

Herbert Levine

List of Publications by Year in descending order

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403
papers

25,315
citations

6613

79
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11607

135
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461
all docs

461
docs citations

461
times ranked

18391
citing authors

#	ARTICLE	IF	CITATIONS
1	Guidelines and definitions for research on epithelialâ€“mesenchymal transition. Nature Reviews Molecular Cell Biology, 2020, 21, 341-352.	37.0	1,195
2	Pattern selection in fingered growth phenomena. Advances in Physics, 1988, 37, 255-339.	14.4	932
3	Implications of the Hybrid Epithelial/Mesenchymal Phenotype in Metastasis. Frontiers in Oncology, 2015, 5, 155.	2.8	581
4	Cooperative self-organization of microorganisms. Advances in Physics, 2000, 49, 395-554.	14.4	529
5	Phase-Field Model of Mode III Dynamic Fracture. Physical Review Letters, 2001, 87, 045501.	7.8	482
6	MicroRNA-based regulation of epithelialâ€“hybridâ€“mesenchymal fate determination. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18144-18149.	7.1	442
7	Experimental Demonstration of the Role of Anisotropy in Interfacial Pattern Formation. Physical Review Letters, 1985, 55, 1315-1318.	7.8	407
8	Tumor Budding: The Name is EMT. Partial EMT.. Journal of Clinical Medicine, 2016, 5, 51.	2.4	369
9	Stability of the hybrid epithelial/mesenchymal phenotype. Oncotarget, 2016, 7, 27067-27084.	1.8	367
10	Self-organization in systems of self-propelled particles. Physical Review E, 2000, 63, 017101.	2.1	363
11	Diffuse interface model of diffusion-limited crystal growth. Physical Review B, 1985, 31, 6119-6122.	3.2	333
12	<scp>EMT</scp> and <scp>MET</scp>: necessary or permissive for metastasis?. Molecular Oncology, 2017, 11, 755-769.	4.6	319
13	Electron Delocalization by a Magnetic Field in Two Dimensions. Physical Review Letters, 1983, 51, 1915-1918.	7.8	296
14	Vortex reconnection in superfluid helium. Physical Review Letters, 1993, 71, 1375-1378.	7.8	256
15	Hybrid epithelial/mesenchymal phenotypes promote metastasis and therapy resistance across carcinomas. , 2019, 194, 161-184.		244
16	Bacterial linguistic communication and social intelligence. Trends in Microbiology, 2004, 12, 366-372.	7.7	241
17	RNA Virus Evolution via a Fitness-Space Model. Physical Review Letters, 1996, 76, 4440-4443.	7.8	240
18	Geometrical models of interface evolution. Physical Review A, 1984, 29, 1335-1342.	2.5	238

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19	Toward understanding cancer stem cell heterogeneity in the tumor microenvironment. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 148-157.	7.1	238
20	Coupling actin flow, adhesion, and morphology in a computational cell motility model. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6851-6856.	7.1	230
21	Elucidating cancer metabolic plasticity by coupling gene regulation with metabolic pathways. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3909-3918.	7.1	227
22	Heterogeneous clearance rates of long-lived lymphocytes infected with HIV: Intrinsic stability predicts lifelong persistence. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 4819-4824.	7.1	224
23	Computational Model for Cell Morphodynamics. Physical Review Letters, 2010, 105, 108104.	7.8	214
24	Modeling the Genetic Regulation of Cancer Metabolism: Interplay between Glycolysis and Oxidative Phosphorylation. Cancer Research, 2017, 77, 1564-1574.	0.9	207
25	Survival Outcomes in Cancer Patients Predicted by a Partial EMT Gene Expression Scoring Metric. Cancer Research, 2017, 77, 6415-6428.	0.9	206
26	Dynamic Instabilities of Fracture under Biaxial Strain Using a Phase Field Model. Physical Review Letters, 2004, 93, 105504.	7.8	198
27	Geometrical Approach to Moving-Interface Dynamics. Physical Review Letters, 1983, 51, 1111-1114.	7.8	191
28	Epithelialâ€mesenchymal transition, a spectrum of states: Role in lung development, homeostasis, and disease. Developmental Dynamics, 2018, 247, 346-358.	1.8	190
29	Alignment of cellular motility forces with tissue flow as a mechanism for efficient wound healing. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2452-2459.	7.1	184
30	Immunoproteasome deficiency is a feature of non-small cell lung cancer with a mesenchymal phenotype and is associated with a poor outcome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1555-64.	7.1	174
31	Elucidating the Metabolic Plasticity of Cancer: Mitochondrial Reprogramming and Hybrid Metabolic States. Cells, 2018, 7, 21.	4.1	167
32	Viscosity renormalization in the Brinkman equation. Physics of Fluids, 1983, 26, 2864.	1.4	165
33	Domain swapping is a consequence of minimal frustration. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13786-13791.	7.1	164
34	Stability of Dendritic Crystals. Physical Review Letters, 1986, 57, 3069-3072.	7.8	161
35	Interrogating the topological robustness of gene regulatory circuits by randomization. PLoS Computational Biology, 2017, 13, e1005456.	3.2	161
36	Coupling the modules of EMT and stemness: A tunable â€stemness windowâ€™ model. Oncotarget, 2015, 6, 25161-25174.	1.8	157

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37	Towards elucidating the connection between epithelialâ€“mesenchymal transitions and stemness. Journal of the Royal Society Interface, 2014, 11, 20140962.	3.4	156
38	Incoherent Feedforward Control Governs Adaptation of Activated Ras in a Eukaryotic Chemotaxis Pathway. Science Signaling, 2012, 5, ra2.	3.6	154
39	Directional sensing in eukaryotic chemotaxis: A balanced inactivation model. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9761-9766.	7.1	145
40	Theory of the quantized Hall effect (I). Nuclear Physics B, 1984, 240, 30-48.	2.5	137
41	Controlling spatiotemporal chaos. Physical Review Letters, 1994, 72, 2561-2564.	7.8	136
42	Self-organized Vortex State in Two-Dimensional Dictyostelium Dynamics. Physical Review Letters, 1999, 83, 1247-1250.	7.8	136
43	Identification of EMT signaling cross-talk and gene regulatory networks by single-cell RNA sequencing. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	134
44	Polarity mechanisms such as contact inhibition of locomotion regulate persistent rotational motion of mammalian cells on micropatterns. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14770-14775.	7.1	131
45	Notch-Jagged signalling can give rise to clusters of cells exhibiting a hybrid epithelial/mesenchymal phenotype. Journal of the Royal Society Interface, 2016, 13, 20151106.	3.4	130
46	Geometrical models of interface evolution. II. Numerical simulation. Physical Review A, 1984, 30, 3161-3174.	2.5	129
47	The Astrocyte as a Gatekeeper of Synaptic Information Transfer. Neural Computation, 2007, 19, 303-326.	2.2	125
48	Pattern formation in Dictyostelium via the dynamics of cooperative biological entities. Physical Review E, 1993, 48, 4801-4804.	2.1	123
49	Phenotypic Plasticity, Bet-Hedging, and Androgen Independence in Prostate Cancer: Role of Non-Genetic Heterogeneity. Frontiers in Oncology, 2018, 8, 50.	2.8	122
50	Hybrid epithelial/mesenchymal phenotype(s): The “fittest” for metastasis?. Biochimica Et Biophysica Acta: Reviews on Cancer, 2018, 1870, 151-157.	7.4	122
51	Stress-induced plasticity of dynamic collagen networks. Nature Communications, 2017, 8, 842.	12.8	121
52	OVOL guides the epithelial-hybrid-mesenchymal transition. Oncotarget, 2015, 6, 15436-15448.	1.8	121
53	External and internal constraints on eukaryotic chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9656-9659.	7.1	120
54	Steady-state dendritic crystal growth. Physical Review A, 1986, 33, 3352-3357.	2.5	117

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55	Toward rationally redesigning bacterial two-component signaling systems using coevolutionary information. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E563-71.	7.1	117
56	Inflammatory breast cancer: a model for investigating cluster-based dissemination. Npj Breast Cancer, 2017, 3, 21.	5.2	117
57	Self-engineering capabilities of bacteria. Journal of the Royal Society Interface, 2006, 3, 197-214.	3.4	115
58	Cellular memory in eukaryotic chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14448-14453.	7.1	115
59	Geometrical models of interface evolution. III. Theory of dendritic growth. Physical Review A, 1985, 31, 1712-1717.	2.5	111
60	Interface fluctuations in random media. Physical Review A, 1991, 43, 4551-4554.	2.5	111
61	Fluctuation-induced diffusive instabilities. Nature, 1998, 394, 556-558.	27.8	111
62	Interface moving through a random background. Physical Review B, 1985, 32, 280-292.	3.2	110
63	Contact inhibition of locomotion determines cell-cell and cell-substrate forces in tissues. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2660-2665.	7.1	109
64	Stochastic spreading of intracellular Ca ²⁺ release. Physical Review E, 2000, 62, 2636-2643.	2.1	108
65	Infiltration of CD8 ⁺ T cells into tumor cell clusters in triple-negative breast cancer. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3678-3687.	7.1	108
66	Physical Limits on Cellular Sensing of Spatial Gradients. Physical Review Letters, 2010, 105, 048104.	7.8	104
67	Numb prevents a complete epithelial-mesenchymal transition by modulating Notch signalling. Journal of the Royal Society Interface, 2017, 14, 20170512.	3.4	104
68	Bacterial survival strategies suggest rethinking cancer cooperativity. Trends in Microbiology, 2012, 20, 403-410.	7.7	103
69	NRF2 activates a partial epithelial-mesenchymal transition and is maximally present in a hybrid epithelial/mesenchymal phenotype. Integrative Biology (United Kingdom), 2019, 11, 251-263.	1.3	102
70	Complex bacterial patterns. Nature, 1995, 373, 566-567.	27.8	100
71	Pattern selection in three dimensional dendritic growth. Acta Metallurgica, 1988, 36, 2693-2706.	2.1	99
72	Interfacial velocity corrections due to multiplicative noise. Physical Review E, 1999, 59, 3893-3900.	2.1	97

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73	Emergent Collective Chemotaxis without Single-Cell Gradient Sensing. Physical Review Letters, 2016, 116, 098101.	7.8	96
74	Mechanically-driven phase separation in a growing bacterial colony. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2166-73.	7.1	95
75	Spleen Tyrosine Kinaseâ€Mediated Autophagy Is Required for Epithelialâ€Mesenchymal Plasticity and Metastasis in Breast Cancer. Cancer Research, 2019, 79, 1831-1843.	0.9	95
76	Membrane-bound Turing patterns. Physical Review E, 2005, 72, 061912.	2.1	92
77	Small Regulatory RNAs May Sharpen Spatial Expression Patterns. PLoS Computational Biology, 2007, 3, e233.	3.2	92
78	The GRHL2/ZEB Feedback Loop-A Key Axis in the Regulation of EMT in Breast Cancer. Journal of Cellular Biochemistry, 2017, 118, 2559-2570.	2.6	90
79	Molecular-beam epitaxial growth and surface diffusion. Physical Review Letters, 1992, 69, 100-103.	7.8	89
80	Mesenchymal-Epithelial Transition in Sarcomas Is Controlled by the Combinatorial Expression of MicroRNA 200s and GRHL2. Molecular and Cellular Biology, 2016, 36, 2503-2513.	2.3	88
81	The Physics of Cellular Decision Making During Epithelialâ€Mesenchymal Transition. Annual Review of Biophysics, 2020, 49, 1-18.	10.0	87
82	Comparative Study of Transcriptomics-Based Scoring Metrics for the Epithelial-Hybrid-Mesenchymal Spectrum. Frontiers in Bioengineering and Biotechnology, 2020, 8, 220.	4.1	87
83	Motion of extended charges in classical electrodynamics. American Journal of Physics, 1977, 45, 75-78.	0.7	85
84	MCAM Mediates Chemoresistance in Small-Cell Lung Cancer via the PI3K/AKT/SOX2 Signaling Pathway. Cancer Research, 2017, 77, 4414-4425.	0.9	85
85	Establishing Direction during Chemotaxis in Eukaryotic Cells. Biophysical Journal, 2002, 83, 1361-1367.	0.5	84
86	Velocity selection in dendritic growth. Physical Review B, 1986, 33, 7867-7870.	3.2	83
87	Division accuracy in a stochastic model of Min oscillations in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 347-352.	7.1	83
88	Positive genetic feedback governs cAMP spiral wave formation in Dictyostelium.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 6382-6386.	7.1	82
89	Dendritic growth in a channel. Physical Review A, 1986, 34, 4980-4987.	2.5	81
90	A possible role for epigenetic feedback regulation in the dynamics of the epithelialâ€mesenchymal transition (EMT). Physical Biology, 2019, 16, 066004.	1.8	81

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91	Possible Cooperation of Differential Adhesion and Chemotaxis in Mound Formation of Dictyostelium. Biophysical Journal, 1998, 75, 2615-2625.	0.5	80
92	Folding Time Predictions from All-atom Replica Exchange Simulations. Journal of Molecular Biology, 2007, 372, 756-763.	4.2	80
93	Decoding leader cells in collective cancer invasion. Nature Reviews Cancer, 2021, 21, 592-604.	28.4	80
94	A mechanism for epithelial-mesenchymal heterogeneity in a population of cancer cells. PLoS Computational Biology, 2020, 16, e1007619.	3.2	80
95	Aggregation Patterns in Stressed Bacteria. Physical Review Letters, 1995, 75, 1859-1862.	7.8	79
96	Numerical simulation of two-dimensional snowflake growth. Physical Review A, 1984, 30, 2820-2823.	2.5	78
97	Embryonic pattern scaling achieved by oppositely directed morphogen gradients. Physical Biology, 2006, 3, 107-120.	1.8	78
98	Discrete Stochastic Modeling of Calcium Channel Dynamics. Physical Review Letters, 2000, 84, 5664-5667.	7.8	77
99	Micromechanics of cellularized biopolymer networks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5117-22.	7.1	77
100	The artistry of nature. Nature, 2001, 409, 985-986.	27.8	72
101	Transient Localized Patterns in Noise-Driven Reaction-Diffusion Systems. Physical Review Letters, 2010, 104, 158301.	7.8	72
102	Phosphorylation-induced conformational dynamics in an intrinsically disordered protein and potential role in phenotypic heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2644-E2653.	7.1	72
103	Theory of the quantized hall effect (II). Nuclear Physics B, 1984, 240, 49-70.	2.5	71
104	Effective stochastic dynamics on a protein folding energy landscape. Journal of Chemical Physics, 2006, 125, 054910.	3.0	71
105	Interconnected feedback loops among ESRP1, HAS2, and CD44 regulate epithelial-mesenchymal plasticity in cancer. APL Bioengineering, 2018, 2, 031908.	6.2	71
106	Spatiotemporal Dynamics of HIV Propagation. Journal of Theoretical Biology, 2002, 218, 85-96.	1.7	70
107	Coexistence of amplitude and frequency modulations in intracellular calcium dynamics. Physical Review E, 2008, 77, 030903.	2.1	70
108	Modelling Vesicular Release at Hippocampal Synapses. PLoS Computational Biology, 2010, 6, e1000983.	3.2	70

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109	Phenotypic Plasticity and Cell Fate Decisions in Cancer: Insights from Dynamical Systems Theory. <i>Cancers</i> , 2017, 9, 70.	3.7	70
110	Crawling and turning in a minimal reaction-diffusion cell motility model: Coupling cell shape and biochemistry. <i>Physical Review E</i> , 2017, 95, 012401.	2.1	69
111	Distinguishing mechanisms underlying EMT tristability. <i>Cancer Convergence</i> , 2017, 1, 2.	8.0	69
112	Periodic Migration in a Physical Model of Cells on Micropatterns. <i>Physical Review Letters</i> , 2013, 111, 158102.	7.8	68
113	Phenotypic plasticity in prostate cancer: role of intrinsically disordered proteins. <i>Asian Journal of Andrology</i> , 2016, 18, 704.	1.6	68
114	Theory of the quantized Hall effect (III). <i>Nuclear Physics B</i> , 1984, 240, 71-90.	2.5	67
115	A mechanism-based computational model to capture the interconnections among epithelial-mesenchymal transition, cancer stem cells and Notch-Jagged signaling. <i>Oncotarget</i> , 2018, 9, 29906-29920.	1.8	67
116	Computational approach for modeling intra- and extracellular dynamics. <i>Physical Review E</i> , 2003, 68, 037702.	2.1	66
117	Recombination Dramatically Speeds Up Evolution of Finite Populations. <i>Physical Review Letters</i> , 2005, 94, 098102.	7.8	65
118	Growth feedback as a basis for persister bistability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 544-549.	7.1	65
119	Activated Membrane Patches Guide Chemotactic Cell Motility. <i>PLoS Computational Biology</i> , 2011, 7, e1002044.	3.2	64
120	Large population solution of the stochastic Luria-Delbrück evolution model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 11682-11687.	7.1	64
121	Epithelial/mesenchymal plasticity: how have quantitative mathematical models helped improve our understanding?. <i>Molecular Oncology</i> , 2017, 11, 739-754.	4.6	64
122	Theory of the Saffman-Taylor “finger” pattern. I. <i>Physical Review A</i> , 1986, 33, 2621-2633.	2.5	63
123	Streaming instability of aggregating slime mold amoebae. <i>Physical Review Letters</i> , 1991, 66, 2400-2403.	7.8	63
124	Connecting the Sequence-Space of Bacterial Signaling Proteins to Phenotypes Using Coevolutionary Landscapes. <i>Molecular Biology and Evolution</i> , 2016, 33, 3054-3064.	8.9	63
125	Quantifying Cancer Epithelial-Mesenchymal Plasticity and its Association with Stemness and Immune Response. <i>Journal of Clinical Medicine</i> , 2019, 8, 725.	2.4	63
126	Towards decoding the coupled decision-making of metabolism and epithelial-to-mesenchymal transition in cancer. <i>British Journal of Cancer</i> , 2021, 124, 1902-1911.	6.4	63

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127	Differential Contributions of Pre- and Post-EMT Tumor Cells in Breast Cancer Metastasis. Cancer Research, 2020, 80, 163-169.	0.9	62
128	On the large-N limit in symplectic matrix models. Nuclear Physics B, 1983, 215, 307-315.	2.5	61
129	Steady-state cellular growth during directional solidification. Physical Review A, 1989, 39, 3041-3052.	2.5	61
130	Evolution on a smooth landscape. Journal of Statistical Physics, 1997, 87, 519-544.	1.2	61
131	Astrocytes Optimize the Synaptic Transmission of Information. PLoS Computational Biology, 2008, 4, e1000088.	3.2	61
132	The physics of eukaryotic chemotaxis. Physics Today, 2013, 66, 24-30.	0.3	61
133	Scaling of conductivities in the fractional quantum Hall effect. Physical Review B, 1985, 32, 1311-1314.	3.2	60
134	Determining the scale of the Bicoid morphogen gradient. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1710-1715.	7.1	60
135	Receptor Noise and Directional Sensing in Eukaryotic Chemotaxis. Physical Review Letters, 2008, 100, 228101.	7.8	59
136	Nonlinear elasticity of disordered fiber networks. Soft Matter, 2016, 12, 1419-1424.	2.7	59
137	Stability of finger patterns in Hele-Shaw cells. Physical Review A, 1985, 32, 1930-1933.	2.5	58
138	The Role of Cell Contraction and Adhesion in Dictyostelium Motility. Biophysical Journal, 2010, 99, 50-58.	0.5	58
139	Monopole Condensation and the Lattice-Quantum-Chromodynamics Crossover. Physical Review Letters, 1981, 47, 621-624.	7.8	57
140	Computational Modeling of the Crosstalk Between Macrophage Polarization and Tumor Cell Plasticity in the Tumor Microenvironment. Frontiers in Oncology, 2019, 9, 10.	2.8	55
141	Theory of the Saffman-Taylor "finger" pattern. II. Physical Review A, 1986, 33, 2634-2639.	2.5	54
142	Quantifying noise levels of intercellular signals. Physical Review E, 2007, 75, 061905.	2.1	54
143	Resistance to Chemotherapy: Patient Variability and Cellular Heterogeneity. Cancer Research, 2014, 74, 4663-4670.	0.9	54
144	Mean-field theory for diffusion-limited aggregation in low dimensions. Physical Review Letters, 1991, 66, 1978-1981.	7.8	53

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145	Collective Signal Processing in Cluster Chemotaxis: Roles of Adaptation, Amplification, and Co-attraction in Collective Guidance. PLoS Computational Biology, 2016, 12, e1005008.	3.2	52
146	Immunosuppressive Traits of the Hybrid Epithelial/Mesenchymal Phenotype. Frontiers in Immunology, 2021, 12, 797261.	4.8	52
147	Target-Specific and Global Effectors in Gene Regulation by MicroRNA. Biophysical Journal, 2007, 93, L52-L54.	0.5	51
148	Spiral Competition in Three-Component Excitable Media. Physical Review Letters, 1996, 76, 1170-1173.	7.8	50
149	Operating principles of tristable circuits regulating cellular differentiation. Physical Biology, 2017, 14, 035007.	1.8	49
150	Pericytes enable effective angiogenesis in the presence of proinflammatory signals. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23551-23561.	7.1	49
151	Scattering of Superfluid Vortex Rings. Physical Review Letters, 1996, 76, 4745-4748.	7.8	48
152	On the mechanism of long-range orientational order of fibroblasts. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8974-8979.	7.1	48
153	Physical schemata underlying biological pattern formation—examples, issues and strategies. Physical Biology, 2004, 1, P14-P22.	1.8	47
154	Multimodal encoding in a simplified model of intracellular calcium signaling. Cognitive Processing, 2009, 10, 55-70.	1.4	47
155	Short-term plasticity constrains spatial organization of a hippocampal presynaptic terminal. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14657-14662.	7.1	46
156	Interaction between a drifting spiral and defects. Physical Review E, 1993, 47, R800-R803.	2.1	45
157	Spectral mixing of rhythmic neuronal signals in sensory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15176-15181.	7.1	45
158	Receptor noise limitations on chemotactic sensing. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19270-19275.	7.1	45
159	Alignment and nonlinear elasticity in biopolymer gels. Physical Review E, 2015, 91, 042710.	2.1	45
160	XIAP Regulation by MNK Links MAPK and NF- κ B Signaling to Determine an Aggressive Breast Cancer Phenotype. Cancer Research, 2018, 78, 1726-1738.	0.9	45
161	Semiclassical Approach to Planar Diagrams. Physical Review Letters, 1980, 44, 1443-1446.	7.8	44
162	Growth velocity of three-dimensional dendritic crystals. Physical Review A, 1987, 36, 4123-4126.	2.5	44

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163	Protein Oligomerization Through Domain Swapping: Role of Inter-molecular Interactions and Protein Concentration. <i>Journal of Molecular Biology</i> , 2005, 352, 202-211.	4.2	44
164	The Artistry of Microorganisms. <i>Scientific American</i> , 1998, 279, 82-87.	1.0	43
165	Structure of infectious prions: stabilization by domain swapping. <i>FASEB Journal</i> , 2005, 19, 1778-1782.	0.5	43
166	RACIPE: a computational tool for modeling gene regulatory circuits using randomization. <i>BMC Systems Biology</i> , 2018, 12, 74.	3.0	43
167	Dynamics of SU(2) lattice gauge theories. <i>Nuclear Physics B</i> , 1982, 205, 77-106.	2.5	39
168	Catalysis at single-crystal Pt(110) surfaces: Global coupling and standing waves. <i>Physical Review E</i> , 1993, 48, 50-64.	2.1	39
169	Effective elastic parameters of random composites. <i>Applied Physics Letters</i> , 1980, 37, 377-379.	3.3	38
170	A Thermodynamic Model for Receptor Clustering. <i>Biophysical Journal</i> , 1999, 77, 2358-2365.	0.5	38
171	Compression stiffening of fibrous networks with stiff inclusions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21037-21044.	7.1	38
172	Determining the Wavelength of Dendritic Sidebranches. <i>Europhysics Letters</i> , 1987, 4, 215-221.	2.0	37
173	The Fixation Probability of Rare Mutators in Finite Asexual Populations. <i>Genetics</i> , 2009, 181, 1595-1612.	2.9	37
174	Biological Networks Regulating Cell Fate Choice are Minimally Frustrated. <i>Physical Review Letters</i> , 2020, 125, 088101.	7.8	37
175	Connecting Thermal and Mechanical Protein (Un)folding Landscapes. <i>Biophysical Journal</i> , 2014, 107, 2950-2961.	0.5	36
176	PAGE4 and Conformational Switching: Insights from Molecular Dynamics Simulations and Implications for Prostate Cancer. <i>Journal of Molecular Biology</i> , 2018, 430, 2422-2438.	4.2	36
177	A CTC-Cluster-Specific Signature Derived from OMICS Analysis of Patient-Derived Xenograft Tumors Predicts Outcomes in Basal-Like Breast Cancer. <i>Journal of Clinical Medicine</i> , 2019, 8, 1772.	2.4	36
178	Gradient sensing in defined chemotactic fields. <i>Integrative Biology (United Kingdom)</i> , 2010, 2, 659-668.	1.3	35
179	E-Cadherin Represses Anchorage-Independent Growth in Sarcomas through Both Signaling and Mechanical Mechanisms. <i>Molecular Cancer Research</i> , 2019, 17, 1391-1402.	3.4	35
180	Testing the gene expression classification of the EMT spectrum. <i>Physical Biology</i> , 2019, 16, 025002.	1.8	35

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181	Breast cancer dormancy: need for clinically relevant models to address current gaps in knowledge. Npj Breast Cancer, 2021, 7, 66.	5.2	35
182	Mutator Dynamics on a Smooth Evolutionary Landscape. Physical Review Letters, 1998, 80, 2012-2015.	7.8	34
183	Pattern Selection by Gene Expression in Dictyostelium Discoideum. Physical Review Letters, 1998, 80, 3875-3878.	7.8	34
184	Spiral core in singly diffusive excitable media. Physical Review Letters, 1992, 68, 401-404.	7.8	33
185	Steady-state cracks in viscoelastic lattice models. Physical Review E, 1999, 59, 5154-5164.	2.1	33
186	Scaling Solution in the Large Population Limit of the General Asymmetric Stochastic Luria-Elmerick Evolution Process. Journal of Statistical Physics, 2015, 158, 783-805.	1.2	33
187	Properties of gene expression and chromatin structure with mechanically regulated elongation. Nucleic Acids Research, 2018, 46, 5924-5934.	14.5	33
188	Epigenetic feedback and stochastic partitioning during cell division can drive resistance to EMT. Oncotarget, 2020, 11, 2611-2624.	1.8	33
189	Numerical study for traveling waves in directional solidification. Physical Review A, 1990, 42, 7475-7478.	2.5	32
190	Theory of pulse instabilities in electrophysiological models of excitable tissues. Physica D: Nonlinear Phenomena, 1994, 73, 113-127.	2.8	32
191	A comparison of deterministic and stochastic simulations of neuronal vesicle release models. Physical Biology, 2010, 7, 026008.	1.8	32
192	Mechanical bounds to transcriptional noise. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13983-13988.	7.1	32
193	Effects of thymic selection on T cell recognition of foreign and tumor antigenic peptides. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7875-E7881.	7.1	32
194	Anticipating critical transitions in epithelial-hybrid-mesenchymal cell-fate determination. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26343-26352.	7.1	32
195	Mechanisms of cooperativity underlying sequence-independent β -sheet formation. Journal of Chemical Physics, 2002, 116, 4353-4365.	3.0	31
196	Optimal Strategy for Competence Differentiation in Bacteria. PLoS Genetics, 2010, 6, e1001108.	3.5	31
197	The motility-proliferation-metabolism interplay during metastatic invasion. Scientific Reports, 2015, 5, 13538.	3.3	31
198	Computational modeling of mound development in Dictyostelium. Physica D: Nonlinear Phenomena, 1997, 106, 375-388.	2.8	30

#	ARTICLE	IF	CITATIONS
199	Computational systems biology of epithelial-hybrid-mesenchymal transitions. Current Opinion in Systems Biology, 2017, 3, 1-6.	2.6	30
200	SU(2) adjoint Higgs model. Physical Review D, 1982, 25, 3319-3324.	4.7	29
201	Front propagation up a reaction rate gradient. Physical Review E, 2005, 72, 066126.	2.1	29
202	Mechanical Properties of Transcription. Physical Review Letters, 2017, 118, 268101.	7.8	29
203	A Theoretical Approach to Coupling the Epithelial-Mesenchymal Transition (EMT) to Extracellular Matrix (ECM) Stiffness via LOXL2. Cancers, 2021, 13, 1609.	3.7	29
204	Resonant interactions and traveling-solidification cells. Physical Review A, 1991, 43, 1122-1125.	2.5	28
205	Effects of Input Noise on a Simple Biochemical Switch. Physical Review Letters, 2011, 107, 148101.	7.8	28
206	Intercellular Stress Reconstitution from Traction Force Data. Biophysical Journal, 2014, 107, 548-554.	0.5	28
207	Deciphering the Dynamics of Epithelial-Mesenchymal Transition and Cancer Stem Cells in Tumor Progression. Current Stem Cell Reports, 2019, 5, 11-21.	1.6	27
208	Coupled-map lattice model for crystal growth. Physical Review A, 1990, 42, 6125-6128.	2.5	26
209	Standing waves in catalysis at single crystal surfaces. Physical Review Letters, 1992, 69, 204-207.	7.8	26
210	Cell motility dependence on adhesive wetting. Soft Matter, 2019, 15, 2043-2050.	2.7	26
211	Renormalization of the $\hat{\Gamma}_1$ angle, the quantum Hall effect and the strong CP problem. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 150, 182-186.	4.1	25
212	Coalescence of Saffman-Taylor fingers: A new global instability. Physical Review A, 1986, 33, 3625-3627.	2.5	25
213	Selection of the Viscous Finger in the 90° Geometry. Europhysics Letters, 1990, 13, 161-166.	2.0	25
214	Scaling and $\hat{\Gamma}_1$ Dependence in the $O(3)$ $\hat{\Gamma}_1$ Model. Physical Review Letters, 1984, 53, 519-522.	7.8	24
215	Effect of diffusion on patterns in excitable Belousov-Zhabotinskii systems. Physica D: Nonlinear Phenomena, 1989, 39, 1-14.	2.8	24
216	Mode-I fracture in a nonlinear lattice with viscoelastic forces. Physical Review E, 2002, 66, 016126.	2.1	24

#	ARTICLE	IF	CITATIONS
217	Steady-state mode I cracks in a viscoelastic triangular lattice. Journal of the Mechanics and Physics of Solids, 2002, 50, 583-613.	4.8	24
218	Dynamics of Competitive Evolution on a Smooth Landscape. Physical Review Letters, 2003, 90, 088103.	7.8	24
219	How geometry and internal bias affect the accuracy of eukaryotic gradient sensing. Physical Review E, 2011, 83, 021917.	2.1	24
220	Modeling cell-death patterning during biofilm formation. Physical Biology, 2013, 10, 066006.	1.8	24
221	Phenomenological modeling of durotaxis. Physical Review E, 2017, 96, 010402.	2.1	24
222	Drug-Tolerant Idling Melanoma Cells Exhibit Theory-Predicted Metabolic Low-Low Phenotype. Frontiers in Oncology, 2020, 10, 1426.	2.8	24
223	Theory of the spiral core in excitable media. Physica D: Nonlinear Phenomena, 1994, 70, 115-139.	2.8	23
224	Histone deacetylases, Mbd3/NuRD, and Tet2 hydroxylase are crucial regulators of epithelialâ€mesenchymal plasticity and tumor metastasis. Oncogene, 2020, 39, 1498-1513.	5.9	23
225	Nrf2 Modulates the Hybrid Epithelial/Mesenchymal Phenotype and Notch Signaling During Collective Cancer Migration. Frontiers in Molecular Biosciences, 2022, 9, 807324.	3.5	23
226	Higher-order instanton effects. Physical Review D, 1979, 19, 1225-1242.	4.7	22
227	Stability of traveling waves in the Belousov-Zhabotinskii reaction. Physical Review A, 1990, 41, 5418-5430.	2.5	22
228	A mathematical analysis of second messenger compartmentalization. Physical Biology, 2008, 5, 046006.	1.8	22
229	Cell motility, contact guidance, and durotaxis. Soft Matter, 2019, 15, 4856-4864.	2.7	22
230	The role of the Arp2/3 complex in shaping the dynamics and structures of branched actomyosin networks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10825-10831.	7.1	22
231	Irradiation Induces Epithelial Cell Unjamming. Frontiers in Cell and Developmental Biology, 2020, 8, 21.	3.7	22
232	Loop space Hamiltonians and numerical methods for large-N gauge theories. Nuclear Physics B, 1983, 213, 169-188.	2.5	21
233	Mean-field diffusion-limited aggregation and the Saffman-Taylor problem in three dimensions. Physical Review A, 1992, 45, 1044-1052.	2.5	21
234	Nonlinear lattice model of viscoelastic mode III fracture. Physical Review E, 2000, 63, 016118.	2.1	21

#	ARTICLE	IF	CITATIONS
235	Quantifying Information Transmission in Eukaryotic Gradient Sensing and Chemotactic Response. Journal of Statistical Physics, 2011, 142, 1167-1186.	1.2	21
236	Confluent and nonconfluent phases in a model of cell tissue. Physical Review E, 2018, 98, .	2.1	21
237	Quantifying the Patterns of Metabolic Plasticity and Heterogeneity along the Epithelialâ€“Hybridâ€“Mesenchymal Spectrum in Cancer. Biomolecules, 2022, 12, 297.	4.0	21
238	A quenched reduction for the topological limit of QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1982, 119, 183-186.	4.1	20
239	Leader-cell-driven epithelial sheet fingering. Physical Biology, 2020, 17, 046003.	1.8	20
240	Rapid assessment of T-cell receptor specificity of the immune repertoire. Nature Computational Science, 2021, 1, 362-373.	8.0	20
241	Large N classical equations and their quantum significance. Annals of Physics, 1981, 136, 113-135.	2.8	19
242	Molecular Simulations Suggest a Force-Dependent Mechanism of Vinculin Activation. Biophysical Journal, 2017, 113, 1697-1710.	0.5	19
243	Structural and Dynamical Order of a Disordered Protein: Molecular Insights into Conformational Switching of PAGE4 at the Systems Level. Biomolecules, 2019, 9, 77.	4.0	19
244	Decoding the mechanisms underlying cell-fate decision-making during stem cell differentiation by random circuit perturbation. Journal of the Royal Society Interface, 2020, 17, 20200500.	3.4	19
245	Calpain-2 regulates hypoxia/HIF-induced plasticity toward amoeboid cancer cell migration and metastasis. Current Biology, 2022, 32, 412-427.e8.	3.9	19
246	Discrete set selection of Saffmanâ€“Taylor fingers. Physics of Fluids, 1987, 30, 1246.	1.4	18
247	Mean-field diffusion-limited aggregation in radial geometries. Physical Review A, 1992, 45, 1053-1057.	2.5	18
248	Quantum Nucleation of Phase Slips in a 1D Model of a Superfluid. Physical Review Letters, 1997, 79, 5054-5057.	7.8	18
249	The eigenvalues of the Laplacian on a sphere with boundary conditions specified on a segment of a great circle. Journal of Mathematical Physics, 1997, 38, 1623-1649.	1.1	18
250	Evolution on a Smooth Landscape: The Role of Bias. Journal of Statistical Physics, 1998, 90, 191-210.	1.2	18
251	Does the continuum theory of dynamic fracture work?. Physical Review E, 2003, 68, 036118.	2.1	18
252	Phenomenological approach to eukaryotic chemotactic efficiency. Physical Review E, 2010, 81, 031906.	2.1	18

#	ARTICLE	IF	CITATIONS
253	“Self-Assisted” Amoeboid Navigation in Complex Environments. PLoS ONE, 2011, 6, e21955.	2.5	18
254	Presynaptic endoplasmic reticulum regulates short-term plasticity in hippocampal synapses. Communications Biology, 2021, 4, 241.	4.4	18
255	DNA supercoiling-mediated collective behavior of co-transcribing RNA polymerases. Nucleic Acids Research, 2022, 50, 1269-1279.	14.5	18
256	Glueball States in Reduced Large-N Hamiltonians. Physical Review Letters, 1982, 49, 1603-1605.	7.8	17
257	Nonsymmetric Saffman–Taylor fingers. Physics of Fluids A, Fluid Dynamics, 1991, 3, 529-534.	1.6	17
258	Cooperativity can reduce stochasticity in intracellular calcium dynamics. Physical Biology, 2004, 1, 27-34.	1.8	17
259	Excitable waves and direction-sensing in <i>Dictyostelium discoideum</i> : steps towards a chemotaxis model. Physical Biology, 2016, 13, 016002.	1.8	17
260	The mechanics and dynamics of cancer cells sensing noisy 3D contact guidance. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	17
261	How does a beta -hairpin fold/unfold? Competition between topology and heterogeneity in a solvable model. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 10775-10779.	7.1	16
262	Compartmentalization of second messengers in neurons: A mathematical analysis. Physical Review E, 2009, 80, 041901.	2.1	16
263	Implications of Tumor–Immune Coevolution on Cancer Evasion and Optimized Immunotherapy. Trends in Cancer, 2021, 7, 373-383.	7.4	16
264	Spatial distribution of B cells and lymphocyte clusters as a predictor of triple-negative breast cancer outcome. Npj Breast Cancer, 2021, 7, 84.	5.2	16
265	Growth of non-reflection-symmetric dendrites. Physical Review A, 1991, 43, 883-887.	2.5	15
266	Spiral-core meandering in excitable media. Physical Review A, 1992, 46, 5264-5267.	2.5	15
267	Arrested cracks in nonlinear lattice models of brittle fracture. Physical Review E, 1999, 60, 7569-7571.	2.1	15
268	Fluctuation-Regularized Front Propagation Dynamics in Reaction-Diffusion Systems. Physical Review Letters, 2005, 94, 158302.	7.8	15
269	Stochastic modeling of tumor progression and immune evasion. Journal of Theoretical Biology, 2018, 458, 148-155.	1.7	15
270	Analysis of Hierarchical Organization in Gene Expression Networks Reveals Underlying Principles of Collective Tumor Cell Dissemination and Metastatic Aggressiveness of Inflammatory Breast Cancer. Frontiers in Oncology, 2018, 8, 244.	2.8	15

#	ARTICLE	IF	CITATIONS
271	Loop-space hamiltonians and numerical methods for large-N gauge theories (II). Nuclear Physics B, 1984, 230, 299-316.	2.5	14
272	Morphology transitions in a mean-field model of diffusion-limited growth. Physical Review Letters, 1993, 71, 3838-3841.	7.8	14
273	Microscopic Selection of Fluid Fingering Patterns. Physical Review Letters, 2001, 86, 4532-4535.	7.8	14
274	An instability at the edge of a tissue of collectively migrating cells can lead to finger formation during wound healing. European Physical Journal: Special Topics, 2014, 223, 1259-1264.	2.6	14
275	Modeling delayed processes in biological systems. Physical Review E, 2016, 94, 032408.	2.1	14
276	Role of the supracellular actomyosin cable during epithelial wound healing. Soft Matter, 2018, 14, 4866-4873.	2.7	14
277	Understanding cytoskeletal avalanches using mechanical stability analysis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	14
278	A rising bubble in a tube. Physics of Fluids A, Fluid Dynamics, 1990, 2, 542-546.	1.6	13
279	Hydrodynamic modes of a granular shear flow. Physics of Fluids A, Fluid Dynamics, 1991, 3, 2067-2075.	1.6	13
280	Maximal dendrite size in monolayer systems. Physical Review Letters, 1991, 67, 3121-3123.	7.8	13
281	Two State Behavior in a Solvable Model of β^2 -Hairpin Folding. Physical Review Letters, 2000, 84, 3490-3493.	7.8	13
282	Comment on "Dynamics of HIV Infection: A Cellular Automata Approach". Physical Review Letters, 2002, 89, 219805.	7.8	13
283	Gene expression profiles of inflammatory breast cancer reveal high heterogeneity across the epithelial-hybrid-mesenchymal spectrum. Translational Oncology, 2021, 14, 101026.	3.7	13
284	Dynamic Phenotypic Switching and Group Behavior Help Non-Small Cell Lung Cancer Cells Evade Chemotherapy. Biomolecules, 2022, 12, 8.	4.0	13
285	Neutral-fermion-soliton statistics in the short-range resonating-valence-bond state: A reevaluation. Physical Review B, 1989, 40, 7340-7342.	3.2	12
286	Planar traveling waves in the oscillatory oxidation of CO over polycrystalline catalysts. Journal of Chemical Physics, 1991, 95, 3815-3825.	3.0	12
287	Functional Topology Classification of Biological Computing Networks. Natural Computing, 2005, 4, 339-361.	3.0	12
288	How input fluctuations reshape the dynamics of a biological switching system. Physical Review E, 2012, 86, 061910.	2.1	12

#	ARTICLE	IF	CITATIONS
289	Bistability of the cytokine-immune cell network in a cancer microenvironment. Convergent Science Physical Oncology, 2017, 3, 024002.	2.6	12
290	Mathematical Modeling of Plasticity and Heterogeneity in EMT. Methods in Molecular Biology, 2021, 2179, 385-413.	0.9	12
291	Theory of diffusion-limited growth. Physical Review E, 1993, 48, R4207-R4210.	2.1	11
292	Modeling spatial patterns in Dictyostelium. Chaos, 1994, 4, 563-568.	2.5	11
293	Shunting Inhibition Controls the Gain Modulation Mediated by Asynchronous Neurotransmitter Release in Early Development. PLoS Computational Biology, 2010, 6, e1000973.	3.2	11
294	Uniform modeling of bacterial colony patterns with varying nutrient and substrate. Physica D: Nonlinear Phenomena, 2016, 318-319, 91-99.	2.8	11
295	Sustained Coevolution in a Stochastic Model of Cancer-Immune Interaction. Cancer Research, 2020, 80, 811-819.	0.9	11
296	Transcriptomic-Based Quantification of the Epithelial-Hybrid-Mesenchymal Spectrum across Biological Contexts. Biomolecules, 2022, 12, 29.	4.0	11
297	Linear stability of directional solidification cells. Physical Review A, 1990, 41, 3197-3205.	2.5	10
298	Wave nucleation rate in excitable systems in the low noise limit. Physical Review E, 2003, 68, 031914.	2.1	10
299	Analytic approach to the evolutionary effects of genetic exchange. Physical Review E, 2006, 73, 016113.	2.1	10
300	Propagating mode-I fracture in amorphous materials using the continuous random network model. Physical Review E, 2011, 84, 026102.	2.1	10
301	Noise effects in nonlinear biochemical signaling. Physical Review E, 2012, 85, 011901.	2.1	10
302	Morphodynamics of a growing microbial colony driven by cell death. Physical Review E, 2017, 96, 052404.	2.1	10
303	Physics approaches to the spatial distribution of immune cells in tumors. Reports on Progress in Physics, 2021, 84, 022601.	20.1	10
304	Acoustic propagation in random layered media. Journal of the Acoustical Society of America, 1983, 73, 32-40.	1.1	9
305	The geometrical model of dendritic growth: The small velocity limit. Physica D: Nonlinear Phenomena, 1986, 21, 371-380.	2.8	9
306	Coupled map lattice techniques for simulating interfacial phenomena in reaction-diffusion systems. Chaos, 1992, 2, 337-342.	2.5	9

#	ARTICLE	IF	CITATIONS
307	A statistical mechanics model for receptor clustering. , 2000, 26, 219-234.		9
308	Nutrient chemotaxis suppression of a diffusive instability in bacterial colony dynamics. Physical Review E, 2000, 62, 1444-1447.	2.1	9
309	Excitation-Contraction Coupling Gain and Cooperativity of the Cardiac Ryanodine Receptor: A Modeling Approach. Biophysical Journal, 2005, 89, 3017-3025.	0.5	9
310	Nonlinear self-adapting wave patterns. New Journal of Physics, 2016, 18, 122001.	2.9	9
311	Changes in Triple-Negative Breast Cancer Molecular Subtypes in Patients Without Pathologic Complete Response After Neoadjuvant Systemic Chemotherapy. JCO Precision Oncology, 2022, 6, e2000368.	3.0	9
312	Glassy Dynamics in Icosahedral Systems. Physical Review Letters, 1986, 57, 2679-2682.	7.8	8
313	Locally Balanced Dendritic Integration by Short-Term Synaptic Plasticity and Active Dendritic Conductances. Journal of Neurophysiology, 2009, 102, 3234-3250.	1.8	8
314	Pattern Formation Far from Equilibrium : The Free Space Dendritic Crystal. , 1987, , 1-11.		8
315	TIP INSTABILITY DURING CONFINED DIFFUSION-LIMITED GROWTH. Modern Physics Letters B, 1988, 02, 945-951.	1.9	7
316	Spiral selection as a free boundary problem. Physica D: Nonlinear Phenomena, 1991, 49, 90-97.	2.8	7
317	Mean-field theory of the morphology transition in stochastic diffusion-limited growth. Physical Review E, 1995, 52, 5134-5141.	2.1	7
318	Unicellular Algal Growth: A Biomechanical Approach to Cell Wall Dynamics. Physical Review Letters, 1997, 79, 4290-4293.	7.8	7
319	Comment on "Selection of the Saffman-Taylor Finger Width in the Absence of Surface Tension: An Exact Result". Physical Review Letters, 1998, 81, 4528-4528.	7.8	7
320	Analytical study of the effect of recombination on evolution via DNA shuffling. Physical Review E, 2004, 69, 051911.	2.1	7
321	Activity-dependent stochastic resonance in recurrent neuronal networks. Physical Review E, 2008, 77, 060903.	2.1	7
322	Mechanisms and Constraints on Yeast MAPK Signaling Specificity. Biophysical Journal, 2009, 96, 4755-4763.	0.5	7
323	Modeling closure of circular wounds through coordinated collective motion. Physical Biology, 2016, 13, 016006.	1.8	7
324	Designing bacterial signaling interactions with coevolutionary landscapes. PLoS ONE, 2018, 13, e0201734.	2.5	7

#	ARTICLE	IF	CITATIONS
325	Predicting Relapse in Patients With Triple Negative Breast Cancer (TNBC) Using a Deep-Learning Approach. <i>Frontiers in Physiology</i> , 2020, 11, 511071.	2.8	7
326	Targeting the Id1-Kif11 Axis in Triple-Negative Breast Cancer Using Combination Therapy. <i>Biomolecules</i> , 2020, 10, 1295.	4.0	7
327	Computational Modeling of Collective Cell Migration: Mechanical and Biochemical Aspects. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1146, 1-11.	1.6	7
328	Three-dimensional cancer cell migration directed by dual mechanochemical guidance. <i>Physical Review Research</i> , 2022, 4, .	3.6	7
329	Computational approach to steady-state eutectic growth. <i>Journal of Crystal Growth</i> , 1989, 94, 871-879.	1.5	6
330	The dynamics of Dictyostelium development. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998, 249, 53-63.	2.6	6
331	Swarming patterns in Microorganisms: Some new modeling results. , 2006, , .		6
332	Scientific priorities for the BRAIN Initiative. <i>Nature Methods</i> , 2013, 10, 713-714.	19.0	6
333	Ordered hexagonal patterns via notch- Δ signaling. <i>Physical Biology</i> , 2021, 18, 066006.	1.8	6
334	Insights from graph theory on the morphologies of actomyosin networks with multilinkers. <i>Physical Review E</i> , 2020, 102, 062420.	2.1	6
335	Strong coupling versus large N in β -models. <i>Nuclear Physics B</i> , 1982, 195, 493-502.	2.5	5
336	Steady-state dendritic growth at non-zero capillarity. <i>Scripta Metallurgica</i> , 1984, 18, 463-466.	1.2	5
337	Comment on the ∞ -Limit of the Fuller-Lenard Model. <i>Physical Review Letters</i> , 1986, 57, 645-645.	7.8	5
338	Velocity selection for Taylor bubbles. <i>Physical Review A</i> , 1989, 39, 5462-5465.	2.5	5
339	Signal processing in local neuronal circuits based on activity-dependent noise and competition. <i>Chaos</i> , 2009, 19, 033107.	2.5	5
340	We need theoretical physics approaches to study living systems. <i>Physical Biology</i> , 2013, 10, 040201.	1.8	5
341	Cluster size distribution of cells disseminating from a primary tumor. <i>PLoS Computational Biology</i> , 2021, 17, e1009011.	3.2	5
342	A mechanistic modeling framework reveals the key principles underlying tumor metabolism. <i>PLoS Computational Biology</i> , 2022, 18, e1009841.	3.2	5

#	ARTICLE	IF	CITATIONS
343	Regularization and renormalization of semiclassical QCD. Nuclear Physics B, 1979, 157, 237-249.	2.5	4
344	Monte Carlo evaluation of the effective potential. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 131, 127-132.	4.1	4
345	Cellular solutions for highly nonequilibrium directional solidification. Physical Review A, 1989, 39, 3208-3210.	2.5	4
346	Refraction of waves in excitable media. Physical Review E, 1998, 58, 2910-2917.	2.1	4
347	Fluctuation-induced instabilities in front propagation up a comoving reaction gradient in two dimensions. Physical Review E, 2006, 74, 016119.	2.1	4
348	Induction of Mesenchymal-Epithelial Transitions in Sarcoma Cells. Journal of Visualized Experiments, 2017,,.	0.3	4
349	Hindrances to precise recovery of cellular forces in fibrous biopolymer networks. Physical Biology, 2018, 15, 026001.	1.8	4
350	Quantifying Cancer: More Than Just a Numbers Game. Trends in Cancer, 2021, 7, 267-269.	7.4	4
351	Collective motility and mechanical waves in cell clusters. European Physical Journal E, 2021, 44, 137.	1.6	4
352	Quantum effects in the quark-antiquark potential due to instantons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1978, 78, 235-240.	4.1	3
353	Simple models of interface growth. Physica D: Nonlinear Phenomena, 1984, 12, 241-244.	2.8	3
354	Dynamic determination of the dendritic growth direction within a complex-phase-field model. Physical Review E, 1995, 52, 4553-4556.	2.1	3
355	Front stability in mean-field models of diffusion-limited growth. Physical Review E, 1996, 53, 861-870.	2.1	3
356	How input noise limits biochemical sensing in ultrasensitive systems. Physical Review E, 2014, 90, 032702.	2.1	3
357	Quantitative Characteristic of ncRNA Regulation in Gene Regulatory Networks. Methods in Molecular Biology, 2019, 1912, 341-366.	0.9	3
358	Occupancy and Fractal Dimension Analyses of the Spatial Distribution of Cytotoxic (CD8+) T Cells Infiltrating the Tumor Microenvironment in Triple Negative Breast Cancer. Biophysical Reviews and Letters, 2020, 15, 83-98.	0.8	3
359	Dendritic Crystal Growth: Overview. NATO ASI Series Series B: Physics, 1991, , 67-73.	0.2	3
360	NRF2-dependent Epigenetic Regulation can Promote the Hybrid Epithelial/Mesenchymal Phenotype. Frontiers in Cell and Developmental Biology, 2021, 9, 828250.	3.7	3

#	ARTICLE	IF	CITATIONS
361	Instantons in unusual settings. Nuclear Physics B, 1980, 172, 119-131.	2.5	2
362	Two-dimensional SU(N) Higgs theory. Nuclear Physics B, 1980, 170, 128-138.	2.5	2
363	N-body dynamics and the collective field method. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 81, 9-11.	2.1	2
364	The potential and the migdal string. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 103, 203-206.	4.1	2
365	Onset of asymptotically free scaling. Physical Review D, 1982, 26, 959-962.	4.7	2
366	A Geometrical Model for Spirals: a Possible Paradigm for Belousov-Zhabotinskii. Europhysics Letters, 1990, 12, 465-470.	2.0	2
367	Outer Stability of Spirals in Excitable Media. Europhysics Letters, 1992, 19, 553-558.	2.0	2
368	Spherical cap bubbles. Journal of Fluid Mechanics, 1992, 235, 73.	3.4	2
369	Phase-field model of spiral dendritic growth. Physical Review E, 1996, 54, 2797-2801.	2.1	2
370	Correlated phenotypic transitions to competence in bacterial colonies. Physical Review E, 2007, 76, 040901.	2.1	2
371	Design principles and specificity in biological networks with cross activation. Physical Biology, 2011, 8, 026001.	1.8	2
372	Energy Evaluation of $\hat{\tau}^2$ -Strand Packing in a Fibril-Forming SH3 Domain. Journal of Physical Chemistry B, 2013, 117, 13051-13057.	2.6	2
373	Learning physics of living systems from <i>Dictyostelium</i> . Physical Biology, 2014, 11, 053011.	1.8	2
374	Introduction to Physics in Cancer Research. Cancer Research, 2014, 74, 4572-4573.	0.9	2
375	Properties of cooperatively induced phases in sensing models. Physical Review E, 2015, 91, 052707.	2.1	2
376	Boundary-driven anomalous spirals in oscillatory media. New Journal of Physics, 2017, 19, 063026.	2.9	2
377	Gene Circuit Explorer (GeneEx): an interactive web-app for visualizing, simulating and analyzing gene regulatory circuits. Bioinformatics, 2021, 37, 1327-1329.	4.1	2
378	Modularity of the metabolic gene network as a prognostic biomarker for hepatocellular carcinoma. Oncotarget, 2018, 9, 15015-15026.	1.8	2

#	ARTICLE	IF	CITATIONS
379	Classical behavior of large N fermionic systems. Annals of Physics, 1981, 133, 13-27.	2.8	1
380	Expanding the scale of molecular biophysics. Physical Biology, 2016, 13, 053001.	1.8	1
381	Epithelial-mesenchymal transition in cancer. , 2020, , 553-568.		1
382	Crystalline Anisotropy. Science, 1984, 225, 566-566.	12.6	0
383	Diffusive boundary layers in the free-surface excitable medium spiral. Physical Review E, 1997, 55, R3847-R3850.	2.1	0
384	Measurement Noise Limitations in Eukaryotic Chemotaxis. Biophysical Journal, 2011, 100, 7a.	0.5	0
385	Calculating Intercellular Stress in a Model of Collectively Moving Cells. Biophysical Journal, 2014, 106, 173a.	0.5	0
386	<i>Physical Biology</i> : challenges for our second decade. Physical Biology, 2014, 11, 030201.	1.8	0
387	How to eat on the go. Nature Physics, 2016, 12, 1091-1091.	16.7	0
388	Loss of immunoproteasome driven by EMT is associated with immune evasion and poor prognosis in non-small cell lung cancer. Journal of Thoracic Oncology, 2016, 11, S48-S49.	1.1	0
389	The Role of Exosome-Mediated Cell-Cell Communication in Inducing Phenotypic Changes. Biophysical Journal, 2016, 110, 479a.	0.5	0
390	Modeling of Actomyosin Networks with a Molecular Underpinning of Cross-Linker Proteins. Biophysical Journal, 2018, 114, 143a.	0.5	0
391	Editorial: Characterizing the Multi-Faceted Dynamics of Tumor Cell Plasticity. Frontiers in Molecular Biosciences, 2020, 7, 630276.	3.5	0
392	Modeling Self-Propelled Deformable Cell Motion in the Dictyostelium Mound; a Status Report. The IMA Volumes in Mathematics and Its Applications, 2001, , 255-267.	0.5	0
393	Towards a Theory of Interfacial Pattern Formation. , 1988, , 83-93.		0
394	Stability of Travelling Waves in the Belousov-Zhabotinskii Reaction. NATO ASI Series Series B: Physics, 1990, , 299-311.	0.2	0
395	Growth of Non-Reflection Symmetric Patterns. NATO ASI Series Series B: Physics, 1991, , 31-41.	0.2	0
396	The oscillatory instability in rapid solidification. Journal De Physique, I, 1991, 1, 1291-1302.	1.2	0

#	ARTICLE	IF	CITATIONS
397	Amoebae Aggregation in Dictyoselium Discoideum. NATO ASI Series Series B: Physics, 1993, , 21-27.	0.2	0
398	Abstract 3170: MCAM modulates small cell lung cancer chemoresistance via PI3k/Akt/Sox2 signaling pathway. , 2017, , .		0
399	Stochastic cancer-immune coevolution: Implications for cancer incidence and immunotherapeutic efficacy.. Journal of Clinical Oncology, 2019, 37, e14023-e14023.	1.6	0
400	Abstract 1195: Stochastic co-evolution of the adaptive immune system and an evading cancer population. , 2019, , .		0
401	Abstract 2448: Elucidating the metabolic plasticity of cancer by coupling gene regulation with metabolic pathways. , 2019, , .		0
402	Let the robotic games begin. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2204152119.	7.1	0
403	Abstract 2783:<i>OMICS</i>analysis of breast cancer PDX tumors to determine CTC-cluster-specific signature in predicting breast cancer metastasis. , 2019, , .		0