

Herbert Levine

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6616059/herbert-levine-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

409
papers

19,049
citations

75
h-index

122
g-index

461
ext. papers

22,912
ext. citations

5.8
avg, IF

7.02
L-index

#	Paper	IF	Citations
409	A mechanistic modeling framework reveals the key principles underlying tumor metabolism.. <i>PLoS Computational Biology</i> , 2022 , 18, e1009841	5	0
408	Changes in Triple-Negative Breast Cancer Molecular Subtypes in Patients Without Pathologic Complete Response After Neoadjuvant Systemic Chemotherapy.. <i>JCO Precision Oncology</i> , 2022 , 6, e2000368	3.6	1
407	Nrf2 Modulates the Hybrid Epithelial/Mesenchymal Phenotype and Notch Signaling During Collective Cancer Migration.. <i>Frontiers in Molecular Biosciences</i> , 2022 , 9, 807324	5.6	2
406	Let the robotic games begin.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2204152119	11.5	
405	NRF2-dependent Epigenetic Regulation can Promote the Hybrid Epithelial/Mesenchymal Phenotype.. <i>Frontiers in Cell and Developmental Biology</i> , 2021 , 9, 828250	5.7	1
404	Calpain-2 regulates hypoxia/HIF-induced plasticity toward amoeboid cancer cell migration and metastasis. <i>Current Biology</i> , 2021 ,	6.3	4
403	Cluster size distribution of cells disseminating from a primary tumor. <i>PLoS Computational Biology</i> , 2021 , 17, e1009011	5	2
402	Collective motility and mechanical waves in cell clusters. <i>European Physical Journal E</i> , 2021 , 44, 137	1.5	2
401	Understanding cytoskeletal avalanches using mechanical stability analysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	3
400	The mechanics and dynamics of cancer cells sensing noisy 3D contact guidance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	6
399	A Theoretical Approach to Coupling the Epithelial-Mesenchymal Transition (EMT) to Extracellular Matrix (ECM) Stiffness via LOXL2. <i>Cancers</i> , 2021 , 13,	6.6	13
398	Gene expression profiles of inflammatory breast cancer reveal high heterogeneity across the epithelial-hybrid-mesenchymal spectrum. <i>Translational Oncology</i> , 2021 , 14, 101026	4.9	5
397	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	8.7	14
396	Implications of Tumor-Immune Coevolution on Cancer Evasion and Optimized Immunotherapy. <i>Trends in Cancer</i> , 2021 , 7, 373-383	12.5	6
395	Rapid assessment of T-cell receptor specificity of the immune repertoire. <i>Nature Computational Science</i> , 2021 , 1, 362-373		2
394	Breast cancer dormancy: need for clinically relevant models to address current gaps in knowledge. <i>Npj Breast Cancer</i> , 2021 , 7, 66	7.8	8
393	Identification of EMT signaling cross-talk and gene regulatory networks by single-cell RNA sequencing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	31

392	Spatial distribution of B cells and lymphocyte clusters as a predictor of triple-negative breast cancer outcome. <i>Npj Breast Cancer</i> , 2021 , 7, 84	7.8	2
391	Gene Circuit Explorer (GeneEx): an interactive web-app for visualizing, simulating and analyzing gene regulatory circuits. <i>Bioinformatics</i> , 2021 , 37, 1327-1329	7.2	1
390	Physics approaches to the spatial distribution of immune cells in tumors. <i>Reports on Progress in Physics</i> , 2021 , 84, 022601	14.4	4
389	Presynaptic endoplasmic reticulum regulates short-term plasticity in hippocampal synapses. <i>Communications Biology</i> , 2021 , 4, 241	6.7	5
388	Decoding leader cells in collective cancer invasion. <i>Nature Reviews Cancer</i> , 2021 , 21, 592-604	31.3	23
387	Mathematical Modeling of Plasticity and Heterogeneity in EMT. <i>Methods in Molecular Biology</i> , 2021 , 2179, 385-413	1.4	7
386	Immunosuppressive Traits of the Hybrid Epithelial/Mesenchymal Phenotype.. <i>Frontiers in Immunology</i> , 2021 , 12, 797261	8.4	8
385	Dynamic Phenotypic Switching and Group Behavior Help Non-Small Cell Lung Cancer Cells Evade Chemotherapy.. <i>Biomolecules</i> , 2021 , 12,	5.9	4
384	The role of the Arp2/3 complex in shaping the dynamics and structures of branched actomyosin networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 10825-10831	11.5	12
383	Occupancy and Fractal Dimension Analyses of the Spatial Distribution of Cytotoxic (CD8+) T Cells Infiltrating the Tumor Microenvironment in Triple Negative Breast Cancer. <i>Biophysical Reviews and Letters</i> , 2020 , 15, 83-98	1.2	3
382	Leader-cell-driven epithelial sheet fingering. <i>Physical Biology</i> , 2020 , 17, 046003	3	7
381	Irradiation Induces Epithelial Cell Unjamming. <i>Frontiers in Cell and Developmental Biology</i> , 2020 , 8, 21	5.7	11
380	A mechanism for epithelial-mesenchymal heterogeneity in a population of cancer cells. <i>PLoS Computational Biology</i> , 2020 , 16, e1007619	5	52
379	Epigenetic feedback and stochastic partitioning during cell division can drive resistance to EMT. <i>Oncotarget</i> , 2020 , 11, 2611-2624	3.3	18
378	Insights from graph theory on the morphologies of actomyosin networks with multilinkers. <i>Physical Review E</i> , 2020 , 102, 062420	2.4	3
377	Histone deacetylases, Mbd3/NuRD, and Tet2 hydroxylase are crucial regulators of epithelial-mesenchymal plasticity and tumor metastasis. <i>Oncogene</i> , 2020 , 39, 1498-1513	9.2	11
376	The Physics of Cellular Decision Making During Epithelial-Mesenchymal Transition. <i>Annual Review of Biophysics</i> , 2020 , 49, 1-18	21.1	36
375	Differential Contributions of Pre- and Post-EMT Tumor Cells in Breast Cancer Metastasis. <i>Cancer Research</i> , 2020 , 80, 163-169	10.1	33

374	Sustained Coevolution in a Stochastic Model of Cancer-Immune Interaction. <i>Cancer Research</i> , 2020 , 80, 811-819	10.1	4
373	Predicting Relapse in Patients With Triple Negative Breast Cancer (TNBC) Using a Deep-Learning Approach. <i>Frontiers in Physiology</i> , 2020 , 11, 511071	4.6	0
372	Epithelial-mesenchymal transition in cancer 2020 , 553-568		1
371	Decoding the mechanisms underlying cell-fate decision-making during stem cell differentiation by random circuit perturbation. <i>Journal of the Royal Society Interface</i> , 2020 , 17, 20200500	4.1	4
370	Biological Networks Regulating Cell Fate Choice Are Minimally Frustrated. <i>Physical Review Letters</i> , 2020 , 125, 088101	7.4	11
369	Drug-Tolerant Idling Melanoma Cells Exhibit Theory-Predicted Metabolic Low-Low Phenotype. <i>Frontiers in Oncology</i> , 2020 , 10, 1426	5.3	7
368	Targeting the Id1-Kif11 Axis in Triple-Negative Breast Cancer Using Combination Therapy. <i>Biomolecules</i> , 2020 , 10,	5.9	2
367	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	11.5	13
366	Guidelines and definitions for research on epithelial-mesenchymal transition. <i>Nature Reviews Molecular Cell Biology</i> , 2020 , 21, 341-352	48.7	469
365	Comparative Study of Transcriptomics-Based Scoring Metrics for the Epithelial-Hybrid-Mesenchymal Spectrum. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 220	5.8	37
364	Cell motility dependence on adhesive wetting. <i>Soft Matter</i> , 2019 , 15, 2043-2050	3.6	16
363	Quantifying Cancer Epithelial-Mesenchymal Plasticity and its Association with Stemness and Immune Response. <i>Journal of Clinical Medicine</i> , 2019 , 8,	5.1	41
362	Cell motility, contact guidance, and durotaxis. <i>Soft Matter</i> , 2019 , 15, 4856-4864	3.6	15
361	Structural and Dynamical Order of a Disordered Protein: Molecular Insights into Conformational Switching of PAGE4 at the Systems Level. <i>Biomolecules</i> , 2019 , 9,	5.9	11
360	Deciphering the Dynamics of Epithelial-Mesenchymal Transition and Cancer Stem Cells in Tumor Progression. <i>Current Stem Cell Reports</i> , 2019 , 5, 11-21	1.8	16
359	E-Cadherin Represses Anchorage-Independent Growth in Sarcomas through Both Signaling and Mechanical Mechanisms. <i>Molecular Cancer Research</i> , 2019 , 17, 1391-1402	6.6	15
358	Elucidating cancer metabolic plasticity by coupling gene regulation with metabolic pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 3909-3918	11.5	138
357	Infiltration of CD8 T cells into tumor cell clusters in triple-negative breast cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 3678-3687	11.5	54

356	Spleen Tyrosine Kinase-Mediated Autophagy Is Required for Epithelial-Mesenchymal Plasticity and Metastasis in Breast Cancer. <i>Cancer Research</i> , 2019 , 79, 1831-1843	10.1	70
355	Computational Modeling of the Crosstalk Between Macrophage Polarization and Tumor Cell Plasticity in the Tumor Microenvironment. <i>Frontiers in Oncology</i> , 2019 , 9, 10	5.3	26
354	NRF2 activates a partial epithelial-mesenchymal transition and is maximally present in a hybrid epithelial/mesenchymal phenotype. <i>Integrative Biology (United Kingdom)</i> , 2019 , 11, 251-263	3.7	67
353	A possible role for epigenetic feedback regulation in the dynamics of the epithelial-mesenchymal transition (EMT). <i>Physical Biology</i> , 2019 , 16, 066004	3	47
352	Pericytes enable effective angiogenesis in the presence of proinflammatory signals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 23551-23561	11.5	23
351	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,	5.1	19
350	Stochastic cancer-immune coevolution: Implications for cancer incidence and immunotherapeutic efficacy.. <i>Journal of Clinical Oncology</i> , 2019 , 37, e14023-e14023	2.2	
349	Computational Modeling of Collective Cell Migration: Mechanical and Biochemical Aspects. <i>Advances in Experimental Medicine and Biology</i> , 2019 , 1146, 1-11	3.6	5
348	Anticipating critical transitions in epithelial-hybrid-mesenchymal cell-fate determination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 ,	11.5	15
347	Toward understanding cancer stem cell heterogeneity in the tumor microenvironment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 148-157	11.5	137
346	Testing the gene expression classification of the EMT spectrum. <i>Physical Biology</i> , 2019 , 16, 025002	3	22
345	Quantitative Characteristic of ncRNA Regulation in Gene Regulatory Networks. <i>Methods in Molecular Biology</i> , 2019 , 1912, 341-366	1.4	2
344	Hybrid epithelial/mesenchymal phenotypes promote metastasis and therapy resistance across carcinomas. <i>Pharmacology & Therapeutics</i> , 2019 , 194, 161-184	13.9	140
343	XIAP Regulation by MNK Links MAPK and NF κ B Signaling to Determine an Aggressive Breast Cancer Phenotype. <i>Cancer Research</i> , 2018 , 78, 1726-1738	10.1	29
342	Hindrances to precise recovery of cellular forces in fibrous biopolymer networks. <i>Physical Biology</i> , 2018 , 15, 026001	3	4
341	Epithelial-mesenchymal transition, a spectrum of states: Role in lung development, homeostasis, and disease. <i>Developmental Dynamics</i> , 2018 , 247, 346-358	2.9	123
340	RACIPE: a computational tool for modeling gene regulatory circuits using randomization. <i>BMC Systems Biology</i> , 2018 , 12, 74	3.5	15
339	Analysis of Hierarchical Organization in Gene Expression Networks Reveals Underlying Principles of Collective Tumor Cell Dissemination and Metastatic Aggressiveness of Inflammatory Breast Cancer. <i>Frontiers in Oncology</i> , 2018 , 8, 244	5.3	13

338	Phenotypic Plasticity, Bet-Hedging, and Androgen Independence in Prostate Cancer: Role of Non-Genetic Heterogeneity. <i>Frontiers in Oncology</i> , 2018 , 8, 50	5.3	69
337	Elucidating the Metabolic Plasticity of Cancer: Mitochondrial Reprogramming and Hybrid Metabolic States. <i>Cells</i> , 2018 , 7,	7.9	104
336	Hybrid epithelial/mesenchymal phenotype(s): The 'fittest' for metastasis?. <i>Biochimica Et Biophysica Acta: Reviews on Cancer</i> , 2018 , 1870, 151-157	11.2	76
335	Designing bacterial signaling interactions with coevolutionary landscapes. <i>PLoS ONE</i> , 2018 , 13, e0201734	3.7	5
334	Properties of gene expression and chromatin structure with mechanically regulated elongation. <i>Nucleic Acids Research</i> , 2018 , 46, 5924-5934	20.1	17
333	PAGE4 and Conformational Switching: Insights from Molecular Dynamics Simulations and Implications for Prostate Cancer. <i>Journal of Molecular Biology</i> , 2018 , 430, 2422-2438	6.5	24
332	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	3.3	49
331	Modularity of the metabolic gene network as a prognostic biomarker for hepatocellular carcinoma. <i>Oncotarget</i> , 2018 , 9, 15015-15026	3.3	1
330	Stochastic modeling of tumor progression and immune evasion. <i>Journal of Theoretical Biology</i> , 2018 , 458, 148-155	2.3	6
329	Interconnected feedback loops among ESRP1, HAS2, and CD44 regulate epithelial-mesenchymal plasticity in cancer. <i>APL Bioengineering</i> , 2018 , 2, 031908	6.6	46
328	Confluent and nonconfluent phases in a model of cell tissue. <i>Physical Review E</i> , 2018 , 98,	2.4	13
327	Role of the supracellular actomyosin cable during epithelial wound healing. <i>Soft Matter</i> , 2018 , 14, 4866-4873	3.8	10
326	Crawling and turning in a minimal reaction-diffusion cell motility model: Coupling cell shape and biochemistry. <i>Physical Review E</i> , 2017 , 95, 012401	2.4	45
325	Computational systems biology of epithelial-hybrid-mesenchymal transitions. <i>Current Opinion in Systems Biology</i> , 2017 , 3, 1-6	3.2	24
324	Modeling the Genetic Regulation of Cancer Metabolism: Interplay between Glycolysis and Oxidative Phosphorylation. <i>Cancer Research</i> , 2017 , 77, 1564-1574	10.1	142
323	The GRHL2/ZEB Feedback Loop-A Key Axis in the Regulation of EMT in Breast Cancer. <i>Journal of Cellular Biochemistry</i> , 2017 , 118, 2559-2570	4.7	63
322	EMT and MET: necessary or permissive for metastasis?. <i>Molecular Oncology</i> , 2017 , 11, 755-769	7.9	204
321	Epithelial/mesenchymal plasticity: how have quantitative mathematical models helped improve our understanding?. <i>Molecular Oncology</i> , 2017 , 11, 739-754	7.9	48

320	Phosphorylation-induced conformational dynamics in an intrinsically disordered protein and potential role in phenotypic heterogeneity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E2644-E2653	11.5	55
319	Stress-induced plasticity of dynamic collagen networks. <i>Nature Communications</i> , 2017 , 8, 842	17.4	77
318	Survival Outcomes in Cancer Patients Predicted by a Partial EMT Gene Expression Scoring Metric. <i>Cancer Research</i> , 2017 , 77, 6415-6428	10.1	132
317	Molecular Simulations Suggest a Force-Dependent Mechanism of Vinculin Activation. <i>Biophysical Journal</i> , 2017 , 113, 1697-1710	2.9	12
316	Phenotypic Plasticity and Cell Fate Decisions in Cancer: Insights from Dynamical Systems Theory. <i>Cancers</i> , 2017 , 9,	6.6	51
315	Bistability of the cytokine-immune cell network in a cancer microenvironment. <i>Convergent Science Physical Oncology</i> , 2017 , 3, 024002		5
314	Effects of thymic selection on T cell recognition of foreign and tumor antigenic peptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E7875-E7881	11.5	18
313	Induction of Mesenchymal-Epithelial Transitions in Sarcoma Cells. <i>Journal of Visualized Experiments</i> , 2017 ,	1.6	4
312	Operating principles of tristable circuits regulating cellular differentiation. <i>Physical Biology</i> , 2017 , 14, 035007	3	22
311	On the mechanism of long-range orientational order of fibroblasts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 8974-8979	11.5	22
310	Numb prevents a complete epithelial-mesenchymal transition by modulating Notch signalling. <i>Journal of the Royal Society Interface</i> , 2017 , 14,	4.1	78
309	Morphodynamics of a growing microbial colony driven by cell death. <i>Physical Review E</i> , 2017 , 96, 052404	2.4	4
308	MCAM Mediates Chemoresistance in Small-Cell Lung Cancer via the PI3K/AKT/SOX2 Signaling Pathway. <i>Cancer Research</i> , 2017 , 77, 4414-4425	10.1	64
307	Boundary-driven anomalous spirals in oscillatory media. <i>New Journal of Physics</i> , 2017 , 19, 063026	2.9	1
306	Inflammatory breast cancer: a model for investigating cluster-based dissemination. <i>Npj Breast Cancer</i> , 2017 , 3, 21	7.8	81
305	Mechanical Properties of Transcription. <i>Physical Review Letters</i> , 2017 , 118, 268101	7.4	13
304	Phenomenological modeling of durotaxis. <i>Physical Review E</i> , 2017 , 96, 010402	2.4	15
303	Distinguishing mechanisms underlying EMT tristability 2017 , 1, 2		47

302	Interrogating the topological robustness of gene regulatory circuits by randomization. <i>PLoS Computational Biology</i> , 2017 , 13, e1005456	5	86
301	Mechanical bounds to transcriptional noise. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 13983-13988	11.5	21
300	Modeling delayed processes in biological systems. <i>Physical Review E</i> , 2016 , 94, 032408	2.4	9
299	Notch-Jagged signalling can give rise to clusters of cells exhibiting a hybrid epithelial/mesenchymal phenotype. <i>Journal of the Royal Society Interface</i> , 2016 , 13,	4.1	84
298	Mesenchymal-Epithelial Transition in Sarcomas Is Controlled by the Combinatorial Expression of MicroRNA 200s and GRHL2. <i>Molecular and Cellular Biology</i> , 2016 , 36, 2503-13	4.8	65
297	Emergent Collective Chemotaxis without Single-Cell Gradient Sensing. <i>Physical Review Letters</i> , 2016 , 116, 098101	7.4	71
296	Modeling closure of circular wounds through coordinated collective motion. <i>Physical Biology</i> , 2016 , 13, 016006	3	6
295	Nonlinear elasticity of disordered fiber networks. <i>Soft Matter</i> , 2016 , 12, 1419-24	3.6	47
294	Contact inhibition of locomotion determines cell-cell and cell-substrate forces in tissues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 2660-5	11.5	69
293	Excitable waves and direction-sensing in <i>Dictyostelium discoideum</i> : steps towards a chemotaxis model. <i>Physical Biology</i> , 2016 , 13, 016002	3	13
292	Immunoproteasome deficiency is a feature of non-small cell lung cancer with a mesenchymal phenotype and is associated with a poor outcome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E1555-64	11.5	110
291	Collective Signal Processing in Cluster Chemotaxis: Roles of Adaptation, Amplification, and Co-attraction in Collective Guidance. <i>PLoS Computational Biology</i> , 2016 , 12, e1005008	5	33
290	Phenotypic plasticity in prostate cancer: role of intrinsically disordered proteins. <i>Asian Journal of Andrology</i> , 2016 , 18, 704-10	2.8	44
289	Expanding the scale of molecular biophysics. <i>Physical Biology</i> , 2016 , 13, 053001	3	1
288	Stability of the hybrid epithelial/mesenchymal phenotype. <i>Oncotarget</i> , 2016 , 7, 27067-84	3.3	259
287	Tumor Budding: The Name is EMT. Partial EMT. <i>Journal of Clinical Medicine</i> , 2016 , 5,	5.1	258
286	Nonlinear self-adapting wave patterns. <i>New Journal of Physics</i> , 2016 , 18, 122001	2.9	8
285	Uniform modeling of bacterial colony patterns with varying nutrient and substrate. <i>Physica D: Nonlinear Phenomena</i> , 2016 , 318-319, 91-99	3.3	8

284	Connecting the Sequence-Space of Bacterial Signaling Proteins to Phenotypes Using Coevolutionary Landscapes. <i>Molecular Biology and Evolution</i> , 2016 , 33, 3054-3064	8.3	36
283	Scaling solution in the large population limit of the general asymmetric stochastic Luria-Delbrück evolution process. <i>Journal of Statistical Physics</i> , 2015 , 158, 783-805	1.5	25
282	Alignment and nonlinear elasticity in biopolymer gels. <i>Physical Review E</i> , 2015 , 91, 042710	2.4	36
281	Mechanically-driven phase separation in a growing bacterial colony. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E2166-73	11.5	58
280	Micromechanics of cellularized biopolymer networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E5117-22	11.5	61
279	Properties of cooperatively induced phases in sensing models. <i>Physical Review E</i> , 2015 , 91, 052707	2.4	2
278	The motility-proliferation-metabolism interplay during metastatic invasion. <i>Scientific Reports</i> , 2015 , 5, 13538	4.9	29
277	Implications of the Hybrid Epithelial/Mesenchymal Phenotype in Metastasis. <i>Frontiers in Oncology</i> , 2015 , 5, 155	5.3	414
276	OVOL guides the epithelial-hybrid-mesenchymal transition. <i>Oncotarget</i> , 2015 , 6, 15436-48	3.3	92
275	Coupling the modules of EMT and stemness: A tunable 'stemness window' model. <i>Oncotarget</i> , 2015 , 6, 25161-74	3.3	116
274	Cellular memory in eukaryotic chemotaxis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 14448-53	11.5	83
273	Towards elucidating the connection between epithelial-mesenchymal transitions and stemness. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20140962	4.1	126
272	Learning physics of living systems from Dictyostelium. <i>Physical Biology</i> , 2014 , 11, 053011	3	2
271	Polarity mechanisms such as contact inhibition of locomotion regulate persistent rotational motion of mammalian cells on micropatterns. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 14770-5	11.5	87
270	Intercellular stress reconstitution from traction force data. <i>Biophysical Journal</i> , 2014 , 107, 548-554	2.9	25
269	Resistance to chemotherapy: patient variability and cellular heterogeneity. <i>Cancer Research</i> , 2014 , 74, 4663-70	10.1	35
268	How input noise limits biochemical sensing in ultrasensitive systems. <i>Physical Review E</i> , 2014 , 90, 032702	2.4	2
267	Introduction to physics in cancer research. <i>Cancer Research</i> , 2014 , 74, 4572-3	10.1	2

266	An instability at the edge of a tissue of collectively migrating cells can lead to finger formation during wound healing. <i>European Physical Journal: Special Topics</i> , 2014 , 223, 1259-1264	2.3	11
265	Connecting thermal and mechanical protein (un)folding landscapes. <i>Biophysical Journal</i> , 2014 , 107, 2950-2961	2.9	25
264	Toward rationally redesigning bacterial two-component signaling systems using coevolutionary information. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E563-71	11.5	85
263	Growth feedback as a basis for persistent bistability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 544-9	11.5	46
262	Scientific priorities for the BRAIN Initiative. <i>Nature Methods</i> , 2013 , 10, 713-4	21.6	6
261	MicroRNA-based regulation of epithelial-hybrid-mesenchymal fate determination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 18144-9	11.5	327
260	The physics of eukaryotic chemotaxis. <i>Physics Today</i> , 2013 , 66,	0.9	45
259	Energy evaluation of β -strand packing in a fibril-forming SH3 domain. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 13051-7	3.4	2
258	Modeling cell-death patterning during biofilm formation. <i>Physical Biology</i> , 2013 , 10, 066006	3	16
257	Large population solution of the stochastic Luria-Delbruck evolution model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 11682-7	11.5	38
256	Periodic migration in a physical model of cells on micropatterns. <i>Physical Review Letters</i> , 2013 , 111, 158102	10.2	49
255	Alignment of cellular motility forces with tissue flow as a mechanism for efficient wound healing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 2452-9	11.5	141
254	How input fluctuations reshape the dynamics of a biological switching system. <i>Physical Review E</i> , 2012 , 86, 061910	2.4	10
253	Bacterial survival strategies suggest rethinking cancer cooperativity. <i>Trends in Microbiology</i> , 2012 , 20, 403-10	12.4	87
252	Noise effects in nonlinear biochemical signaling. <i>Physical Review E</i> , 2012 , 85, 011901	2.4	10
251	Coupling actin flow, adhesion, and morphology in a computational cell motility model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 6851-6	11.5	182
250	Short-term plasticity constrains spatial organization of a hippocampal presynaptic terminal. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 14657-62	11.5	37
249	Incoherent feedforward control governs adaptation of activated ras in a eukaryotic chemotaxis pathway. <i>Science Signaling</i> , 2012 , 5, ra2	8.8	117

248	"Self-assisted" amoeboid navigation in complex environments. <i>PLoS ONE</i> , 2011 , 6, e21955	3.7	16
247	Quantifying information transmission in eukaryotic gradient sensing and chemotactic response. <i>Journal of Statistical Physics</i> , 2011 , 142, 1167-1186	1.5	20
246	Propagating mode-I fracture in amorphous materials using the continuous random network model. <i>Physical Review E</i> , 2011 , 84, 026102	2.4	9
245	Effects of input noise on a simple biochemical switch. <i>Physical Review Letters</i> , 2011 , 107, 148101	7.4	26
244	Design principles and specificity in biological networks with cross activation. <i>Physical Biology</i> , 2011 , 8, 026001	3	1
243	How geometry and internal bias affect the accuracy of eukaryotic gradient sensing. <i>Physical Review E</i> , 2011 , 83, 021917	2.4	23
242	Activated membrane patches guide chemotactic cell motility. <i>PLoS Computational Biology</i> , 2011 , 7, e1002044	3	55
241	Modelling vesicular release at hippocampal synapses. <i>PLoS Computational Biology</i> , 2010 , 6, e1000983	5	49
240	Optimal strategy for competence differentiation in bacteria. <i>PLoS Genetics</i> , 2010 , 6, e1001108	6	26
239	External and internal constraints on eukaryotic chemotaxis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 9656-9	11.5	107
238	Phenomenological approach to eukaryotic chemotactic efficiency. <i>Physical Review E</i> , 2010 , 81, 031906	2.4	16
237	Computational model for cell morphodynamics. <i>Physical Review Letters</i> , 2010 , 105, 108104	7.4	170
236	Transient localized patterns in noise-driven reaction-diffusion systems. <i>Physical Review Letters</i> , 2010 , 104, 158301	7.4	65
235	Physical limits on cellular sensing of spatial gradients. <i>Physical Review Letters</i> , 2010 , 105, 048104	7.4	80
234	Shunting inhibition controls the gain modulation mediated by asynchronous neurotransmitter release in early development. <i>PLoS Computational Biology</i> , 2010 , 6, e1000973	5	11
233	The role of cell contraction and adhesion in dictyostelium motility. <i>Biophysical Journal</i> , 2010 , 99, 50-8	2.9	52
232	A comparison of deterministic and stochastic simulations of neuronal vesicle release models. <i>Physical Biology</i> , 2010 , 7, 026008	3	25
231	Gradient sensing in defined chemotactic fields. <i>Integrative Biology (United Kingdom)</i> , 2010 , 2, 659-68	3.7	34

230	Eukaryotic chemotaxis and its limitations due to stochastic sensing 2010 , 1-19		3
229	Compartmentalization of second messengers in neurons: a mathematical analysis. <i>Physical Review E</i> , 2009 , 80, 041901	2.4	12
228	Signal processing in local neuronal circuits based on activity-dependent noise and competition. <i>Chaos</i> , 2009 , 19, 033107	3.3	4
227	Determining the scale of the Bicoid morphogen gradient. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 1710-5	11.5	51
226	Locally balanced dendritic integration by short-term synaptic plasticity and active dendritic conductances. <i>Journal of Neurophysiology</i> , 2009 , 102, 3234-50	3.2	7
225	The fixation probability of rare mutators in finite asexual populations. <i>Genetics</i> , 2009 , 181, 1595-612	4	28
224	Multimodal encoding in a simplified model of intracellular calcium signaling. <i>Cognitive Processing</i> , 2009 , 10 Suppl 1, S55-70	1.5	42
223	Mechanisms and constraints on yeast MAPK signaling specificity. <i>Biophysical Journal</i> , 2009 , 96, 4755-63	2.9	6
222	The Role of Receptor Occupancy Noise in Eukaryotic Chemotaxis. <i>Understanding Complex Systems</i> , 2009 , 61-69	0.4	
221	Activity-dependent stochastic resonance in recurrent neuronal networks. <i>Physical Review E</i> , 2008 , 77, 060903	2.4	7
220	Receptor noise and directional sensing in eukaryotic chemotaxis. <i>Physical Review Letters</i> , 2008 , 100, 228101	10.1	53
219	A mathematical analysis of second messenger compartmentalization. <i>Physical Biology</i> , 2008 , 5, 046006	3	19
218	Astrocytes optimize the synaptic transmission of information. <i>PLoS Computational Biology</i> , 2008 , 4, e1000088	5	55
217	Receptor noise limitations on chemotactic sensing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 19270-5	11.5	39
216	Coexistence of amplitude and frequency modulations in intracellular calcium dynamics. <i>Physical Review E</i> , 2008 , 77, 030903	2.4	56
215	Directed Motility and Dictyostelium Aggregation 2008 , 59-92		
214	The astrocyte as a gatekeeper of synaptic information transfer. <i>Neural Computation</i> , 2007 , 19, 303-26	2.9	100
213	Target-specific and global effectors in gene regulation by MicroRNA. <i>Biophysical Journal</i> , 2007 , 93, L52-42.9	4.9	44

212	Small regulatory RNAs may sharpen spatial expression patterns. <i>PLoS Computational Biology</i> , 2007 , 3, e233	5	79
211	Correlated phenotypic transitions to competence in bacterial colonies. <i>Physical Review E</i> , 2007 , 76, 040901	1	2
210	Quantifying noise levels of intercellular signals. <i>Physical Review E</i> , 2007 , 75, 061905	2.4	51
209	Folding time predictions from all-atom replica exchange simulations. <i>Journal of Molecular Biology</i> , 2007 , 372, 756-63	6.5	71
208	Division accuracy in a stochastic model of Min oscillations in Escherichia coli. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 347-52	11.5	73
207	Embryonic pattern scaling achieved by oppositely directed morphogen gradients. <i>Physical Biology</i> , 2006 , 3, 107-20	3	66
206	Fluctuation-induced instabilities in front propagation up a comoving reaction gradient in two dimensions. <i>Physical Review E</i> , 2006 , 74, 016119	2.4	4
205	Analytic approach to the evolutionary effects of genetic exchange. <i>Physical Review E</i> , 2006 , 73, 016113	2.4	7
204	Swarming patterns in Microorganisms: Some new modeling results 2006 ,		4
203	Directional sensing in eukaryotic chemotaxis: a balanced inactivation model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 9761-6	11.5	128
202	Effective stochastic dynamics on a protein folding energy landscape. <i>Journal of Chemical Physics</i> , 2006 , 125, 054910	3.9	68
201	Self-engineering capabilities of bacteria. <i>Journal of the Royal Society Interface</i> , 2006 , 3, 197-214	4.1	94
200	Protein oligomerization through domain swapping: role of inter-molecular interactions and protein concentration. <i>Journal of Molecular Biology</i> , 2005 , 352, 202-11	6.5	43
199	Excitation-contraction coupling gain and cooperativity of the cardiac ryanodine receptor: a modeling approach. <i>Biophysical Journal</i> , 2005 , 89, 3017-25	2.9	6
198	Functional Topology Classification of Biological Computing Networks. <i>Natural Computing</i> , 2005 , 4, 339-363		10
197	Fluctuation-regularized front propagation dynamics in reaction-diffusion systems. <i>Physical Review Letters</i> , 2005 , 94, 158302	7.4	15
196	Membrane-bound Turing patterns. <i>Physical Review E</i> , 2005 , 72, 061912	2.4	76
195	Recombination dramatically speeds up evolution of finite populations. <i>Physical Review Letters</i> , 2005 , 94, 098102	7.4	62

194	Front propagation up a reaction rate gradient. <i>Physical Review E</i> , 2005 , 72, 066126	2.4	24
193	Structure of infectious prions: stabilization by domain swapping. <i>FASEB Journal</i> , 2005 , 19, 1778-82	0.9	41
192	Dynamic instabilities of fracture under biaxial strain using a phase field model. <i>Physical Review Letters</i> , 2004 , 93, 105504	7.4	177
191	Physical schemata underlying biological pattern formation-examples, issues and strategies. <i>Physical Biology</i> , 2004 , 1, P14-22	3	41
190	Cooperativity can reduce stochasticity in intracellular calcium dynamics. <i>Physical Biology</i> , 2004 , 1, 27-34	3	16
189	Domain swapping is a consequence of minimal frustration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 13786-91	11.5	152
188	Analytical study of the effect of recombination on evolution via DNA shuffling. <i>Physical Review E</i> , 2004 , 69, 051911	2.4	7
187	Bacterial linguistic communication and social intelligence. <i>Trends in Microbiology</i> , 2004 , 12, 366-72	12.4	209
186	Heterogeneous clearance rates of long-lived lymphocytes infected with HIV: intrinsic stability predicts lifelong persistence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 4819-24	11.5	210
185	Does the continuum theory of dynamic fracture work?. <i>Physical Review E</i> , 2003 , 68, 036118	2.4	15
184	Computational approach for modeling intra- and extracellular dynamics. <i>Physical Review E</i> , 2003 , 68, 037702	2.4	54
183	Dynamics of competitive evolution on a smooth landscape. <i>Physical Review Letters</i> , 2003 , 90, 088103	7.4	23
182	Wave nucleation rate in excitable systems in the low noise limit. <i>Physical Review E</i> , 2003 , 68, 031914	2.4	10
181	Spatiotemporal dynamics of HIV propagation. <i>Journal of Theoretical Biology</i> , 2002 , 218, 85-96	2.3	63
180	Steady-state mode I cracks in a viscoelastic triangular lattice. <i>Journal of the Mechanics and Physics of Solids</i> , 2002 , 50, 583-613	5	21
179	Comment on "dynamics of HIV infection: a cellular automata approach". <i>Physical Review Letters</i> , 2002 , 89, 219805	7.4	13
178	Mode-I fracture in a nonlinear lattice with viscoelastic forces. <i>Physical Review E</i> , 2002 , 66, 016126	2.4	20
177	Spectral mixing of rhythmic neuronal signals in sensory cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 15176-81	11.5	21

176	Mechanisms of cooperativity underlying sequence-independent sheet formation. <i>Journal of Chemical Physics</i> , 2002 , 116, 4353-4365	3.9	30
175	Establishing direction during chemotaxis in eukaryotic cells. <i>Biophysical Journal</i> , 2002 , 83, 1361-7	2.9	77
174	The artistry of nature. <i>Nature</i> , 2001 , 409, 985-6	50.4	48
173	Microscopic selection of fluid fingering patterns. <i>Physical Review Letters</i> , 2001 , 86, 4532-5	7.4	13
172	Nonlinear lattice model of viscoelastic mode III fracture. <i>Physical Review E</i> , 2001 , 63, 016118	2.4	17
171	Self-organization in systems of self-propelled particles. <i>Physical Review E</i> , 2001 , 63, 017101	2.4	282
170	Phase-field model of mode III dynamic fracture. <i>Physical Review Letters</i> , 2001 , 87, 045501	7.4	391
169	Modeling Self-Propelled Deformable Cell Motion in the Dictyostelium Mound; a Status Report. <i>The IMA Volumes in Mathematics and Its Applications</i> , 2001 , 255-267	0.5	
168	A statistical mechanics model for receptor clustering. <i>Journal of Biological Physics</i> , 2000 , 26, 219-34	1.6	6
167	Two state behavior in a solvable model of beta-hairpin folding. <i>Physical Review Letters</i> , 2000 , 84, 3490-3	7.4	13
166	Nutrient chemotaxis suppression of a diffusive instability in bacterial colony dynamics. <i>Physical Review E</i> , 2000 , 62, 1444-7	2.4	8
165	Discrete stochastic modeling of calcium channel dynamics. <i>Physical Review Letters</i> , 2000 , 84, 5664-7	7.4	65
164	How does a beta -hairpin fold/unfold? competition between topology and heterogeneity in a solvable model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 10775-9	11.5	16
163	Cooperative self-organization of microorganisms. <i>Advances in Physics</i> , 2000 , 49, 395-554	18.4	415
162	Stochastic spreading of intracellular Ca(2+) release. <i>Physical Review E</i> , 2000 , 62, 2636-43	2.4	102
161	Steady-state cracks in viscoelastic lattice models. <i>Physical Review E</i> , 1999 , 59, 5154-64	2.4	27
160	Arrested cracks in nonlinear lattice models of brittle fracture. <i>Physical Review E</i> , 1999 , 60, 7569-71	2.4	13
159	Self-organized Vortex State in Two-Dimensional Dictyostelium Dynamics. <i>Physical Review Letters</i> , 1999 , 83, 1247-1250	7.4	117

158	Interfacial velocity corrections due to multiplicative noise. <i>Physical Review E</i> , 1999 , 59, 3893-3900	2.4	86
157	A thermodynamic model for receptor clustering. <i>Biophysical Journal</i> , 1999 , 77, 2358-65	2.9	32
156	Evolution on a Smooth Landscape: The Role of Bias. <i>Journal of Statistical Physics</i> , 1998 , 90, 191-210	1.5	17
155	Fluctuation-induced diffusive instabilities. <i>Nature</i> , 1998 , 394, 556-558	50.4	98
154	The Artistry of Microorganisms. <i>Scientific American</i> , 1998 , 279, 82-87	0.5	37
153	The dynamics of Dictyostelium development. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998 , 249, 53-63	3.3	5
152	Possible cooperation of differential adhesion and chemotaxis in mound formation of Dictyostelium. <i>Biophysical Journal</i> , 1998 , 75, 2615-25	2.9	72
151	Comment on Selection of the Saffman-Taylor Finger Width in the Absence of Surface Tension: An Exact Result \square <i>Physical Review Letters</i> , 1998 , 81, 4528-4528	7.4	6
150	Refraction of waves in excitable media. <i>Physical Review E</i> , 1998 , 58, 2910-2917	2.4	4
149	Mutator Dynamics on a Smooth Evolutionary Landscape. <i>Physical Review Letters</i> , 1998 , 80, 2012-2015	7.4	29
148	Pattern Selection by Gene Expression in Dictyostelium Discoideum. <i>Physical Review Letters</i> , 1998 , 80, 3875-3878	7.4	27
147	Quantum Nucleation of Phase Slips in a 1D Model of a Superfluid. <i>Physical Review Letters</i> , 1997 , 79, 5054-5057	7.4	17
146	Unicellular Algal Growth: A Biomechanical Approach to Cell Wall Dynamics. <i>Physical Review Letters</i> , 1997 , 79, 4290-4293	7.4	6
145	Diffusive boundary layers in the free-surface excitable medium spiral. <i>Physical Review E</i> , 1997 , 55, R3847-R3850	2.4	13
144	The eigenvalues of the Laplacian on a sphere with boundary conditions specified on a segment of a great circle. <i>Journal of Mathematical Physics</i> , 1997 , 38, 1623-1649	1.2	14
143	Evolution on a smooth landscape. <i>Journal of Statistical Physics</i> , 1997 , 87, 519-544	1.5	57
142	Computational modeling of mound development in Dictyostelium. <i>Physica D: Nonlinear Phenomena</i> , 1997 , 106, 375-388	3.3	19
141	Positive genetic feedback governs cAMP spiral wave formation in Dictyostelium. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996 , 93, 6382-6	11.5	70

140	Phase-field model of spiral dendritic growth. <i>Physical Review E</i> , 1996 , 54, 2797-2801	2.4	2
139	RNA virus evolution via a fitness-space model. <i>Physical Review Letters</i> , 1996 , 76, 4440-4443	7.4	201
138	Spiral competition in three-component excitable media. <i>Physical Review Letters</i> , 1996 , 76, 1170-1173	7.4	46
137	Front stability in mean-field models of diffusion-limited growth. <i>Physical Review E</i> , 1996 , 53, 861-870	2.4	3
136	Scattering of superfluid vortex rings. <i>Physical Review Letters</i> , 1996 , 76, 4745-4748	7.4	45
135	Complex bacterial patterns. <i>Nature</i> , 1995 , 373, 566-7	50.4	95
134	Dynamic determination of the dendritic growth direction within a complex-phase-field model. <i>Physical Review E</i> , 1995 , 52, 4553-4556	2.4	3
133	Aggregation Patterns in Stressed Bacteria. <i>Physical Review Letters</i> , 1995 , 75, 1859-1862	7.4	71
132	Mean-field theory of the morphology transition in stochastic diffusion-limited growth. <i>Physical Review E</i> , 1995 , 52, 5134-5141	2.4	5
131	Controlling spatiotemporal chaos. <i>Physical Review Letters</i> , 1994 , 72, 2561-2564	7.4	129
130	Theory of the spiral core in excitable media. <i>Physica D: Nonlinear Phenomena</i> , 1994 , 70, 115-139	3.3	22
129	Theory of pulse instabilities in electrophysiological models of excitable tissues. <i>Physica D: Nonlinear Phenomena</i> , 1994 , 73, 113-127	3.3	31
128	Modeling spatial patterns in Dictyostelium. <i>Chaos</i> , 1994 , 4, 563-568	3.3	8
127	Theory of diffusion-limited growth. <i>Physical Review E</i> , 1993 , 48, R4207-R4210	2.4	10
126	Pattern formation in Dictyostelium via the dynamics of cooperative biological entities. <i>Physical Review E</i> , 1993 , 48, 4801-4804	2.4	103
125	Vortex reconnection in superfluid helium. <i>Physical Review Letters</i> , 1993 , 71, 1375-1378	7.4	220
124	Interaction between a drifting spiral and defects. <i>Physical Review E</i> , 1993 , 47, R800-R803	2.4	43
123	Catalysis at single-crystal Pt(110) surfaces: Global coupling and standing waves. <i>Physical Review E</i> , 1993 , 48, 50-64	2.4	36

122	Morphology transitions in a mean-field model of diffusion-limited growth. <i>Physical Review Letters</i> , 1993 , 71, 3838-3841	7.4	13
121	Amoebae Aggregation in Dictyoselium Discoideum. <i>NATO ASI Series Series B: Physics</i> , 1993 , 21-27		
120	Outer Stability of Spirals in Excitable Media. <i>Europhysics Letters</i> , 1992 , 19, 553-558	1.6	2
119	Standing waves in catalysis at single crystal surfaces. <i>Physical Review Letters</i> , 1992 , 69, 204-207	7.4	24
118	Mean-field diffusion-limited aggregation and the Saffman-Taylor problem in three dimensions. <i>Physical Review A</i> , 1992 , 45, 1044-1052	2.6	21
117	Mean-field diffusion-limited aggregation in radial geometries. <i>Physical Review A</i> , 1992 , 45, 1053-1057	2.6	18
116	Coupled map lattice techniques for simulating interfacial phenomena in reaction-diffusion systems. <i>Chaos</i> , 1992 , 2, 337-342	3.3	9
115	Spiral core in singly diffusive excitable media. <i>Physical Review Letters</i> , 1992 , 68, 401-404	7.4	29
114	Spiral-core meandering in excitable media. <i>Physical Review A</i> , 1992 , 46, 5264-5267	2.6	14
113	Spherical cap bubbles. <i>Journal of Fluid Mechanics</i> , 1992 , 235, 73	3.7	2
112	Molecular-beam epitaxial growth and surface diffusion. <i>Physical Review Letters</i> , 1992 , 69, 100-103	7.4	86
111	Hydrodynamic modes of a granular shear flow. <i>Physics of Fluids A, Fluid Dynamics</i> , 1991 , 3, 2067-2075		10
110	Spiral selection as a free boundary problem. <i>Physica D: Nonlinear Phenomena</i> , 1991 , 49, 90-97	3.3	7
109	Nonsymmetric Saffman-Taylor fingers. <i>Physics of Fluids A, Fluid Dynamics</i> , 1991 , 3, 529-534		15
108	Interface fluctuations in random media. <i>Physical Review A</i> , 1991 , 43, 4551-4554	2.6	103
107	Planar traveling waves in the oscillatory oxidation of CO over polycrystalline catalysts. <i>Journal of Chemical Physics</i> , 1991 , 95, 3815-3825	3.9	11
106	Streaming instability of aggregating slime mold amoebae. <i>Physical Review Letters</i> , 1991 , 66, 2400-2403	7.4	57
105	Mean-field theory for diffusion-limited aggregation in low dimensions. <i>Physical Review Letters</i> , 1991 , 66, 1978-1981	7.4	52

104	Resonant interactions and traveling-solidification cells. <i>Physical Review A</i> , 1991 , 43, 1122-1125	2.6	28
103	Growth of non-reflection-symmetric dendrites. <i>Physical Review A</i> , 1991 , 43, 883-887	2.6	14
102	Maximal dendrite size in monolayer systems. <i>Physical Review Letters</i> , 1991 , 67, 3121-3123	7.4	12
101	Growth of Non-Reflection Symmetric Patterns. <i>NATO ASI Series Series B: Physics</i> , 1991 , 31-41		
100	Dendritic Crystal Growth: Overview. <i>NATO ASI Series Series B: Physics</i> , 1991 , 67-73		2
99	Selection of the Viscous Finger in the 90° Geometry. <i>Europhysics Letters</i> , 1990 , 13, 161-166	1.6	23
98	A Geometrical Model for Spirals: a Possible Paradigm for Belousov-Zhabotinskii. <i>Europhysics Letters</i> , 1990 , 12, 465-470	1.6	2
97	Numerical study for traveling waves in directional solidification. <i>Physical Review A</i> , 1990 , 42, 7475-7478	2.6	32
96	Stability of traveling waves in the Belousov-Zhabotinskii reaction. <i>Physical Review A</i> , 1990 , 41, 5418-5430	2.6	20
95	Coupled-map lattice model for crystal growth. <i>Physical Review A</i> , 1990 , 42, 6125-6128	2.6	20
94	A rising bubble in a tube. <i>Physics of Fluids A, Fluid Dynamics</i> , 1990 , 2, 542-546		11
93	Linear stability of directional solidification cells. <i>Physical Review A</i> , 1990 , 41, 3197-3205	2.6	10
92	Directional Solidification: Theoretical Methods and Current Understanding 1990 , 123-133		1
91	Stability of Travelling Waves in the Belousov-Zhabotinskii Reaction. <i>NATO ASI Series Series B: Physics</i> , 1990 , 299-311		
90	Cellular solutions for highly nonequilibrium directional solidification. <i>Physical Review A</i> , 1989 , 39, 3208-3216	2.6	4
89	Steady-state cellular growth during directional solidification. <i>Physical Review A</i> , 1989 , 39, 3041-3052	2.6	60
88	Neutral-fermion-soliton statistics in the short-range resonating-valence-bond state: A reevaluation. <i>Physical Review B</i> , 1989 , 40, 7340-7342	3.3	12
87	Velocity selection for Taylor bubbles. <i>Physical Review A</i> , 1989 , 39, 5462-5465	2.6	5

86	Effect of diffusion on patterns in excitable Belousov-Zhabotinskii systems. <i>Physica D: Nonlinear Phenomena</i> , 1989 , 39, 1-14	3.3	23
85	Computational approach to steady-state eutectic growth. <i>Journal of Crystal Growth</i> , 1989 , 94, 871-879	1.6	6
84	Pattern selection in three dimensional dendritic growth. <i>Acta Metallurgica</i> , 1988 , 36, 2693-2706		75
83	Pattern selection in fingered growth phenomena. <i>Advances in Physics</i> , 1988 , 37, 255-339	18.4	831
82	TIP INSTABILITY DURING CONFINED DIFFUSION-LIMITED GROWTH. <i>Modern Physics Letters B</i> , 1988 , 02, 945-951	1.6	7
81	Towards a Theory of Interfacial Pattern Formation 1988 , 83-93		
80	Determining the Wavelength of Dendritic Sidebranches. <i>Europhysics Letters</i> , 1987 , 4, 215-221	1.6	36
79	Growth velocity of three-dimensional dendritic crystals. <i>Physical Review A</i> , 1987 , 36, 4123-4126	2.6	40
78	Discrete set selection of Saffman-Taylor fingers. <i>Physics of Fluids</i> , 1987 , 30, 1246		17
77	Pattern Formation Far from Equilibrium : The Free Space Dendritic Crystal 1987 , 1-11		4
76	The geometrical model of dendritic growth: The small velocity limit. <i>Physica D: Nonlinear Phenomena</i> , 1986 , 21, 371-380	3.3	8
75	Velocity selection in dendritic growth. <i>Physical Review B</i> , 1986 , 33, 7867-7870	3.3	77
74	Steady-state dendritic crystal growth. <i>Physical Review A</i> , 1986 , 33, 3352-3357	2.6	111
73	Coalescence of Saffman-Taylor fingers: A new global instability. <i>Physical Review A</i> , 1986 , 33, 3625-3627	2.6	22
72	Dendritic growth in a channel. <i>Physical Review A</i> , 1986 , 34, 4980-4987	2.6	77
71	Theory of the Saffman-Taylor "finger" pattern. I. <i>Physical Review A</i> , 1986 , 33, 2621-2633	2.6	61
70	Comment on the n=. <i>Physical Review Letters</i> , 1986 , 57, 645	7.4	4
69	Glassy dynamics in icosahedral systems. <i>Physical Review Letters</i> , 1986 , 57, 2679-2682	7.4	8

68	Stability of dendritic crystals. <i>Physical Review Letters</i> , 1986 , 57, 3069-3072	7.4	145
67	Theory of the Saffman-Taylor "finger" pattern. II. <i>Physical Review A</i> , 1986 , 33, 2634-2639	2.6	48
66	Renormalization of the β angle, the quantum Hall effect and the strong CP problem. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1985 , 150, 182-186	4.2	23
65	Experimental demonstration of the role of anisotropy in interfacial pattern formation. <i>Physical Review Letters</i> , 1985 , 55, 1315-1318	7.4	378
64	Stability of finger patterns in Hele-Shaw cells. <i>Physical Review A</i> , 1985 , 32, 1930-1933	2.6	54
63	Scaling of conductivities in the fractional quantum Hall effect. <i>Physical Review B</i> , 1985 , 32, 1311-1314	3.3	56
62	Geometrical models of interface evolution. III. Theory of dendritic growth. <i>Physical Review A</i> , 1985 , 31, 1712-1717	2.6	105
61	Interface moving through a random background. <i>Physical Review B</i> , 1985 , 32, 280-292	3.3	104
60	Diffuse interface model of diffusion-limited crystal growth. <i>Physical Review B</i> , 1985 , 31, 6119-6122	3.3	297
59	Geometrical models of interface evolution. II. Numerical simulation. <i>Physical Review A</i> , 1984 , 30, 3161-3174	2.6	122
58	Numerical simulation of two-dimensional snowflake growth. <i>Physical Review A</i> , 1984 , 30, 2820-2823	2.6	77
57	Scaling and β dependence in the O(3) β model. <i>Physical Review Letters</i> , 1984 , 53, 519-522	7.4	23
56	Crystalline anisotropy. <i>Science</i> , 1984 , 225, 566	3.3	3
55	Simple models of interface growth. <i>Physica D: Nonlinear Phenomena</i> , 1984 , 12, 241-244	3.3	2
54	Geometrical models of interface evolution. <i>Physical Review A</i> , 1984 , 29, 1335-1342	2.6	223
53	Steady-state dendritic growth at non-zero capillarity. <i>Scripta Metallurgica</i> , 1984 , 18, 463-466		5
52	Loop-space hamiltonians and numerical methods for large-N gauge theories (II). <i>Nuclear Physics B</i> , 1984 , 230, 299-316	2.8	9
51	Theory of the quantized Hall effect (I). <i>Nuclear Physics B</i> , 1984 , 240, 30-48	2.8	130

50	Theory of the quantized hall effect (II). <i>Nuclear Physics B</i> , 1984 , 240, 49-70	2.8	68
49	Theory of the quantized Hall effect (III). <i>Nuclear Physics B</i> , 1984 , 240, 71-90	2.8	61
48	Loop space Hamiltonians and numerical methods for large-N gauge theories. <i>Nuclear Physics B</i> , 1983 , 213, 169-188	2.8	13
47	On the large-N limit in symplectic matrix models. <i>Nuclear Physics B</i> , 1983 , 215, 307-315	2.8	50
46	Geometrical Approach to Moving-Interface Dynamics. <i>Physical Review Letters</i> , 1983 , 51, 1111-1114	7.4	178
45	Acoustic propagation in random layered media. <i>Journal of the Acoustical Society of America</i> , 1983 , 73, 32-40	2.2	9
44	Monte Carlo evaluation of the effective potential. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1983 , 131, 127-132	4.2	4
43	Viscosity renormalization in the Brinkman equation. <i>Physics of Fluids</i> , 1983 , 26, 2864		127
42	Electron Delocalization by a Magnetic Field in Two Dimensions. <i>Physical Review Letters</i> , 1983 , 51, 1915-1918	7.4	273
41	Onset of asymptotically free scaling. <i>Physical Review D</i> , 1982 , 26, 959-962	4.9	1
40	SU(2) adjoint Higgs model. <i>Physical Review D</i> , 1982 , 25, 3319-3324	4.9	21
39	Glueball States in Reduced Large-N Hamiltonians. <i>Physical Review Letters</i> , 1982 , 49, 1603-1605	7.4	16
38	Strong coupling versus large N in \mathbb{E}_6 models. <i>Nuclear Physics B</i> , 1982 , 195, 493-502	2.8	4
37	Dynamics of SU(2) lattice gauge theories. <i>Nuclear Physics B</i> , 1982 , 205, 77-106	2.8	35
36	A quenched reduction for the topological limit of QCD. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1982 , 119, 183-186	4.2	19
35	Large N classical equations and their quantum significance. <i>Annals of Physics</i> , 1981 , 136, 113-135	2.5	18
34	Classical behavior of large N fermionic systems. <i>Annals of Physics</i> , 1981 , 133, 13-27	2.5	1
33	N-body dynamics and the collective field method. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1981 , 81, 9-11	2.3	2

32	The potential and the migdal string. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1981 , 103, 203-206	4.2	2
31	Monopole Condensation and the Lattice-Quantum-Chromodynamics Crossover. <i>Physical Review Letters</i> , 1981 , 47, 621-624	7.4	54
30	Semiclassical Approach to Planar Diagrams. <i>Physical Review Letters</i> , 1980 , 44, 1443-1446	7.4	42
29	Effective elastic parameters of random composites. <i>Applied Physics Letters</i> , 1980 , 37, 377-379	3.4	29
28	Instantons in unusual settings. <i>Nuclear Physics B</i> , 1980 , 172, 119-131	2.8	1
27	Two-dimensional SU(N) Higgs theory. <i>Nuclear Physics B</i> , 1980 , 170, 128-138	2.8	1
26	Regularization and renormalization of semiclassical QCD. <i>Nuclear Physics B</i> , 1979 , 157, 237-249	2.8	4
25	Higher-order instanton effects. <i>Physical Review D</i> , 1979 , 19, 1225-1242	4.9	21
24	Quantum effects in the quark-antiquark potential due to instantons. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1978 , 78, 235-240	4.2	3
23	Motion of extended charges in classical electrodynamics. <i>American Journal of Physics</i> , 1977 , 45, 75-78	0.7	64
22	Phenotypic Plasticity and Cell Fate Decisions in Cancer: Insights from Dynamical Systems Theory		2
21	Stiffness Sensing and Cell Motility: Durotaxis and Contact Guidance		1
20	Distinguishing Mechanisms Underlying EMT Tristability		2
19	Inflammatory Breast Cancer: a model for investigating cluster-based dissemination		1
18	EMT and MET: necessary or permissive for metastasis?		1
17	Calpain-2 regulates hypoxia/HIF-induced amoeboid reprogramming and metastasis		6
16	Rapid Assessment of T-Cell Receptor Specificity of the Immune Repertoire		2
15	Suppressing chemoresistance in lung cancer via dynamic phenotypic switching and intermittent therapy		3

14	A mechanism-based computational model to capture the interconnections among epithelial-mesenchymal transition, cancer stem cells and Notch-Jagged signaling	1
13	NRF2 activates a partial Epithelial-Mesenchymal Transition and is maximally present in a hybrid Epithelial/Mesenchymal phenotype	4
12	Towards understanding cancer stem cell heterogeneity in the tumor microenvironment	1
11	Presynaptic Endoplasmic Reticulum Contributes Crucially to Short-term Plasticity in Small Hippocampal Synapses	2
10	Ordered Hexagonal Patterns via Notch-Delta Signaling	2
9	A Mechanism for Epithelial-Mesenchymal Heterogeneity in a Population of Cancer Cells	11
8	A possible role for epigenetic feedback regulation in the dynamics of the Epithelial-Mesenchymal Transition (EMT)	1
7	Fractal dimension, occupancy and hotspot analyses of B cell spatial distribution predict clinical outcome in breast cancer	2
6	Drug-tolerant idling melanoma cells exhibit theory-predicted metabolic low-low phenotype	1
5	Analysis of hierarchical organization in gene expression networks reveals underlying principles of collective tumor cell dissemination and metastatic aggressiveness of inflammatory breast cancer	1
4	Nrf2 modulates the hybrid epithelial/mesenchymal phenotype and Notch signaling during collective cancer migration	3
3	Immunosuppressive traits of the hybrid epithelial/mesenchymal phenotype	3
2	A theoretical approach to coupling the epithelial-mesenchymal transition (EMT) to extracellular matrix (ECM) stiffness via LOXL2	1
1	Transcriptomic-based quantification of the epithelial-hybrid-mesenchymal spectrum across biological contexts	1