Herbert Levine

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6616059/publications.pdf

Version: 2024-02-01

403 papers	25,315 citations	6592 79 h-index	11581 135 g-index
461 all docs	461 docs citations	461 times ranked	18391 citing authors

#	Article	IF	Citations
1	DNA supercoiling-mediated collective behavior of co-transcribing RNA polymerases. Nucleic Acids Research, 2022, 50, 1269-1279.	6.5	18
2	Calpain-2 regulates hypoxia/HIF-induced plasticity toward amoeboid cancer cell migration and metastasis. Current Biology, 2022, 32, 412-427.e8.	1.8	19
3	A mechanistic modeling framework reveals the key principles underlying tumor metabolism. PLoS Computational Biology, 2022, 18, e1009841.	1.5	5
4	Quantifying the Patterns of Metabolic Plasticity and Heterogeneity along the Epithelialâ€“Hybridâ€“Mesenchymal Spectrum in Cancer. Biomolecules, 2022, 12, 297.	1.8	21
5	Changes in Triple-Negative Breast Cancer Molecular Subtypes in Patients Without Pathologic Complete Response After Neoadjuvant Systemic Chemotherapy. JCO Precision Oncology, 2022, 6, e2000368.	1.5	9
6	Nrf2 Modulates the Hybrid Epithelial/Mesenchymal Phenotype and Notch Signaling During Collective Cancer Migration. Frontiers in Molecular Biosciences, 2022, 9, 807324.	1.6	23
7	Dynamic Phenotypic Switching and Group Behavior Help Non-Small Cell Lung Cancer Cells Evade Chemotherapy. Biomolecules, 2022, 12, 8.	1.8	13
8	Transcriptomic-Based Quantification of the Epithelial-Hybrid-Mesenchymal Spectrum across Biological Contexts. Biomolecules, 2022, 12, 29.	1.8	11
9	Let the robotic games begin. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2204152119.	3.3	0
10	Three-dimensional cancer cell migration directed by dual mechanochemical guidance. Physical Review Research, 2022, 4, .	1.3	7
11	Gene Circuit Explorer (GeneEx): an interactive web-app for visualizing, simulating and analyzing gene regulatory circuits. Bioinformatics, 2021, 37, 1327-1329.	1.8	2
12	Physics approaches to the spatial distribution of immune cells in tumors. Reports on Progress in Physics, 2021, 84, 022601.	8.1	10
13	Presynaptic endoplasmic reticulum regulates short-term plasticity in hippocampal synapses. Communications Biology, 2021, 4, 241.	2.0	18
14	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, .	3.3	17
15	A Theoretical Approach to Coupling the Epithelial-Mesenchymal Transition (EMT) to Extracellular Matrix (ECM) Stiffness via LOXL2. Cancers, 2021, 13, 1609.	1.7	29
16	Quantifying Cancer: More Than Just a Numbers Game. Trends in Cancer, 2021, 7, 267-269.	3.8	4
17	Gene expression profiles of inflammatory breast cancer reveal high heterogeneity across the epithelial-hybrid-mesenchymal spectrum. Translational Oncology, 2021, 14, 101026.	1.7	13
18	Towards decoding the coupled decision-making of metabolism and epithelial-to-mesenchymal transition in cancer. British Journal of Cancer, 2021, 124, 1902-1911.	2.9	63

#	Article	IF	Citations
19	Implications of Tumorâ€“Immune Coevolution on Cancer Evasion and Optimized Immunotherapy. Trends in Cancer, 2021, 7, 373-383.	3.8	16
20	Rapid assessment of T-cell receptor specificity of the immune repertoire. Nature Computational Science, 2021, 1, 362-373.	3.8	20
21	Breast cancer dormancy: need for clinically relevant models to address current gaps in knowledge. Npj Breast Cancer, 2021, 7, 66.	2.3	35
22	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, .	3.3	134
23	Spatial distribution of B cells and lymphocyte clusters as a predictor of triple-negative breast cancer outcome. Npj Breast Cancer, 2021, 7, 84.	2.3	16
24	Decoding leader cells in collective cancer invasion. Nature Reviews Cancer, 2021, 21, 592-604.	12.8	80
25	Ordered hexagonal patterns via notchâ€“delta signaling. Physical Biology, 2021, 18, 066006.	0.8	6
26	Mathematical Modeling of Plasticity and Heterogeneity in EMT. Methods in Molecular Biology, 2021, 2179, 385-413.	0.4	12
27	Understanding cytoskeletal avalanches using mechanical stability analysis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	14
28	Cluster size distribution of cells disseminating from a primary tumor. PLoS Computational Biology, 2021, 17, e1009011.	1.5	5
29	Collective motility and mechanical waves in cell clusters. European Physical Journal E, 2021, 44, 137.	0.7	4
30	NRF2-dependent Epigenetic Regulation can Promote the Hybrid Epithelial/Mesenchymal Phenotype. Frontiers in Cell and Developmental Biology, 2021, 9, 828250.	1.8	3
31	Immunosuppressive Traits of the Hybrid Epithelial/Mesenchymal Phenotype. Frontiers in Immunology, 2021, 12, 797261.	2.2	52
32	Histone deacetylases, Mbd3/NuRD, and Tet2 hydroxylase are crucial regulators of epithelialâ€“mesenchymal plasticity and tumor metastasis. Oncogene, 2020, 39, 1498-1513.	2.6	23
33	The Physics of Cellular Decision Making During Epithelialâ€“Mesenchymal Transition. Annual Review of Biophysics, 2020, 49, 1-18.	4.5	87
34	Differential Contributions of Pre- and Post-EMT Tumor Cells in Breast Cancer Metastasis. Cancer Research, 2020, 80, 163-169.	0.4	62
35	Sustained Coevolution in a Stochastic Model of Cancerâ€“Immune Interaction. Cancer Research, 2020, 80, 811-819.	0.4	11
36	Predicting Relapse in Patients With Triple Negative Breast Cancer (TNBC) Using a Deep-Learning Approach. Frontiers in Physiology, 2020, 11, 511071.	1.3	7

#	Article	IF	Citations
37	Epithelial-mesenchymal transition in cancer. , 2020, , 553-568.		1
38	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.	1.5	19
39	Biological Networks Regulating Cell Fate Choice are Minimally Frustrated. Physical Review Letters, 2020, 125, 088101.	2.9	37
40	Drug-Tolerant Idling Melanoma Cells Exhibit Theory-Predicted Metabolic Low-Low Phenotype. Frontiers in Oncology, 2020, 10, 1426.	1.3	24
41	Targeting the Id1-Kif11 Axis in Triple-Negative Breast Cancer Using Combination Therapy. Biomolecules, 2020, 10, 1295.	1.8	7
42	Compression stiffening of fibrous networks with stiff inclusions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21037-21044.	3.3	38
43	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.	3.3	22
44	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.	0.9	3
45	Leader-cell-driven epithelial sheet fingering. Physical Biology, 2020, 17, 046003.	0.8	20
46	Irradiation Induces Epithelial Cell Unjamming. Frontiers in Cell and Developmental Biology, 2020, 8, 21.	1.8	22
47	Guidelines and definitions for research on epithelialâ€“mesenchymal transition. Nature Reviews Molecular Cell Biology, 2020, 21, 341-352.	16.1	1,195
48	Comparative Study of Transcriptomics-Based Scoring Metrics for the Epithelial-Hybrid-Mesenchymal Spectrum. Frontiers in Bioengineering and Biotechnology, 2020, 8, 220.	2.0	87
49	Editorial: Characterizing the Multi-Faceted Dynamics of Tumor Cell Plasticity. Frontiers in Molecular Biosciences, 2020, 7, 630276.	1.6	0
50	A mechanism for epithelial-mesenchymal heterogeneity in a population of cancer cells. PLoS Computational Biology, 2020, 16, e1007619.	1.5	80
51	Epigenetic feedback and stochastic partitioning during cell division can drive resistance to EMT. Oncotarget, 2020, 11, 2611-2624.	0.8	33
52	Insights from graph theory on the morphologies of actomyosin networks with multilinkers. Physical Review E, 2020, 102, 062420.	0.8	6
53	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.	0.6	102
54	A possible role for epigenetic feedback regulation in the dynamics of the epithelialâ€“mesenchymal transition (EMT). Physical Biology, 2019, 16, 066004.	0.8	81

#	Article	IF	Citations
55	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.	3.3	49
56	A CTC-Cluster-Specific Signature Derived from OMICS Analysis of Patient-Derived Xenograft Tumors Predicts Outcomes in Basal-Like Breast Cancer. Journal of Clinical Medicine, 2019, 8, 1772.	1.0	36
57	Cell motility dependence on adhesive wetting. Soft Matter, 2019, 15, 2043-2050.	1.2	26
58	Quantifying Cancer Epithelial-Mesenchymal Plasticity and its Association with Stemness and Immune Response. Journal of Clinical Medicine, 2019, 8, 725.	1.0	63
59	Cell motility, contact guidance, and durotaxis. Soft Matter, 2019, 15, 4856-4864.	1.2	22
60	Structural and Dynamical Order of a Disordered Protein: Molecular Insights into Conformational Switching of PAGE4 at the Systems Level. Biomolecules, 2019, 9, 77.	1.8	19
61	Deciphering the Dynamics of Epithelial-Mesenchymal Transition and Cancer Stem Cells in Tumor Progression. Current Stem Cell Reports, 2019, 5, 11-21.	0.7	27
62	E-Cadherin Represses Anchorage-Independent Growth in Sarcomas through Both Signaling and Mechanical Mechanisms. Molecular Cancer Research, 2019, 17, 1391-1402.	1.5	35
63	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.	3.3	227
64	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.	3.3	108
65	Spleen Tyrosine Kinaseâ€“Mediated Autophagy Is Required for Epithelialâ€“Mesenchymal Plasticity and Metastasis in Breast Cancer. Cancer Research, 2019, 79, 1831-1843.	0.4	95
66	Computational Modeling of the Crosstalk Between Macrophage Polarization and Tumor Cell Plasticity in the Tumor Microenvironment. Frontiers in Oncology, 2019, 9, 10.	1.3	55
67	Anticipating critical transitions in epithelialâ€“hybrid-mesenchymal cell-fate determination. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26343-26352.	3.3	32
68	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.	3.3	238
69	Testing the gene expression classification of the EMT spectrum. Physical Biology, 2019, 16, 025002.	0.8	35
70	Quantitative Characteristic of ncRNA Regulation in Gene Regulatory Networks. Methods in Molecular Biology, 2019, 1912, 341-366.	0.4	3
71	Hybrid epithelial/mesenchymal phenotypes promote metastasis and therapy resistance across carcinomas. , 2019, 194, 161-184.		244
72	Computational Modeling of Collective Cell Migration: Mechanical and Biochemical Aspects. Advances in Experimental Medicine and Biology, 2019, 1146, 1-11.	0.8	7

#	Article	IF	Citations
73	Stochastic cancer-immune coevolution: Implications for cancer incidence and immunotherapeutic efficacy.. Journal of Clinical Oncology, 2019, 37, e14023-e14023.	0.8	0
74	Abstract 1195: Stochastic co-evolution of the adaptive immune system and an evading cancer population. , 2019, , .		0
75	Abstract 2448: Elucidating the metabolic plasticity of cancer by coupling gene regulation with metabolic pathways. , 2019, , .		0
76	Abstract 2783:OMICSanalysis of breast cancer PDX tumors to determine CTC-cluster-specific signature in predicting breast cancer metastasis. , 2019, , .		0
77	XIAP Regulation by MNK Links MAPK and NFÎºB Signaling to Determine an Aggressive Breast Cancer Phenotype. Cancer Research, 2018, 78, 1726-1738.	0.4	45
78	Hindrances to precise recovery of cellular forces in fibrous biopolymer networks. Physical Biology, 2018, 15, 026001.	0.8	4
79	Epithelialâ€“mesenchymal transition, a spectrum of states: Role in lung development, homeostasis, and disease. Developmental Dynamics, 2018, 247, 346-358.	0.8	190
80	Stochastic modeling of tumor progression and immune evasion. Journal of Theoretical Biology, 2018, 458, 148-155.	0.8	15
81	Interconnected feedback loops among ESRP1, HAS2, and CD44 regulate epithelial-mesenchymal plasticity in cancer. APL Bioengineering, 2018, 2, 031908.	3.3	71
82	Confluent and nonconfluent phases in a model of cell tissue. Physical Review E, 2018, 98, .	0.8	21
83	Modeling of Actomyosin Networks with a Molecular Underpinning of Cross-Linker Proteins. Biophysical Journal, 2018, 114, 143a.	0.2	0
84	Role of the supracellular actomyosin cable during epithelial wound healing. Soft Matter, 2018, 14, 4866-4873.	1.2	14
85	RACIPE: a computational tool for modeling gene regulatory circuits using randomization. BMC Systems Biology, 2018, 12, 74.	3.0	43
86	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.	1.3	15
87	Phenotypic Plasticity, Bet-Hedging, and Androgen Independence in Prostate Cancer: Role of Non-Genetic Heterogeneity. Frontiers in Oncology, 2018, 8, 50.	1.3	122
88	Elucidating the Metabolic Plasticity of Cancer: Mitochondrial Reprogramming and Hybrid Metabolic States. Cells, 2018, 7, 21.	1.8	167
89	Hybrid epithelial/mesenchymal phenotype(s): The â€˜fittestâ€™ for metastasis?. Biochimica Et Biophysica Acta: Reviews on Cancer, 2018, 1870, 151-157.	3.3	122
90	Designing bacterial signaling interactions with coevolutionary landscapes. PLoS ONE, 2018, 13, e0201734.	1.1	7

#	Article	IF	Citations
91	Properties of gene expression and chromatin structure with mechanically regulated elongation. Nucleic Acids Research, 2018, 46, 5924-5934.	6.5	33
92	PAGE4 and Conformational Switching: Insights from Molecular Dynamics Simulations and Implications for Prostate Cancer. Journal of Molecular Biology, 2018, 430, 2422-2438.	2.0	36
93	A mechanism-based computational model to capture the interconnections among epithelial-mesenchymal transition, cancer stem cells and Notch-Jagged signaling. Oncotarget, 2018, 9, 29906-29920.	0.8	67
94	Modularity of the metabolic gene network as a prognostic biomarker for hepatocellular carcinoma. Oncotarget, 2018, 9, 15015-15026.	0.8	2
95	Crawling and turning in a minimal reaction-diffusion cell motility model: Coupling cell shape and biochemistry. Physical Review E, 2017, 95, 012401.	0.8	69
96	Computational systems biology of epithelial-hybrid-mesenchymal transitions. Current Opinion in Systems Biology, 2017, 3, 1-6.	1.3	30
97	Modeling the Genetic Regulation of Cancer Metabolism: Interplay between Glycolysis and Oxidative Phosphorylation. Cancer Research, 2017, 77, 1564-1574.	0.4	207
98	The GRHL2/ZEB Feedback Loop-A Key Axis in the Regulation of EMT in Breast Cancer. Journal of Cellular Biochemistry, 2017, 118, 2559-2570.	1.2	90
99	<scp>EMT</scp> and <scp>MET</scp>: necessary or permissive for metastasis?. Molecular Oncology, 2017, 11, 755-769.	2.1	319
100	Epithelial/mesenchymal plasticity: how have quantitative mathematical models helped improve our understanding?. Molecular Oncology, 2017, 11, 739-754.	2.1	64
101	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.	3.3	72
102	Stress-induced plasticity of dynamic collagen networks. Nature Communications, 2017, 8, 842.	5.8	121
103	Survival Outcomes in Cancer Patients Predicted by a Partial EMT Gene Expression Scoring Metric. Cancer Research, 2017, 77, 6415-6428.	0.4	206
104	Molecular Simulations Suggest a Force-Dependent Mechanism of Vinculin Activation. Biophysical Journal, 2017, 113, 1697-1710.	0.2	19
105	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.	3.3	32
106	Induction of Mesenchymal-Epithelial Transitions in Sarcoma Cells. Journal of Visualized Experiments, 2017, , .	0.2	4
107	Operating principles of tristable circuits regulating cellular differentiation. Physical Biology, 2017, 14, 035007.	0.8	49
108	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.	3.3	48

#	Article	IF	Citations
109	Numb prevents a complete epithelialâ€“mesenchymal transition by modulating Notch signalling. Journal of the Royal Society Interface, 2017, 14, 20170512.	1.5	104
110	Morphodynamics of a growing microbial colony driven by cell death. Physical Review E, 2017, 96, 052404.	0.8	10
111	MCAM Mediates Chemoresistance in Small-Cell Lung Cancer via the PI3K/AKT/SOX2 Signaling Pathway. Cancer Research, 2017, 77, 4414-4425.	0.4	85
112	Boundary-driven anomalous spirals in oscillatory media. New Journal of Physics, 2017, 19, 063026.	1.2	2
113	Inflammatory breast cancer: a model for investigating cluster-based dissemination. Npj Breast Cancer, 2017, 3, 21.	2.3	117
114	Mechanical Properties of Transcription. Physical Review Letters, 2017, 118, 268101.	2.9	29
115	Phenomenological modeling of durotaxis. Physical Review E, 2017, 96, 010402.	0.8	24
116	Distinguishing mechanisms underlying EMT tristability. Cancer Convergence, 2017, 1, 2.	8.0	69
117	Phenotypic Plasticity and Cell Fate Decisions in Cancer: Insights from Dynamical Systems Theory. Cancers, 2017, 9, 70.	1.7	70
118	Bistability of the cytokine-immune cell network in a cancer microenvironment. Convergent Science Physical Oncology, 2017, 3, 024002.	2.6	12
119	Interrogating the topological robustness of gene regulatory circuits by randomization. PLoS Computational Biology, 2017, 13, e1005456.	1.5	161
120	Abstract 3170: MCAM modulates small cell lung cancer chemoresistance via PI3k/Akt/Sox2 signaling pathway. , 2017, , .		0
121	Expanding the scale of molecular biophysics. Physical Biology, 2016, 13, 053001.	0.8	1
122	Stability of the hybrid epithelial/mesenchymal phenotype. Oncotarget, 2016, 7, 27067-27084.	0.8	367
123	Tumor Budding: The Name is EMT. Partial EMT.. Journal of Clinical Medicine, 2016, 5, 51.	1.0	369
124	Nonlinear self-adapting wave patterns. New Journal of Physics, 2016, 18, 122001.	1.2	9
125	Uniform modeling of bacterial colony patterns with varying nutrient and substrate. Physica D: Nonlinear Phenomena, 2016, 318-319, 91-99.	1.3	11
126	Connecting the Sequence-Space of Bacterial Signaling Proteins to Phenotypes Using Coevolutionary Landscapes. Molecular Biology and Evolution, 2016, 33, 3054-3064.	3.5	63

#	Article	IF	Citations
127	How to eat on the go. Nature Physics, 2016, 12, 1091-1091.	6.5	0
128	Mechanical bounds to transcriptional noise. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13983-13988.	3.3	32
129	Modeling delayed processes in biological systems. Physical Review E, 2016, 94, 032408.	0.8	14
130	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.	1.5	130
131	Mesenchymal-Epithelial Transition in Sarcomas Is Controlled by the Combinatorial Expression of MicroRNA 200s and GRHL2. Molecular and Cellular Biology, 2016, 36, 2503-2513.	1.1	88
132	Emergent Collective Chemotaxis without Single-Cell Gradient Sensing. Physical Review Letters, 2016, 116, 098101.	2.9	96
133	Modeling closure of circular wounds through coordinated collective motion. Physical Biology, 2016, 13, 016006.	0.8	7
134	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.	0.5	0
135	Nonlinear elasticity of disordered fiber networks. Soft Matter, 2016, 12, 1419-1424.	1.2	59
136	The Role of Exosome-Mediated Cell-Cell Communication in Inducing Phenotypic Changes. Biophysical Journal, 2016, 110, 479a.	0.2	0
137	Contact inhibition of locomotion determines cellâ€“cell and cellâ€“substrate forces in tissues. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2660-2665.	3.3	109
138	Excitable waves and direction-sensing inDictyostelium discoideum: steps towards a chemotaxis model. Physical Biology, 2016, 13, 016002.	0.8	17
139	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.	3.3	174
140	Collective Signal Processing in Cluster Chemotaxis: Roles of Adaptation, Amplification, and Co-attraction in Collective Guidance. PLoS Computational Biology, 2016, 12, e1005008.	1.5	52
141	Phenotypic plasticity in prostate cancer: role of intrinsically disordered proteins. Asian Journal of Andrology, 2016, 18, 704.	0.8	68
142	Properties of cooperatively induced phases in sensing models. Physical Review E, 2015, 91, 052707.	0.8	2
143	The motility-proliferation-metabolism interplay during metastatic invasion. Scientific Reports, 2015, 5, 13538.	1.6	31
144	Implications of the Hybrid Epithelial/Mesenchymal Phenotype in Metastasis. Frontiers in Oncology, 2015, 5, 155.	1.3	581

#	Article	IF	Citations
145	Scaling Solution in the Large Population Limit of the General Asymmetric Stochastic Luriaâ€“DelbrÃ¼ck Evolution Process. Journal of Statistical Physics, 2015, 158, 783-805.	0.5	33
146	Alignment and nonlinear elasticity in biopolymer gels. Physical Review E, 2015, 91, 042710.	0.8	45
147	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.	3.3	95
148	Micromechanics of cellularized biopolymer networks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5117-22.	3.3	77
149	OVOL guides the epithelial-hybrid-mesenchymal transition. Oncotarget, 2015, 6, 15436-15448.	0.8	121
150	Coupling the modules of EMT and stemness: A tunable â€˜stemness windowâ€™ model. Oncotarget, 2015, 6, 25161-25174.	0.8	157
151	Connecting Thermal and Mechanical Protein (Un)folding Landscapes. Biophysical Journal, 2014, 107, 2950-2961.	0.2	36
152	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.	3.3	117
153	Growth feedback as a basis for persister bistability. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 544-549.	3.3	65
154	Calculating Intercellular Stress in a Model of Collectively Moving Cells. Biophysical Journal, 2014, 106, 173a.	0.2	0
155	Cellular memory in eukaryotic chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14448-14453.	3.3	115
156	Towards elucidating the connection between epithelialâ€“mesenchymal transitions and stemness. Journal of the Royal Society Interface, 2014, 11, 20140962.	1.5	156
157	Learning physics of living systems fromDictyostelium. Physical Biology, 2014, 11, 053011.	0.8	2
158	Physical Biology : challenges for our second decade. Physical Biology, 2014, 11, 030201.	0.8	0
159	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.	3.3	131
160	Intercellular Stress Reconstitution from Traction Force Data. Biophysical Journal, 2014, 107, 548-554.	0.2	28
161	Resistance to Chemotherapy: Patient Variability and Cellular Heterogeneity. Cancer Research, 2014, 74, 4663-4670.	0.4	54
162	How input noise limits biochemical sensing in ultrasensitive systems. Physical Review E, 2014, 90, 032702.	0.8	3

#	Article	IF	Citations
163	Introduction to Physics in Cancer Research. Cancer Research, 2014, 74, 4572-4573.	0.4	2
164	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.	1.2	14
165	We need theoretical physics approaches to study living systems. Physical Biology, 2013, 10, 040201.	0.8	5
166	Scientific priorities for the BRAIN Initiative. Nature Methods, 2013, 10, 713-714.	9.0	6
167	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.	3.3	442
168	The physics of eukaryotic chemotaxis. Physics Today, 2013, 66, 24-30.	0.3	61
169	Energy Evaluation of Î²-Strand Packing in a Fibril-Forming SH3 Domain. Journal of Physical Chemistry B, 2013, 117, 13051-13057.	1.2	2
170	Modeling cell-death patterning during biofilm formation. Physical Biology, 2013, 10, 066006.	0.8	24
171	Large population solution of the stochastic Luriaâ€“DelbrÃ¼ck evolution model. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11682-11687.	3.3	64
172	Periodic Migration in a Physical Model of Cells on Micropatterns. Physical Review Letters, 2013, 111, 158102.	2.9	68
173	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.	3.3	184
174	Noise effects in nonlinear biochemical signaling. Physical Review E, 2012, 85, 011901.	0.8	10
175	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.	3.3	230
176	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.	3.3	46
177	Incoherent Feedforward Control Governs Adaptation of Activated Ras in a Eukaryotic Chemotaxis Pathway. Science Signaling, 2012, 5, ra2.	1.6	154
178	How input fluctuations reshape the dynamics of a biological switching system. Physical Review E, 2012, 86, 061910.	0.8	12
179	Bacterial survival strategies suggest rethinking cancer cooperativity. Trends in Microbiology, 2012, 20, 403-410.	3.5	103
180	Measurement Noise Limitations in Eukaryotic Chemotaxis. Biophysical Journal, 2011, 100, 7a.	0.2	0

#	Article	IF	Citations
181	â€œSelf-Assistedâ€•Amoeboid Navigation in Complex Environments. PLoS ONE, 2011, 6, e21955.	1.1	18
182	Quantifying Information Transmission in Eukaryotic Gradient Sensing and Chemotactic Response. Journal of Statistical Physics, 2011, 142, 1167-1186.	0.5	21
183	Propagating mode-I fracture in amorphous materials using the continuous random network model. Physical Review E, 2011, 84, 026102.	0.8	10
184	Effects of Input Noise on a Simple Biochemical Switch. Physical Review Letters, 2011, 107, 148101.	2.9	28
185	Design principles and specificity in biological networks with cross activation. Physical Biology, 2011, 8, 026001.	0.8	2
186	How geometry and internal bias affect the accuracy of eukaryotic gradient sensing. Physical Review E, 2011, 83, 021917.	0.8	24
187	Activated Membrane Patches Guide Chemotactic Cell Motility. PLoS Computational Biology, 2011, 7, e1002044.	1.5	64
188	Modelling Vesicular Release at Hippocampal Synapses. PLoS Computational Biology, 2010, 6, e1000983.	1.5	70
189	Optimal Strategy for Competence Differentiation in Bacteria. PLoS Genetics, 2010, 6, e1001108.	1.5	31
190	External and internal constraints on eukaryotic chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9656-9659.	3.3	120
191	Phenomenological approach to eukaryotic chemotactic efficiency. Physical Review E, 2010, 81, 031906.	0.8	18
192	Computational Model for Cell Morphodynamics. Physical Review Letters, 2010, 105, 108104.	2.9	214
193	Transient Localized Patterns in Noise-Driven Reaction-Diffusion Systems. Physical Review Letters, 2010, 104, 158301.	2.9	72
194	Physical Limits on Cellular Sensing of Spatial Gradients. Physical Review Letters, 2010, 105, 048104.	2.9	104
195	Shunting Inhibition Controls the Gain Modulation Mediated by Asynchronous Neurotransmitter Release in Early Development. PLoS Computational Biology, 2010, 6, e1000973.	1.5	11
196	The Role of Cell Contraction and Adhesion in Dictyostelium Motility. Biophysical Journal, 2010, 99, 50-58.	0.2	58
197	A comparison of deterministic and stochastic simulations of neuronal vesicle release models. Physical Biology, 2010, 7, 026008.	0.8	32
198	Gradient sensing in defined chemotactic fields. Integrative Biology (United Kingdom), 2010, 2, 659-668.	0.6	35

#	Article	IF	Citations
199	Compartmentalization of second messengers in neurons: A mathematical analysis. Physical Review E, 2009, 80, 041901.	0.8	16
200	Signal processing in local neuronal circuits based on activity-dependent noise and competition. Chaos, 2009, 19, 033107.	1.0	5
201	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.	3.3	60
202	Locally Balanced Dendritic Integration by Short-Term Synaptic Plasticity and Active Dendritic Conductances. Journal of Neurophysiology, 2009, 102, 3234-3250.	0.9	8
203	The Fixation Probability of Rare Mutators in Finite Asexual Populations. Genetics, 2009, 181, 1595-1612.	1.2	37
204	Multimodal encoding in a simplified model of intracellular calcium signaling. Cognitive Processing, 2009, 10, 55-70.	0.7	47
205	Mechanisms and Constraints on Yeast MAPK Signaling Specificity. Biophysical Journal, 2009, 96, 4755-4763.	0.2	7
206	Activity-dependent stochastic resonance in recurrent neuronal networks. Physical Review E, 2008, 77, 060903.	0.8	7
207	Receptor Noise and Directional Sensing in Eukaryotic Chemotaxis. Physical Review Letters, 2008, 100, 228101.	2.9	59
208	A mathematical analysis of second messenger compartmentalization. Physical Biology, 2008, 5, 046006.	0.8	22
209	Astrocytes Optimize the Synaptic Transmission of Information. PLoS Computational Biology, 2008, 4, e1000088.	1.5	61
210	Receptor noise limitations on chemotactic sensing. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19270-19275.	3.3	45
211	Coexistence of amplitude and frequency modulations in intracellular calcium dynamics. Physical Review E, 2008, 77, 030903.	0.8	70
212	Small Regulatory RNAs May Sharpen Spatial Expression Patterns. PLoS Computational Biology, 2007, 3, e233.	1.5	92
213	Correlated phenotypic transitions to competence in bacterial colonies. Physical Review E, 2007, 76, 040901.	0.8	2
214	Quantifying noise levels of intercellular signals. Physical Review E, 2007, 75, 061905.	0.8	54
215	Folding Time Predictions from All-atom Replica Exchange Simulations. Journal of Molecular Biology, 2007, 372, 756-763.	2.0	80
216	The Astrocyte as a Gatekeeper of Synaptic Information Transfer. Neural Computation, 2007, 19, 303-326.	1.3	125

#	Article	IF	Citations
217	Target-Specific and Global Effectors in Gene Regulation by MicroRNA. Biophysical Journal, 2007, 93, L52-L54.	0.2	51
218	Effective stochastic dynamics on a protein folding energy landscape. Journal of Chemical Physics, 2006, 125, 054910.	1.2	71
219	Self-engineering capabilities of bacteria. Journal of the Royal Society Interface, 2006, 3, 197-214.	1.5	115
220	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.	3.3	83
221	Embryonic pattern scaling achieved by oppositely directed morphogen gradients. Physical Biology, 2006, 3, 107-120.	0.8	78
222	Fluctuation-induced instabilities in front propagation up a comoving reaction gradient in two dimensions. Physical Review E, 2006, 74, 016119.	0.8	4
223	Analytic approach to the evolutionary effects of genetic exchange. Physical Review E, 2006, 73, 016113.	0.8	10
224	Swarming patterns in Microorganisms: Some new modeling results. , 2006, , .		6
225	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.	3.3	145
226	Functional Topology Classification of Biological Computing Networks. Natural Computing, 2005, 4, 339-361.	1.8	12
227	Fluctuation-Regularized Front Propagation Dynamics in Reaction-Diffusion Systems. Physical Review Letters, 2005, 94, 158302.	2.9	15
228	Membrane-bound Turing patterns. Physical Review E, 2005, 72, 061912.	0.8	92
229	Recombination Dramatically Speeds Up Evolution of Finite Populations. Physical Review Letters, 2005, 94, 098102.	2.9	65
230	Front propagation up a reaction rate gradient. Physical Review E, 2005, 72, 066126.	0.8	29
231	Structure of infectious prions: stabilization by domain swapping. FASEB Journal, 2005, 19, 1778-1782.	0.2	43
232	Protein Oligomerization Through Domain Swapping: Role of Inter-molecular Interactions and Protein Concentration. Journal of Molecular Biology, 2005, 352, 202-211.	2.0	44
233	Excitation-Contraction Coupling Gain and Cooperativity of the Cardiac Ryanodine Receptor: A Modeling Approach. Biophysical Journal, 2005, 89, 3017-3025.	0.2	9
234	Dynamic Instabilities of Fracture under Biaxial Strain Using a Phase Field Model. Physical Review Letters, 2004, 93, 105504.	2.9	198

#	Article	IF	Citations
235	Physical schemata underlying biological pattern formationâ€"examples, issues and strategies. Physical Biology, 2004, 1, P14-P22.	0.8	47
236	Cooperativity can reduce stochasticity in intracellular calcium dynamics. Physical Biology, 2004, 1, 27-34.	0.8	17
237	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.	3.3	164
238	Analytical study of the effect of recombination on evolution via DNA shuffling. Physical Review E, 2004, 69, 051911.	0.8	7
239	Bacterial linguistic communication and social intelligence. Trends in Microbiology, 2004, 12, 366-372.	3.5	241
240	Does the continuum theory of dynamic fracture work?. Physical Review E, 2003, 68, 036118.	0.8	18
241	Computational approach for modeling intra- and extracellular dynamics. Physical Review E, 2003, 68, 037702.	0.8	66
242	Dynamics of Competitive Evolution on a Smooth Landscape. Physical Review Letters, 2003, 90, 088103.	2.9	24
243	Wave nucleation rate in excitable systems in the low noise limit. Physical Review E, 2003, 68, 031914.	0.8	10
244	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.	3.3	224
245	Comment on â€œDynamics of HIV Infection: A Cellular Automata Approachâ€• Physical Review Letters, 2002, 89, 219805.	2.9	13
246	Mode-I fracture in a nonlinear lattice with viscoelastic forces. Physical Review E, 2002, 66, 016126.	0.8	24
247	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.	3.3	45
248	Mechanisms of cooperativity underlying sequence-independent Î²-sheet formation. Journal of Chemical Physics, 2002, 116, 4353-4365.	1.2	31
249	Establishing Direction during Chemotaxis in Eukaryotic Cells. Biophysical Journal, 2002, 83, 1361-1367.	0.2	84
250	Spatiotemporal Dynamics of HIV Propagation. Journal of Theoretical Biology, 2002, 218, 85-96.	0.8	70
251	Steady-state mode I cracks in a viscoelastic triangular lattice. Journal of the Mechanics and Physics of Solids, 2002, 50, 583-613.	2.3	24
252	Phase-Field Model of Mode III Dynamic Fracture. Physical Review Letters, 2001, 87, 045501.	2.9	482

#	Article	IF	Citations
253	The artistry of nature. Nature, 2001, 409, 985-986.	13.7	72
254	Microscopic Selection of Fluid Fingering Patterns. Physical Review Letters, 2001, 86, 4532-4535.	2.9	14
255	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
256	A statistical mechanics model for receptor clustering. , 2000, 26, 219-234.		9
257	Two State Behavior in a Solvable Model ofÎ²-Hairpin Folding. Physical Review Letters, 2000, 84, 3490-3493.	2.9	13
258	Nutrient chemotaxis suppression of a diffusive instability in bacterial colony dynamics. Physical Review E, 2000, 62, 1444-1447.	0.8	9
259	Discrete Stochastic Modeling of Calcium Channel Dynamics. Physical Review Letters, 2000, 84, 5664-5667.	2.9	77
260	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.	3.3	16
261	Cooperative self-organization of microorganisms. Advances in Physics, 2000, 49, 395-554.	35.9	529
262	Nonlinear lattice model of viscoelastic mode III fracture. Physical Review E, 2000, 63, 016118.	0.8	21
263	Self-organization in systems of self-propelled particles. Physical Review E, 2000, 63, 017101.	0.8	363
264	Stochastic spreading of intracellularCa2+release. Physical Review E, 2000, 62, 2636-2643.	0.8	108
265	Steady-state cracks in viscoelastic lattice models. Physical Review E, 1999, 59, 5154-5164.	0.8	33
266	Arrested cracks in nonlinear lattice models of brittle fracture. Physical Review E, 1999, 60, 7569-7571.	0.8	15
267	Self-organized Vortex State in Two-DimensionalDictyosteliumDynamics. Physical Review Letters, 1999, 83, 1247-1250.	2.9	136
268	Interfacial velocity corrections due to multiplicative noise. Physical Review E, 1999, 59, 3893-3900.	0.8	97
269	A Thermodynamic Model for Receptor Clustering. Biophysical Journal, 1999, 77, 2358-2365.	0.2	38
270	Evolution on a Smooth Landscape: The Role of Bias. Journal of Statistical Physics, 1998, 90, 191-210.	0.5	18

#	Article	IF	Citations
271	Fluctuation-induced diffusive instabilities. Nature, 1998, 394, 556-558.	13.7	111
272	The Artistry of Microorganisms. Scientific American, 1998, 279, 82-87.	1.0	43
273	The dynamics of Dictyostelium development. Physica A: Statistical Mechanics and Its Applications, 1998, 249, 53-63.	1.2	6
274	Possible Cooperation of Differential Adhesion and Chemotaxis in Mound Formation of Dictyostelium. Biophysical Journal, 1998, 75, 2615-2625.	0.2	80
275	Comment on â€œSelection of the Saffman-Taylor Finger Width in the Absence of Surface Tension: An Exact Resultâ€• Physical Review Letters, 1998, 81, 4528-4528.	2.9	7
276	Refraction of waves in excitable media. Physical Review E, 1998, 58, 2910-2917.	0.8	4
277	Mutator Dynamics on a Smooth Evolutionary Landscape. Physical Review Letters, 1998, 80, 2012-2015.	2.9	34
278	Pattern Selection by Gene Expression inDictyostelium Discoideum. Physical Review Letters, 1998, 80, 3875-3878.	2.9	34
279	Quantum Nucleation of Phase Slips in a1DModel of a Superfluid. Physical Review Letters, 1997, 79, 5054-5057.	2.9	18
280	Unicellular Algal Growth: A Biomechanical Approach to Cell Wall Dynamics. Physical Review Letters, 1997, 79, 4290-4293.	2.9	7
281	Diffusive boundary layers in the free-surface excitable medium spiral. Physical Review E, 1997, 55, R3847-R3850.	0.8	0
282	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.	0.5	18
283	Evolution on a smooth landscape. Journal of Statistical Physics, 1997, 87, 519-544.	0.5	61
284	Computational modeling of mound development in Dictyostelium. Physica D: Nonlinear Phenomena, 1997, 106, 375-388.	1.3	30
285	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.	3.3	82
286	Phase-field model of spiral dendritic growth. Physical Review E, 1996, 54, 2797-2801.	0.8	2
287	RNA Virus Evolution via a Fitness-Space Model. Physical Review Letters, 1996, 76, 4440-4443.	2.9	240
288	Spiral Competition in Three-Component Excitable Media. Physical Review Letters, 1996, 76, 1170-1173.	2.9	50

#	Article	IF	Citations
289	Front stability in mean-field models of diffusion-limited growth. Physical Review E, 1996, 53, 861-870.	0.8	3
290	Scattering of Superfluid Vortex Rings. Physical Review Letters, 1996, 76, 4745-4748.	2.9	48
291	Complex bacterial patterns. Nature, 1995, 373, 566-567.	13.7	100
292	Dynamic determination of the dendritic growth direction within a complex-phase-field model. Physical Review E, 1995, 52, 4553-4556.	0.8	3
293	Aggregation Patterns in Stressed Bacteria. Physical Review Letters, 1995, 75, 1859-1862.	2.9	79
294	Mean-field theory of the morphology transition in stochastic diffusion-limited growth. Physical Review E, 1995, 52, 5134-5141.	0.8	7
295	Controlling spatiotemporal chaos. Physical Review Letters, 1994, 72, 2561-2564.	2.9	136
296	Theory of the spiral core in excitable media. Physica D: Nonlinear Phenomena, 1994, 70, 115-139.	1.3	23
297	Theory of pulse instabilities in electrophysiological models of excitable tissues. Physica D: Nonlinear Phenomena, 1994, 73, 113-127.	1.3	32
298	Modeling spatial patterns in Dictyostelium. Chaos, 1994, 4, 563-568.	1.0	11
299	Theory of diffusion-limited growth. Physical Review E, 1993, 48, R4207-R4210.	0.8	11
300	Pattern formation inDictyosteliumvia the dynamics of cooperative biological entities. Physical Review E, 1993, 48, 4801-4804.	0.8	123
301	Vortex reconnection in superfluid helium. Physical Review Letters, 1993, 71, 1375-1378.	2.9	256
302	Interaction between a drifting spiral and defects. Physical Review E, 1993, 47, R800-R803.	0.8	45
303	Catalysis at single-crystal Pt(110) surfaces: Global coupling and standing waves. Physical Review E, 1993, 48, 50-64.	0.8	39
304	Morphology transitions in a mean-field model of diffusion-limited growth. Physical Review Letters, 1993, 71, 3838-3841.	2.9	14
305	Amoebae Aggregation in Dictyoselium Discoideum. NATO ASI Series Series B: Physics, 1993, , 21-27.	0.2	0
306	Outer Stability of Spirals in Excitable Media. Europhysics Letters, 1992, 19, 553-558.	0.7	2

#	Article	IF	Citations
307	Standing waves in catalysis at single crystal surfaces. Physical Review Letters, 1992, 69, 204-207.	2.9	26
308	Mean-field diffusion-limited aggregation and the Saffman-Taylor problem in three dimensions. Physical Review A, 1992, 45, 1044-1052.	1.0	21
309	Mean-field diffusion-limited aggregation in radial geometries. Physical Review A, 1992, 45, 1053-1057.	1.0	18
310	Coupled map lattice techniques for simulating interfacial phenomena in reactionâ€diffusion systems. Chaos, 1992, 2, 337-342.	1.0	9
311	Spiral core in singly diffusive excitable media. Physical Review Letters, 1992, 68, 401-404.	2.9	33
312	Spiral-core meandering in excitable media. Physical Review A, 1992, 46, 5264-5267.	1.0	15
313	Spherical cap bubbles. Journal of Fluid Mechanics, 1992, 235, 73.	1.4	2
314	Molecular-beam epitaxial growth and surface diffusion. Physical Review Letters, 1992, 69, 100-103.	2.9	89
315	Hydrodynamic modes of a granular shear flow. Physics of Fluids A, Fluid Dynamics, 1991, 3, 2067-2075.	1.6	13
316	Spiral selection as a free boundary problem. Physica D: Nonlinear Phenomena, 1991, 49, 90-97.	1.3	7
317	Nonsymmetric Saffmanâ€“Taylor fingers. Physics of Fluids A, Fluid Dynamics, 1991, 3, 529-534.	1.6	17
318	Interface fluctuations in random media. Physical Review A, 1991, 43, 4551-4554.	1.0	111
319	Planar traveling waves in the oscillatory oxidation of CO over polycrystalline catalysts. Journal of Chemical Physics, 1991, 95, 3815-3825.	1.2	12
320	Streaming instability of aggregating slime mold amoebae. Physical Review Letters, 1991, 66, 2400-2403.	2.9	63
321	Mean-field theory for diffusion-limited aggregation in low dimensions. Physical Review Letters, 1991, 66, 1978-1981.	2.9	53
322	Resonant interactions and traveling-solidification cells. Physical Review A, 1991, 43, 1122-1125.	1.0	28
323	Growth of non-reflection-symmetric dendrites. Physical Review A, 1991, 43, 883-887.	1.0	15
324	Maximal dendrite size in monolayer systems. Physical Review Letters, 1991, 67, 3121-3123.	2.9	13

#	Article	IF	Citations
325	Dendritic Crystal Growth: Overview. NATO ASI Series Series B: Physics, 1991, , 67-73.	0.2	3
326	Growth of Non-Reflection Symmetric Patterns. NATO ASI Series Series B: Physics, 1991, , 31-41.	0.2	0
327	The oscillatory instability in rapid solidification. Journal De Physique, I, 1991, 1, 1291-1302.	1.2	0
328	Selection of the Viscous Finger in the 90Â° Geometry. Europhysics Letters, 1990, 13, 161-166.	0.7	25
329	A Geometrical Model for Spirals: a Possible Paradigm for Belousov-Zhabotinskii. Europhysics Letters, 1990, 12, 465-470.	0.7	2
330	Numerical study for traveling waves in directional solidification. Physical Review A, 1990, 42, 7475-7478.	1.0	32
331	Stability of traveling waves in the Belousov-Zhabotinskii reaction. Physical Review A, 1990, 41, 5418-5430.	1.0	22
332	Coupled-map lattice model for crystal growth. Physical Review A, 1990, 42, 6125-6128.	1.0	26
333	A rising bubble in a tube. Physics of Fluids A, Fluid Dynamics, 1990, 2, 542-546.	1.6	13
334	Linear stability of directional solidification cells. Physical Review A, 1990, 41, 3197-3205.	1.0	10
335	Stability of Travelling Waves in the Belousov-Zhabotinskii Reaction. NATO ASI Series Series B: Physics, 1990, , 299-311.	0.2	0
336	Cellular solutions for highly nonequilibrium directional solidification. Physical Review A, 1989, 39, 3208-3210.	1.0	4
337	Steady-state cellular growth during directional solidification. Physical Review A, 1989, 39, 3041-3052.	1.0	61
338	Neutral-fermion-soliton statistics in the short-range resonating-valence-bond state: A reevaluation. Physical Review B, 1989, 40, 7340-7342.	1.1	12
339	Velocity selection for Taylor bubbles. Physical Review A, 1989, 39, 5462-5465.	1.0	5
340	Effect of diffusion on patterns in excitable Belousov-Zhabotinskii systems. Physica D: Nonlinear Phenomena, 1989, 39, 1-14.	1.3	24
341	Computational approach to steady-state eutectic growth. Journal of Crystal Growth, 1989, 94, 871-879.	0.7	6
342	Pattern selection in three dimensional dendritic growth. Acta Metallurgica, 1988, 36, 2693-2706.	2.1	99

#	Article	IF	Citations
343	Pattern selection in fingered growth phenomena. Advances in Physics, 1988, 37, 255-339.	35.9	932
344	TIP INSTABILITY DURING CONFINED DIFFUSION-LIMITED GROWTH. Modern Physics Letters B, 1988, 02, 945-951.	1.0	7
345	Towards a Theory of Interfacial Pattern Formation. , 1988, , 83-93.		0
346	Determining the Wavelength of Dendritic Sidebranches. Europhysics Letters, 1987, 4, 215-221.	0.7	37
347	Growth velocity of three-dimensional dendritic crystals. Physical Review A, 1987, 36, 4123-4126.	1.0	44
348	Discrete set selection of Saffmanâ€“Taylor fingers. Physics of Fluids, 1987, 30, 1246.	1.4	18
349	Pattern Formation Far from Equilibrium : The Free Space Dendritic Crystal. , 1987, , 1-11.		8
350	The geometrical model of dendritic growth: The small velocity limit. Physica D: Nonlinear Phenomena, 1986, 21, 371-380.	1.3	9
351	Velocity selection in dendritic growth. Physical Review B, 1986, 33, 7867-7870.	1.1	83
352	Steady-state dendritic crystal growth. Physical Review A, 1986, 33, 3352-3357.	1.0	117
353	Coalescence of Saffman-Taylor fingers: A new global instability. Physical Review A, 1986, 33, 3625-3627.	1.0	25
354	Dendritic growth in a channel. Physical Review A, 1986, 34, 4980-4987.	1.0	81
355	Theory of the Saffman-Taylor â€˜â€˜fingerâ€™â€™ pattern. I. Physical Review A, 1986, 33, 2621-2633.	1.0	63
356	Comment on then=âˆžLimit of the Fuller-Lenard Model. Physical Review Letters, 1986, 57, 645-645.	2.9	5
357	Glassy Dynamics in Icosahedral Systems. Physical Review Letters, 1986, 57, 2679-2682.	2.9	8
358	Stability of Dendritic Crystals. Physical Review Letters, 1986, 57, 3069-3072.	2.9	161
359	Theory of the Saffman-Taylor â€˜â€˜fingerâ€™â€™ pattern. II. Physical Review A, 1986, 33, 2634-2639.	1.0	54
360	Renormalization of the Î¸ 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.	1.5	25

#	Article	IF	Citations
361	Experimental Demonstration of the Role of Anisotropy in Interfacial Pattern Formation. Physical Review Letters, 1985, 55, 1315-1318.	2.9	407
362	Stability of finger patterns in Hele-Shaw cells. Physical Review A, 1985, 32, 1930-1933.	1.0	58
363	Scaling of conductivities in the fractional quantum Hall effect. Physical Review B, 1985, 32, 1311-1314.	1.1	60
364	Geometrical models of interface evolution. III. Theory of dendritic growth. Physical Review A, 1985, 31, 1712-1717.	1.0	111
365	Interface moving through a random background. Physical Review B, 1985, 32, 280-292.	1.1	110
366	Diffuse interface model of diffusion-limited crystal growth. Physical Review B, 1985, 31, 6119-6122.	1.1	333
367	Geometrical models of interface evolution. II. Numerical simulation. Physical Review A, 1984, 30, 3161-3174.	1.0	129
368	Numerical simulation of two-dimensional snowflake growth. Physical Review A, 1984, 30, 2820-2823.	1.0	78
369	Scaling andÎ¸Dependence in the O(3)Ï•Model. Physical Review Letters, 1984, 53, 519-522.	2.9	24
370	Crystalline Anisotropy. Science, 1984, 225, 566-566.	6.0	0
371	Simple models of interface growth. Physica D: Nonlinear Phenomena, 1984, 12, 241-244.	1.3	3
372	Geometrical models of interface evolution. Physical Review A, 1984, 29, 1335-1342.	1.0	238
373	Steady-state dendritic growth at non-zero capillarity. Scripta Metallurgica, 1984, 18, 463-466.	1.2	5
374	Loop-space hamiltonians and numerical methods for large-N gauge theories (II). Nuclear Physics B, 1984, 230, 299-316.	0.9	14
375	Theory of the quantized Hall effect (I). Nuclear Physics B, 1984, 240, 30-48.	0.9	137
376	Theory of the quantized hall effect (II). Nuclear Physics B, 1984, 240, 49-70.	0.9	71
377	Theory of the quantized Hall effect (III). Nuclear Physics B, 1984, 240, 71-90.	0.9	67
378	Electron Delocalization by a Magnetic Field in Two Dimensions. Physical Review Letters, 1983, 51, 1915-1918.	2.9	296

#	Article	IF	Citations
379	Loop space Hamiltonians and numerical methods for large-N gauge theories. Nuclear Physics B, 1983, 213, 169-188.	0.9	21
380	On the large-N limit in symplectic matrix models. Nuclear Physics B, 1983, 215, 307-315.	0.9	61
381	Geometrical Approach to Moving-Interface Dynamics. Physical Review Letters, 1983, 51, 1111-1114.	2.9	191
382	Acoustic propagation in random layered media. Journal of the Acoustical Society of America, 1983, 73, 32-40.	0.5	9
383	Monte Carlo evaluation of the effective potential. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1983, 131, 127-132.	1.5	4
384	Viscosity renormalization in the Brinkman equation. Physics of Fluids, 1983, 26, 2864.	1.4	165
385	Onset of asymptotically free scaling. Physical Review D, 1982, 26, 959-962.	1.6	2
386	SU(2) adjoint Higgs model. Physical Review D, 1982, 25, 3319-3324.	1.6	29
387	Glueball States in Reduced Large-NHamiltonians. Physical Review Letters, 1982, 49, 1603-1605.	2.9	17
388	Strong coupling versus large N in Ïƒ-models. Nuclear Physics B, 1982, 195, 493-502.	0.9	5
389	Dynamics of SU(2) lattice gauge theories. Nuclear Physics B, 1982, 205, 77-106.	0.9	39
390	A quenched reduction for the topological limit of QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1982, 119, 183-186.	1.5	20
391	Large N classical equations and their quantum significance. Annals of Physics, 1981, 136, 113-135.	1.0	19
392	Classical behavior of large N fermionic systems. Annals of Physics, 1981, 133, 13-27.	1.0	1
393	N-body dynamics and the collective field method. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 81, 9-11.	0.9	2
394	The potential and the migdal string. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1981, 103, 203-206.	1.5	2
395	Monopole Condensation and the Lattice-Quantum-Chromodynamics Crossover. Physical Review Letters, 1981, 47, 621-624.	2.9	57
396	Semiclassical Approach to Planar Diagrams. Physical Review Letters, 1980, 44, 1443-1446.	2.9	44

#	Article	IF	Citations
397	Effective elastic parameters of random composites. Applied Physics Letters, 1980, 37, 377-379.	1.5	38
398	Instantons in unusual settings. Nuclear Physics B, 1980, 172, 119-131.	0.9	2
399	Two-dimensional SU(N) Higgs theory. Nuclear Physics B, 1980, 170, 128-138.	0.9	2
400	Regularization and renormalization of semiclassical QCD. Nuclear Physics B, 1979, 157, 237-249.	0.9	4
401	Higher-order instanton effects. Physical Review D, 1979, 19, 1225-1242.	1.6	22
402	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.	1.5	3
403	Motion of extended charges in classical electrodynamics. American Journal of Physics, 1977, 45, 75-78.	0.3	85