Raymond E Goldstein

List of Publications by Year
in descending order

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213 papers	17,366 citations	11639 70 h-index	15716 125 g-index
238 all docs	238 docs citations	238 times ranked	9049 citing authors

#	Article	IF	Citations
1	Cellular organization in lab-evolved and extant multicellular species obeys a maximum entropy law. ELife, 2022, 11, .	2.8	20
2	Biofilm Growth under Elastic Confinement. Physical Review Letters, 2022, 128, 178102.	2.9	8
3	Collapse of a hemicatenoid bounded by a solid wall: instability and dynamics driven by surface Plateau border friction. Soft Matter, 2022, 18, 4944-4952.	1.2	1
4	An â€œocclusive thrombosis-on-a-chipâ€•microfluidic device for investigating the effect of anti-thrombotic drugs. Lab on A Chip, 2021, 21, 4104-4117.	3.1	17
5	Morphoelasticity of large bending deformations of cell sheets during development. Physical Review E, 2021, 103, 022411.	0.8	5
6	The fluid dynamics of collective vortex structures of plant-animal worms. Journal of Fluid Mechanics, 2021, 914, .	1.4	6
7	Direct measurement of unsteady microscale Stokes flow using optically driven microspheres. Physical Review Fluids, 2021, 6, .	1.0	7
8	Comment on â€œFaceting and Flattening of Emulsion Droplets: A Mechanical Modelâ€• Physical Review Letters, 2021, 126, 259801.	2.9	5
9	Turingâ€™s Diffusive Threshold in Random Reaction-Diffusion Systems. Physical Review Letters, 2021, 126, 238101.	2.9	26
10	Geometry of catenoidal soap film collapse induced by boundary deformation. Physical Review E, 2021, 104, 035105.	0.8	3
11	Swirling Instability of the Microtubule Cytoskeleton. Physical Review Letters, 2021, 126, 028103.	2.9	24
12	Fluid Mechanics of Mosaic Ciliated Tissues. Physical Review Letters, 2021, 127, 198102.	2.9	6
13	A Compact Eulerian Representation of Axisymmetric Inviscid Vortex Sheet Dynamics. Communications on Pure and Applied Mathematics, 2020, 73, 239-256.	1.2	1
14	A theory for the slip and drag of superhydrophobic surfaces with surfactant. Journal of Fluid Mechanics, 2020, 883, .	1.4	26
15	Stability of dancingVolvox. Journal of Fluid Mechanics, 2020, 903, .	1.4	18
16	Motility and phototaxis of Gonium , the simplest differentiated colonial alga. Physical Review E, 2020, 101, 022416.	0.8	24
17	CCDC61/VFL3 Is a Paralog of SAS6 and Promotes Ciliary Functions. Structure, 2020, 28, 674-689.e11.	1.6	16
18	Stress-Induced Dinoflagellate Bioluminescence at the Single Cell Level. Physical Review Letters, 2020, 125, 028102.	2.9	11

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19	Optimal Design of Multilayer Fog Collectors. ACS Applied Materials & Interfaces, 2020, 12, 7736-7743.	4.0	42
20	Subpopulations and stability in microbial communities. Physical Review Research, 2020, 2, .	1.3	10
21	Nuclear crowding and nonlinear diffusion during interkinetic nuclear migration in the zebrafish retina. ELife, 2020, 9, .	2.8	15
22	Nonlinear and nonlocal elasticity in coarse-grained differential-tension models of epithelia. Physical Review E, 2019, 99, 022411.	0.8	10
23	Shape-shifting polyhedral droplets. Physical Review Research, 2019, 1, .	1.3	15
24	Swimming eukaryotic microorganisms exhibit a universal speed distribution. ELife, 2019, 8, .	2.8	28
25	Microbial mutualism at a distance: The role of geometry in diffusive exchanges. Physical Review E, 2018, 97, 022411.	0.8	13
26	Why Clothes Donâ€™t Fall Apart: Tension Transmission in Staple Yarns. Physical Review Letters, 2018, 120, 158001.	2.9	17
27	Nonlinear concentration patterns and bands in autochemotactic suspensions. Physical Review E, 2018, 98, .	0.8	18
28	Embryonic inversion inVolvox carteri: The flipping and peeling of elastic lips. Physical Review E, 2018, 98, .	0.8	6
29	Coffee stains, cell receptors, and time crystals: Lessons from the old literature. Physics Today, 2018, 71, 32-38.	0.3	26
30	Time Irreversibility and Criticality in the Motility of a Flagellate Microorganism. Physical Review Letters, 2018, 121, 058103.	2.9	42
31	The noisy basis of morphogenesis: Mechanisms and mechanics of cell sheet folding inferred from developmental variability. PLoS Biology, 2018, 16, e2005536.	2.6	22
32	The role of tumbling frequency and persistence in optimal run-and-tumble chemotaxis. IMA Journal of Applied Mathematics, 2018, 83, 700-719.	0.8	5
33	Evaporation-driven convective flows in suspensions of nonmotile bacteria. Physical Review Fluids, 2018, 3, .	1.0	13
34	Are theoretical results â€˜Resultsâ€™?. ELife, 2018, 7, .	2.8	20
35	Theory of Shape-Shifting Droplets. Physical Review Letters, 2017, 118, 088001.	2.9	29
36	Scattering of biflagellate microswimmers from surfaces. Physical Review E, 2017, 96, 023102.	0.8	65

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37	Spontaneous oscillations of elastic filaments induced by molecular motors. Journal of the Royal Society Interface, 2017, 14, 20170491.	1.5	64
38	Traces of surfactants can severely limit the drag reduction of superhydrophobic surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7254-7259.	3.3	67
39	Localised dynactin protects growing microtubules to deliver oskar mRNA to the posterior cortex of the Drosophila oocyte. ELife, 2017, 6, .	2.8	14
40	Aerotaxis in the closest relatives of animals. ELife, 2016, 5, .	2.8	29
41	Commentary: A biology journal provides a lesson in peer review. Physics Today, 2016, 69, 10-11.	0.3	3
42	Squirmers with swirl: a model forVolvoxswimming. Journal of Fluid Mechanics, 2016, 798, 165-186.	1.4	92
43	Filter-feeding, near-field flows, and the morphologies of colonial choanoflagellates. Physical Review E, 2016, 94, 052401.	0.8	27
44	Batchelor Prize Lecture Fluid dynamics at the scale of the cell. Journal of Fluid Mechanics, 2016, 807, 1-39.	1.4	23
45	Coordinated beating of algal flagella is mediated by basal coupling. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2784-93.	3.3	133
46	The Evolution of Silicon Transport in Eukaryotes. Molecular Biology and Evolution, 2016, 33, 3226-3248.	3.5	107
47	Directed collective motion of bacteria under channel confinement. New Journal of Physics, 2016, 18, 075002.	1.2	176
48	A model for the effects of germanium on silica biomineralization in choanoflagellates. Journal of the Royal Society Interface, 2016, 13, 20160485.	1.5	10
49	Motility of Colonial Choanoflagellates and the Statistics of Aggregate Random Walkers. Physical Review Letters, 2016, 116, 038102.	2.9	33
50	Instabilities and Solitons in Minimal Strips. Physical Review Letters, 2016, 117, 017801.	2.9	16
51	Ferromagnetic and antiferromagnetic order in bacterial vortex lattices. Nature Physics, 2016, 12, 341-345.	6.5	142
52	Soap-film dynamics and topological transitions under continuous deformation. Physical Review Fluids, 2016, 1, .	1.0	4
53	Elastohydrodynamic synchronization of adjacent beating flagella. Physical Review Fluids, 2016, 1, .	1.0	36
54	Long-range interactions, wobbles, and phase defects in chains of model cilia. Physical Review Fluids, 2016, 1, 081201.	1.0	25

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55	Feeding ducks, bacterial chemotaxis, and the Gini index. Physical Review E, 2015, 92, 022701.	0.8	5
56	Metachronal waves in the flagellar beating ofVolvoxand their hydrodynamic origin. Journal of the Royal Society Interface, 2015, 12, 20141358.	1.5	104
57	Elasticity and glocality: initiation of embryonic inversion in Volvox. Journal of the Royal Society Interface, 2015, 12, 20150671.	1.5	19
58	Do Dissolving Objects Converge to a Universal Shape?. Langmuir, 2015, 31, 4145-4150.	1.6	16
59	From Chemical Gardens to Chemobrionics. Chemical Reviews, 2015, 115, 8652-8703.	23.0	216
60	Dynamics of aVolvoxEmbryo Turning Itself Inside Out. Physical Review Letters, 2015, 114, 178101.	2.9	61
61	A physical perspective on cytoplasmic streaming. Interface Focus, 2015, 5, 20150030.	1.5	127
62	Instability of a MÃ¶bius Strip Minimal Surface and a Link with Systolic Geometry. Physical Review Letters, 2015, 114, 127801.	2.9	12
63	Green Algae as Model Organisms for Biological Fluid Dynamics. Annual Review of Fluid Mechanics, 2015, 47, 343-375.	10.8	261
64	Cortical microtubule nucleation can organise the cytoskeleton of Drosophila oocytes to define the anteroposterior axis. ELife, 2015, 4, .	2.8	47
65	Rheotaxis facilitates upstream navigation of mammalian sperm cells. ELife, 2014, 3, e02403.	2.8	198
66	Flagellar synchronization through direct hydrodynamic interactions. ELife, 2014, 3, e02750.	2.8	208
67	Rhythmicity, Recurrence, and Recovery of Flagellar Beating. Physical Review Letters, 2014, 113, 238103.	2.9	57
68	Lag, lock, sync, slip: the many â€˜phasesâ€™ of coupled flagella. Journal of the Royal Society Interface, 2014, 11, 20131160.	1.5	75
69	Boundary singularities produced by the motion of soap films. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8339-8344.	3.3	19
70	Controlling active self-assembly through broken particle-shape symmetry. Physical Review E, 2014, 89, 010302.	0.8	64
71	Fluid flows created by swimming bacteria drive self-organization in confined suspensions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9733-9738.	3.3	302
72	Instability of a gravity current within a soapÂfilm. Journal of Fluid Mechanics, 2014, 753, .	1.4	4

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73	Membrane Viscosity Determined from Shear-Driven Flow in Giant Vesicles. Physical Review Letters, 2013, 111, 038103.	2.9	79
74	Fluid Dynamics of Bacterial Turbulence. Physical Review Letters, 2013, 110, 228102.	2.9	407
75	Confinement Stabilizes a Bacterial Suspension into a Spiral Vortex. Physical Review Letters, 2013, 110, 268102.	2.9	333
76	Swimming like algae: biomimetic soft artificial cilia. Journal of the Royal Society Interface, 2013, 10, 20120666.	1.5	68
77	A General Allometric and Life-History Model for Cellular Differentiation in the Transition to Multicellularity. American Naturalist, 2013, 181, 369-380.	1.0	33
78	Minimal continuum theories of structure formation in dense active fluids. New Journal of Physics, 2013, 15, 045016.	1.2	81
79	Cytoplasmic streaming in plant cells emerges naturally by microfilament self-organization. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14132-14137.	3.3	88
80	Antiphase Synchronization in a Flagellar-Dominance Mutant ofChlamydomonas. Physical Review Letters, 2013, 111, 158101.	2.9	57
81	Ciliary contact interactions dominate surface scattering of swimming eukaryotes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1187-1192.	3.3	247
82	Collective chemotactic dynamics in the presence of self-generated fluid flows. Physical Review E, 2012, 86, 040902.	0.8	47
83	Coupling of Active Motion and Advection Shapes Intracellular Cargo Transport. Physical Review Letters, 2012, 109, 028104.	2.9	26
84	Spontaneous Circulation of Confined Active Suspensions. Physical Review Letters, 2012, 109, 168105.	2.9	128
85	Fluctuations, Dynamics, and the Stretch-Coil Transition of Single Actin Filaments in Extensional Flows. Physical Review Letters, 2012, 108, 038103.	2.9	90
86	Topological constraints and their breakdown in dynamical evolution. Nonlinearity, 2012, 25, R85-R98.	0.6	10
87	Shear-driven circulation patterns in lipid membrane vesicles. Journal of Fluid Mechanics, 2012, 705, 165-175.	1.4	31
88	A ratchet trap for Leidenfrost drops. Journal of Fluid Mechanics, 2012, 696, 215-227.	1.4	76
89	Hydrodynamic Synchronization and Metachronal Waves on the Surface of the Colonial AlgaVolvox carteri. Physical Review Letters, 2012, 109, 268102.	2.9	136
90	Individual to Collective Dynamics of Swimming Bacteria. The IMA Volumes in Mathematics and Its Applications, 2012, , 73-82.	0.5	0

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91	Meso-scale turbulence in living fluids. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14308-14313.	3.3	747
92	Cytoplasmic streaming in Drosophila oocytes varies with kinesin activity and correlates with the microtubule cytoskeleton architecture. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15109-15114.	3.3	110
93	Dance of the microswimmers. Physics Today, 2012, 65, 30-35.	0.3	66
94	Shape of a Ponytail and the Statistical Physics of Hair Fiber Bundles. Physical Review Letters, 2012, 108, 078101.	2.9	16
95	Fluid dynamics and noise in bacterial cellâ€"cell and cellâ€"surface scattering. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10940-10945.	3.3	583
96	Emergence of Synchronized Beating during the Regrowth of Eukaryotic Flagella. Physical Review Letters, 2011, 107, 148103.	2.9	59
97	Growth and instability of a laminar plume in a strongly stratified environment. Journal of Fluid Mechanics, 2011, 671, 184-206.	1.4	8
98	THE FLAGELLAR PHOTORESPONSE IN VOLVOX SPECIES (VOLVOCACEAE, CHLOROPHYCEAE)1. Journal of Phycology, 2011, 47, 580-583.	1.0	15
99	Dynamics of swimming bacteria: Transition to directional order at high concentration. Physical Review E, 2011, 83, 061907.	0.8	116
100	Flagellar phenotypic plasticity in volvocalean algae correlates with PÃ©clet number. Journal of the Royal Society Interface, 2011, 8, 1409-1417.	1.5	13
101	Insights into the Evolution of Vitamin B12 Auxotrophy from Sequenced Algal Genomes. Molecular Biology and Evolution, 2011, 28, 2921-2933.	3.5	246
102	On the mechanisms of icicle evolution. Journal of Fluid Mechanics, 2010, 647, 287-308.	1.4	16
103	Measurement of cytoplasmic streaming in single plant cells by magnetic resonance velocimetry. Journal of Fluid Mechanics, 2010, 642, 5-14.	1.4	36
104	Cytoplasmic streaming enables the distribution of molecules and vesicles in large plant cells. Protoplasma, 2010, 240, 99-107.	1.0	120
105	Fidelity of adaptive phototaxis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11171-11176.	3.3	123
106	Soap-film MÃ¶bius strip changes topology with a twist singularity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21979-21984.	3.3	43
107	Direct Measurement of the Flow Field around Swimming Microorganisms. Physical Review Letters, 2010, 105, 168101.	2.9	339
108	Fluid Velocity Fluctuations in a Suspension of Swimming Protists. Physical Review Letters, 2010, 105, 188101.	2.9	31

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109	Enhanced mixing and spatial instability in concentrated bacterial suspensions. Physical Review E, 2009, 80, 031903.	0.8	170
110	Dynamics of Enhanced Tracer Diffusion in Suspensions of Swimming Eukaryotic Microorganisms. Physical Review Letters, 2009, 103, 198103.	2.9	385
111	DancingVolvox: Hydrodynamic Bound States of Swimming Algae. Physical Review Letters, 2009, 102, 168101.	2.9	291
112	How to track protists in three dimensions. Review of Scientific Instruments, 2009, 80, 014301.	0.6	40
113	Noise and Synchronization in Pairs of Beating Eukaryotic Flagella. Physical Review Letters, 2009, 103, 168103.	2.9	191
114	Chlamydomonas Swims with Two â€œGearsâ€•in a Eukaryotic Version of Run-and-Tumble Locomotion. Science, 2009, 325, 487-490.	6.0	371
115	The Elastic Basis for the Shape of Borrelia burgdorferi. Biophysical Journal, 2009, 96, 4409-4417.	0.2	62
116	Large-Scale Collective Behavior of Swimming Microorganisms at High Concentrations. , 2009, , 455-470.		0
117	VOLVOX BARBERI, THE FASTEST SWIMMER OF THE VOLVOCALES (CHLOROPHYCEAE)¹. Journal of Phycology, 2008, 44, 1395-1398.	1.0	22
118	Microfluidics of cytoplasmic streaming and its implications for intracellular transport. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 3663-3667.	3.3	102
119	Natureâ€™s Microfluidic Transporter: Rotational Cytoplasmic Streaming at High PÃ©clet Numbers. Physical Review Letters, 2008, 101, 178102.	2.9	39
120	Model for dynamical coherence in thin films of self-propelled microorganisms. Physical Review E, 2007, 75, 040901.	0.8	156
121	Concentration Dependence of the Collective Dynamics of Swimming Bacteria. Physical Review Letters, 2007, 98, 158102.	2.9	579
122	Fluid dynamics of self-propelled microorganisms, from individuals to concentrated populations. Experiments in Fluids, 2007, 43, 737-753.	1.1	242
123	Motility, mixing, and multicellularity. Genetic Programming and Evolvable Machines, 2007, 8, 115-129.	1.5	18
124	The Flagellar Cytoskeleton of the Spirochetes. Journal of Molecular Microbiology and Biotechnology, 2006, 11, 221-227.	1.0	69
125	Hermitization and the Poisson bracket-commutator correspondence as a consequence of averaging. Journal of Physics A, 2006, 39, 789-803.	1.6	1
126	Multicellularity and the functional interdependence of motility and molecular transport. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1353-1358.	3.3	91

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127	Flows driven by flagella of multicellular organisms enhance long-range molecular transport. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8315-8319.	3.3	129
128	Dynamic buckling of morphoelastic filaments. Physical Review E, 2006, 74, 010901.	0.8	35
129	A free-boundary theory for the shape of the ideal dripping icicle. Physics of Fluids, 2006, 18, 083101.	1.6	33
130	Reversal of bacterial locomotion at an obstacle. Physical Review E, 2006, 73, 030901.	0.8	98
131	Teaching Biological Physics. Physics Today, 2005, 58, 46-51.	0.3	8
132	Stalactite growth as a free-boundary problem. Physics of Fluids, 2005, 17, 083101.	1.6	35
133	Mapping of the relativistic kinetic balance equations onto the Kleinâ€"Gordon and second-order Dirac equations. Nonlinearity, 2005, 18, 1295-1304.	0.6	5
134	Boundary layer model for vortex fingers in type-II superconductors. Physical Review B, 2005, 72, .	1.1	8
135	Coiling, Entrainment, and Hydrodynamic Coupling of Decelerated Fluid Jets. Physical Review Letters, 2005, 95, 184501.	2.9	20
136	Stalactite Growth as a Free-Boundary Problem: A Geometric Law and Its Platonic Ideal. Physical Review Letters, 2005, 94, 018501.	2.9	73
137	Bacterial swimming and oxygen transport near contact lines. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 2277-2282.	3.3	539
138	Mapping of the classical kinetic balance equations onto the SchrÃ¶dinger equation. Nonlinearity, 2005, 18, 211-226.	0.6	9
139	Mapping of the classical kinetic balance equations onto the Pauli equation. Nonlinearity, 2005, 18, 227-235.	0.6	6
140	Precipitative Growth Templated by a Fluid Jet. Langmuir, 2005, 21, 10916-10919.	1.6	38
141	Self-Concentration and Large-Scale Coherence in Bacterial Dynamics. Physical Review Letters, 2004, 93, 098103.	2.9	862
142	Tubular precipitation and redox gradients on a bubbling template. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 11537-11541.	3.3	98
143	Dynamic supercoiling bifurcations of growing elastic filaments. Physica D: Nonlinear Phenomena, 2004, 190, 266-289.	1.3	27
144	Inertially driven buckling and overturning of jets in a Hele-Shaw cell. Physical Review E, 2003, 68, 056305.	0.8	15

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145	Quantum Necking in Stressed Metallic Nanowires. Physical Review Letters, 2003, 91, 254501.	2.9	27
146	Fluid-membrane tethers: Minimal surfaces and elastic boundary layers. Physical Review E, 2002, 65, 041901.	0.8	184
147	Periodic Chirality Transformations Propagating On Bacterial Flagella. Physical Review Letters, 2002, 89, 118102.	2.9	38
148	cAMP waves inDictyosteliumterritories. Nonlinearity, 2002, 15, C1-C5.	0.6	8
149	Quantum suppression of the Rayleigh instability in nanowires. Nonlinearity, 2001, 14, 167-177.	0.6	38
150	Resetting Wave Forms inDictyosteliumTerritories. Physical Review Letters, 2001, 87, 068101.	2.9	20
151	Bistable Helices. Physical Review Letters, 2000, 84, 1631-1634.	2.9	88
152	Chiral Self-Propulsion of Growing Bacterial Macrofibers on a Solid Surface. Physical Review Letters, 2000, 84, 1627-1630.	2.9	38
153	Twirling and Whirling: Viscous Dynamics of Rotating Elastic Filaments. Physical Review Letters, 2000, 84, 1623-1626.	2.9	122
154	Domain of convergence of perturbative solutions for Hele-Shaw flow near interface collapse. Physics of Fluids, 1999, 11, 2809-2811.	1.6	10
155	Viscous Nonlinear Dynamics of Twist and Writhe. Physical Review Letters, 1998, 80, 5232-5235.	2.9	105
156	Instabilities and singularities in Heleâ€“Shaw flow. Physics of Fluids, 1998, 10, 2701-2723.	1.6	46
157	Trapping and Wiggling: Elastohydrodynamics of Driven Microfilaments. Biophysical Journal, 1998, 74, 1043-1060.	0.2	186
158	Goldstein and Dorsey Reply:. Physical Review Letters, 1998, 81, 5036-5036.	2.9	3
159	Shapes of flux domains in the intermediate state of type-I superconductors. Physical Review B, 1998, 57, 3058-3072.	1.1	50
160	Flexive and Propulsive Dynamics of Elastica at Low Reynolds Number. Physical Review Letters, 1998, 80, 3879-3882.	2.9	235
161	Propagation of a topological transition: The Rayleigh instability. Physics of Fluids, 1998, 10, 1052-1057.	1.6	58
162	Selection for spiral waves in the social amoebae Dictyostelium. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 13719-13723.	3.3	79

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163	Pearling and Pinching: Propagation of Rayleigh Instabilities. Physical Review Letters, 1997, 78, 2555-2558.	2.9	64
164	Competing Patterns of Signaling Activity inDictyostelium Discoideum. Physical Review Letters, 1996, 76, 1174-1177.	2.9	187
165	Front Progagation in the Pearling Instability of Tubular Vesicles. Journal De Physique II, 1996, 6, 767-796.	0.9	55
166	Hydrodynamics of monolayer domains at the airâ€"water interface. Physics of Fluids, 1996, 8, 843-854.	1.6	66
167	Interface proliferation and the growth of labyrinths in a reaction-diffusion system. Physical Review E, 1996, 53, 3933-3957.	0.8	104
168	Traveling-Wave Chemotaxis. Physical Review Letters, 1996, 77, 775-778.	2.9	52
169	Current-Loop Model for the Intermediate State of Type-I Superconductors. Physical Review Letters, 1996, 76, 3818-3821.	2.9	40
170	Nonlinear Dynamics of Stiff Polymers. Physical Review Letters, 1995, 75, 1094-1097.	2.9	129
171	Attracting Manifold for a Viscous Topology Transition. Physical Review Letters, 1995, 75, 3665-3668.	2.9	29
172	Domain Shape Relaxation and the Spectrum of Thermal Fluctuations in Langmuir Monolayers. The Journal of Physical Chemistry, 1994, 98, 9626-9636.	2.9	43
173	Hydrodynamics of fingering instabilities in dipolar fluids. Physical Review E, 1994, 50, 298-307.	0.8	112
174	Nonlocal contour dynamics model for chemical front motion. Physical Review Letters, 1994, 72, 1120-1123.	2.9	71
175	Dynamics of pattern formation in magnetic fluids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1993, 80, 29-37.	2.3	1
176	Dynamics of pattern formation in magnetic fluids. Journal of Magnetism and Magnetic Materials, 1993, 122, 267-270.	1.0	6
177	Labyrinthine Pattern Formation in Magnetic Fluids. Science, 1993, 261, 1012-1015.	6.0	143
178	Finite-time singularity formation in Hele-Shaw systems. Physical Review E, 1993, 47, 4182-4196.	0.8	66
179	Topology transitions and singularities in viscous flows. Physical Review Letters, 1993, 70, 3043-3046.	2.9	93
180	Droplet breakup in a model of the Hele-Shaw cell. Physical Review E, 1993, 47, 4169-4181.	0.8	148

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181	Topological Transitions in Hele-Shaw Flow. , 1993, , 167-188.		8
182	Solitons, Eulerâ€™s Equation, and the Geometry of Curve Motion. , 1993, , 93-109.		3
183	Internal dynamics of DNA probed by transient electric birefringence. Physical Review Letters, 1992, 68, 1430-1433.	2.9	14
184	Dynamics of labyrinthine pattern formation in magnetic fluids. Physical Review A, 1992, 46, 4894-4904.	1.0	148
185	Solitons, Eulerâ€™s equation, and vortex patch dynamics. Physical Review Letters, 1992, 69, 555-558.	2.9	48
186	The Kortewegâ€“de Vries hierarchy as dynamics of closed curves in the plane. Physical Review Letters, 1991, 67, 3203-3206.	2.9	228
187	Comment on: Rectilinear diameters and extended corresponding states theory. Journal of Chemical Physics, 1991, 95, 9424-9425.	1.2	3
188	Hydrodynamic and interfacial patterns with broken space-time symmetry. Physical Review A, 1991, 43, 6700-6721.	1.0	74
189	Thermodynamics of rough colloidal surfaces. Physical Review Letters, 1991, 66, 1551-1554.	2.9	14
190	Electric double layers near modulated surfaces. Physical Review A, 1990, 41, 5504-5515.	1.0	47
191	Stretched-exponential relaxation of electric birefringence in polymer solutions. Physical Review Letters, 1990, 64, 1043-1046.	2.9	56
192	Defects and traveling-wave states in nonequilibrium patterns with broken parity. Physical Review A, 1990, 41, 5731-5734.	1.0	17
193	Geometrical and topological aspects of electric double layers near curved surfaces. Physical Review Letters, 1990, 65, 508-511.	2.9	67
194	Continuum theory of critical phenomena in polymer solutions: Formalism and mean field approximation. Journal of Chemical Physics, 1989, 90, 7448-7460.	1.2	9
195	Structural phase transitions of interacting membranes. Physical Review A, 1989, 40, 1025-1035.	1.0	44
196	Fluctuating pseudoatoms in metallic fluids. Journal of Chemical Physics, 1989, 91, 1843-1854.	1.2	25
197	Liquid-vapor asymmetry at the critical point. Accounts of Chemical Research, 1989, 22, 77-82.	7.6	13
198	Parity-breaking transitions of modulated patterns in hydrodynamic systems. Physical Review Letters, 1989, 63, 1954-1957.	2.9	128

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199	Model for Lamellar Phases of Interacting Lipid Membranes. Physical Review Letters, 1988, 61, 2213-2216.	2.9	75
200	Stretched-exponential relaxation of birefringence in a critical binary mixture. Physical Review B, 1988, 38, 7223-7226.	1.1	41
201	Broken particleâ€"hole symmetry in critical fluids. Journal of Chemical Physics, 1988, 88, 7059-7065.	1.2	31
202	Revised scaling variables in systems with many-body interactions. Physical Review A, 1987, 35, 4770-4780.	1.0	10
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