: Theory and Experimental Measurement. <i>Journal of Physical Chemistry C</i> , 2007, 111, 294-302.	1.5	14
207	What are the molecular ties that maintain genomic loops?. <i>Trends in Genetics</i> , 2007, 23, 126-133.	2.9	97
208	Entropy-Driven Genome Organization. <i>Biophysical Journal</i> , 2006, 90, 3712-3721.	0.2	164
209	Modeling a Self-Avoiding Chromatin Loop: Relation to the Packing Problem, Action-at-a-Distance, and Nuclear Context. <i>Structure</i> , 2006, 14, 197-204.	1.6	19
210	Stretching a self-interacting semiflexible polymer. <i>Europhysics Letters</i> , 2006, 75, 818-824.	0.7	10
211	Entropic approach curves of a polymer of fixed topology. <i>Europhysics Letters</i> , 2006, 76, 519-525.	0.7	2
212	Growth of a semi-flexible polymer close to a fluctuating obstacle: application to cytoskeletal actin fibres and testing of ratchet models. <i>Journal of Physics Condensed Matter</i> , 2006, 18, S357-S374.	0.7	14
213	Knotting of random ring polymers in confined spaces. <i>Journal of Chemical Physics</i> , 2006, 124, 064903.	1.2	88
214	The depletion attraction: an underappreciated force driving cellular organization. <i>Journal of Cell Biology</i> , 2006, 175, 681-686.	2.3	341
215	Stall, Spiculate, or Run Away: The Fate of Fibers Growing towards Fluctuating Membranes. <i>Physical Review Letters</i> , 2006, 97, 098101.	2.9	13
216	Permeative flows in cholesterics: Shear and Poiseuille flows. <i>Journal of Chemical Physics</i> , 2006, 124, 204906.	1.2	12

#	ARTICLE	IF	CITATIONS
217	Electric-field-induced disclination migration in a Grandjean-Cano wedge. <i>Journal of Applied Physics</i> , 2006, 99, 064911.	1.1	7
218	Geometry of proteins: Hydrogen bonding, sterics, and marginally compact tubes. <i>Physical Review E</i> , 2006, 73, 031921.	0.8	14
219	Lattice Boltzmann algorithm to simulate isotropic-nematic emulsions. <i>Physical Review E</i> , 2006, 74, 041708.	0.8	29
220	Depletion Effects and Loop Formation in Self-Avoiding Polymers. <i>Physical Review Letters</i> , 2006, 97, 178302.	2.9	56
221	Polymer Packaging and Ejection in Viral Capsids: Shape Matters. <i>Physical Review Letters</i> , 2006, 96, 208102.	2.9	112
222	Shear dynamics in cholesterics. <i>Computer Physics Communications</i> , 2005, 169, 122-125.	3.0	4
223	A new interpolation formula for semiflexible polymers. <i>Biophysical Chemistry</i> , 2005, 115, 251-254.	1.5	19
224	Physics of thick polymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 650-679.	2.4	21
225	Switching hydrodynamics in multi-domain, twisted nematic, liquid-crystal devices. <i>Europhysics Letters</i> , 2005, 71, 604-610.	0.7	8
226	Lattice Boltzmann Simulations of Cholesteric Liquid Crystals: Permeative Flows, Doubly Twisted Textures and Cubic Blue Phases. <i>Molecular Crystals and Liquid Crystals</i> , 2005, 435, 185/[845]-198/[858].	0.4	4
227	Three-dimensional dynamic Monte Carlo simulations of elastic actin-like ratchets. <i>Journal of Chemical Physics</i> , 2005, 123, 174908.	1.2	22
228	Rheology of Cholesteric Blue Phases. <i>Physical Review Letters</i> , 2005, 95, 097801.	2.9	33
229	Form of Growing Strings. <i>Physical Review Letters</i> , 2005, 95, 098103.	2.9	6
230	A Coarse Grained Model for DNA and Polymer Packaging: Statics and Dynamics. <i>Journal of Theoretical Medicine</i> , 2005, 6, 115-117.	0.5	3
231	Continuum model for polymers with finite thickness. <i>Journal of Physics A</i> , 2005, 38, L277-L283.	1.6	16
232	Numerical calculations of the phase diagram of cubic blue phases in cholesteric liquid crystals. <i>Physical Review E</i> , 2005, 71, 011703.	0.8	49
233	Inferring the Diameter of a Biopolymer from Its Stretching Response. <i>Biophysical Journal</i> , 2005, 89, 80-86.	0.2	30
234	MODELLING DNA AS A FLEXIBLE THICK POLYMER: DNA ELASTICITY AND PACKAGING THERMODYNAMICS. <i>Series on Knots and Everything</i> , 2005, , 127-147.	0.0	0

#	ARTICLE	IF	CITATIONS
235	Permeative Flows in Cholesteric Liquid Crystals. <i>Physical Review Letters</i> , 2004, 92, 188301.	2.9	45
236	Dynamics of polymer packaging. <i>Journal of Chemical Physics</i> , 2004, 121, 8635.	1.2	69
237	Interplay between shear flow and elastic deformations in liquid crystals. <i>Journal of Chemical Physics</i> , 2004, 121, 582.	1.2	23
238	Lattice Boltzmann algorithm for three-dimensional liquid crystal hydrodynamics. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2004, 362, 1745-1754.	1.6	98
239	Stepwise unfolding of collapsed polymers. <i>European Physical Journal E</i> , 2004, 15, 83-93.	0.7	16
240	Elasticity of Semiflexible Polymers with and without Self-Interactions. <i>Macromolecules</i> , 2003, 36, 10095-10102.	2.2	40
241	Thermodynamics of DNA Packaging Inside a Viral Capsid: The Role of DNA Intrinsic Thickness. <i>Journal of Molecular Biology</i> , 2003, 330, 485-492.	2.0	68
242	Mechanical unfolding of directed polymers in a poor solvent: Critical exponents. <i>Physical Review E</i> , 2003, 67, 041802.	0.8	34
243	Stretching of a Polymer below the β Point. <i>Physical Review Letters</i> , 2003, 90, 088301.	2.9	66
244	Rheology of distorted nematic liquid crystals. <i>Europhysics Letters</i> , 2003, 64, 406-412.	0.7	21
245	Tubes near the edge of compactness and folded protein structures *. <i>Journal of Physics Condensed Matter</i> , 2003, 15, S1787-S1796.	0.7	8
246	Geometry of Compact Tubes and Protein Structures. <i>Complexus</i> , 2003, 1, 4-13.	0.7	22
247	DNA sequence from the unzipping force? One mutation problem. <i>Journal of Physics A</i> , 2002, 35, L349-L356.	1.6	15
248	Force-induced unfolding of a homopolymer on a fractal lattice: exact results versus mean-field predictions. <i>Journal of Physics A</i> , 2002, 35, L233-L240.	1.6	11
249	Mechanical denaturation of DNA: existence of a low-temperature denaturation. <i>Journal of Physics A</i> , 2001, 34, L751-L758.	1.6	45
250	Dynamical Scaling of the DNA Unzipping Transition. <i>Physical Review Letters</i> , 2001, 88, 028102.	2.9	126
251	Phase diagram of force-induced DNA unzipping in exactly solvable models. <i>Physical Review E</i> , 2001, 64, 031901.	0.8	92
252	HMGB2 Loss Upon Senescence Entry Disrupts Genomic Organization and Induces CTCF Clustering Across Cell Types. <i>SSRN Electronic Journal</i> , 0, , .	0.4	3