

# Herbert Levine

## List of Publications by Year in descending order

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Version: 2024-02-01

403  
papers

25,315  
citations

6613

79  
h-index

11607

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. <i>Nucleic Acids Research</i> , 2022, 50, 1269-1279.	14.5	18
2	Calpain-2 regulates hypoxia/HIF-induced plasticity toward amoeboid cancer cell migration and metastasis. <i>Current Biology</i> , 2022, 32, 412-427.e8.	3.9	19
3	A mechanistic modeling framework reveals the key principles underlying tumor metabolism. <i>PLoS Computational Biology</i> , 2022, 18, e1009841.	3.2	5
4	Quantifying the Patterns of Metabolic Plasticity and Heterogeneity along the Epithelial-Hybrid-Mesenchymal Spectrum in Cancer. <i>Biomolecules</i> , 2022, 12, 297.	4.0	21
5	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.	3.0	9
6	Nrf2 Modulates the Hybrid Epithelial/Mesenchymal Phenotype and Notch Signaling During Collective Cancer Migration. <i>Frontiers in Molecular Biosciences</i> , 2022, 9, 807324.	3.5	23
7	Dynamic Phenotypic Switching and Group Behavior Help Non-Small Cell Lung Cancer Cells Evade Chemotherapy. <i>Biomolecules</i> , 2022, 12, 8.	4.0	13
8	Transcriptomic-Based Quantification of the Epithelial-Hybrid-Mesenchymal Spectrum across Biological Contexts. <i>Biomolecules</i> , 2022, 12, 29.	4.0	11
9	Let the robotic games begin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2204152119.	7.1	0
10	Three-dimensional cancer cell migration directed by dual mechanochemical guidance. <i>Physical Review Research</i> , 2022, 4, .	3.6	7
11	Gene Circuit Explorer (GeneEx): an interactive web-app for visualizing, simulating and analyzing gene regulatory circuits. <i>Bioinformatics</i> , 2021, 37, 1327-1329.	4.1	2
12	Physics approaches to the spatial distribution of immune cells in tumors. <i>Reports on Progress in Physics</i> , 2021, 84, 022601.	20.1	10
13	Presynaptic endoplasmic reticulum regulates short-term plasticity in hippocampal synapses. <i>Communications Biology</i> , 2021, 4, 241.	4.4	18
14	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, .	7.1	17
15	A Theoretical Approach to Coupling the Epithelial-Mesenchymal Transition (EMT) to Extracellular Matrix (ECM) Stiffness via LOXL2. <i>Cancers</i> , 2021, 13, 1609.	3.7	29
16	Quantifying Cancer: More Than Just a Numbers Game. <i>Trends in Cancer</i> , 2021, 7, 267-269.	7.4	4
17	Gene expression profiles of inflammatory breast cancer reveal high heterogeneity across the epithelial-hybrid-mesenchymal spectrum. <i>Translational Oncology</i> , 2021, 14, 101026.	3.7	13
18	Towards decoding the coupled decision-making of metabolism and epithelial-to-mesenchymal transition in cancer. <i>British Journal of Cancer</i> , 2021, 124, 1902-1911.	6.4	63

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19	Implications of Tumor-Immune Coevolution on Cancer Evasion and Optimized Immunotherapy. Trends in Cancer, 2021, 7, 373-383.	7.4	16
20	Rapid assessment of T-cell receptor specificity of the immune repertoire. Nature Computational Science, 2021, 1, 362-373.	8.0	20
21	Breast cancer dormancy: need for clinically relevant models to address current gaps in knowledge. Npj Breast Cancer, 2021, 7, 66.	5.2	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, .	7.1	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.	5.2	16
24	Decoding leader cells in collective cancer invasion. Nature Reviews Cancer, 2021, 21, 592-604.	28.4	80
25	Ordered hexagonal patterns via notch-delta signaling. Physical Biology, 2021, 18, 066006.	1.8	6
26	Mathematical Modeling of Plasticity and Heterogeneity in EMT. Methods in Molecular Biology, 2021, 2179, 385-413.	0.9	12
27	Understanding cytoskeletal avalanches using mechanical stability analysis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	14
28	Cluster size distribution of cells disseminating from a primary tumor. PLoS Computational Biology, 2021, 17, e1009011.	3.2	5
29	Collective motility and mechanical waves in cell clusters. European Physical Journal E, 2021, 44, 137.	1.6	4
30	NRF2-dependent Epigenetic Regulation can Promote the Hybrid Epithelial/Mesenchymal Phenotype. Frontiers in Cell and Developmental Biology, 2021, 9, 828250.	3.7	3
31	Immunosuppressive Traits of the Hybrid Epithelial/Mesenchymal Phenotype. Frontiers in Immunology, 2021, 12, 797261.	4.8	52
32	Histone deacetylases, Mbd3/NuRD, and Tet2 hydroxylase are crucial regulators of epithelial-mesenchymal plasticity and tumor metastasis. Oncogene, 2020, 39, 1498-1513.	5.9	23
33	The Physics of Cellular Decision Making During Epithelial-Mesenchymal Transition. Annual Review of Biophysics, 2020, 49, 1-18.	10.0	87
34	Differential Contributions of Pre- and Post-EMT Tumor Cells in Breast Cancer Metastasis. Cancer Research, 2020, 80, 163-169.	0.9	62
35	Sustained Coevolution in a Stochastic Model of Cancer-Immune Interaction. Cancer Research, 2020, 80, 811-819.	0.9	11
36	Predicting Relapse in Patients With Triple Negative Breast Cancer (TNBC) Using a Deep-Learning Approach. Frontiers in Physiology, 2020, 11, 511071.	2.8	7

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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.	3.4	19
39	Biological Networks Regulating Cell Fate Choice are Minimally Frustrated. Physical Review Letters, 2020, 125, 088101.	7.8	37
40	Drug-Tolerant Idling Melanoma Cells Exhibit Theory-Predicted Metabolic Low-Low Phenotype. Frontiers in Oncology, 2020, 10, 1426.	2.8	24
41	Targeting the Id1-Kif11 Axis in Triple-Negative Breast Cancer Using Combination Therapy. Biomolecules, 2020, 10, 1295.	4.0	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.	7.1	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.	7.1	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.	0.8	3
45	Leader-cell-driven epithelial sheet fingering. Physical Biology, 2020, 17, 046003.	1.8	20
46	Irradiation Induces Epithelial Cell Unjamming. Frontiers in Cell and Developmental Biology, 2020, 8, 21.	3.7	22
47	Guidelines and definitions for research on epithelialâ€mesenchymal transition. Nature Reviews Molecular Cell Biology, 2020, 21, 341-352.	37.0	1,195
48	Comparative Study of Transcriptomics-Based Scoring Metrics for the Epithelial-Hybrid-Mesenchymal Spectrum. Frontiers in Bioengineering and Biotechnology, 2020, 8, 220.	4.1	87
49	Editorial: Characterizing the Multi-Faceted Dynamics of Tumor Cell Plasticity. Frontiers in Molecular Biosciences, 2020, 7, 630276.	3.5	0
50	A mechanism for epithelial-mesenchymal heterogeneity in a population of cancer cells. PLoS Computational Biology, 2020, 16, e1007619.	3.2	80
51	Epigenetic feedback and stochastic partitioning during cell division can drive resistance to EMT. Oncotarget, 2020, 11, 2611-2624.	1.8	33
52	Insights from graph theory on the morphologies of actomyosin networks with multilinkers. Physical Review E, 2020, 102, 062420.	2.1	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.	1.3	102
54	A possible role for epigenetic feedback regulation in the dynamics of the epithelialâ€mesenchymal transition (EMT). Physical Biology, 2019, 16, 066004.	1.8	81

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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.	7.1	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.	2.4	36
57	Cell motility dependence on adhesive wetting. Soft Matter, 2019, 15, 2043-2050.	2.7	26
58	Quantifying Cancer Epithelial-Mesenchymal Plasticity and its Association with Stemness and Immune Response. Journal of Clinical Medicine, 2019, 8, 725.	2.4	63
59	Cell motility, contact guidance, and durotaxis. Soft Matter, 2019, 15, 4856-4864.	2.7	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.	4.0	19
61	Deciphering the Dynamics of Epithelial-Mesenchymal Transition and Cancer Stem Cells in Tumor Progression. Current Stem Cell Reports, 2019, 5, 11-21.	1.6	27
62	E-Cadherin Represses Anchorage-Independent Growth in Sarcomas through Both Signaling and Mechanical Mechanisms. Molecular Cancer Research, 2019, 17, 1391-1402.	3.4	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.	7.1	227
64	Infiltration of CD8 <sup>+</sup> T cells into tumor cell clusters in triple-negative breast cancer. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3678-3687.	7.1	108
65	Spleen Tyrosine Kinase-Mediated Autophagy Is Required for Epithelial-Mesenchymal Plasticity and Metastasis in Breast Cancer. Cancer Research, 2019, 79, 1831-1843.	0.9	95
66	Computational Modeling of the Crosstalk Between Macrophage Polarization and Tumor Cell Plasticity in the Tumor Microenvironment. Frontiers in Oncology, 2019, 9, 10.	2.8	55
67	Anticipating critical transitions in epithelial-hybrid-mesenchymal cell-fate determination. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26343-26352.	7.1	32
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.	7.1	238
69	Testing the gene expression classification of the EMT spectrum. Physical Biology, 2019, 16, 025002.	1.8	35
70	Quantitative Characteristic of ncRNA Regulation in Gene Regulatory Networks. Methods in Molecular Biology, 2019, 1912, 341-366.	0.9	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.	1.6	7

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73	Stochastic cancer-immune coevolution: Implications for cancer incidence and immunotherapeutic efficacy.. Journal of Clinical Oncology, 2019, 37, e14023-e14023.	1.6	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: <i>OMICS</i> analysis 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 NF $\kappa$ B Signaling to Determine an Aggressive Breast Cancer Phenotype. Cancer Research, 2018, 78, 1726-1738.	0.9	45
78	Hindrances to precise recovery of cellular forces in fibrous biopolymer networks. Physical Biology, 2018, 15, 026001.	1.8	4
79	Epithelialâ€mesenchymal transition, a spectrum of states: Role in lung development, homeostasis, and disease. Developmental Dynamics, 2018, 247, 346-358.	1.8	190
80	Stochastic modeling of tumor progression and immune evasion. Journal of Theoretical Biology, 2018, 458, 148-155.	1.7	15
81	Interconnected feedback loops among ESRP1, HAS2, and CD44 regulate epithelial-mesenchymal plasticity in cancer. APL Bioengineering, 2018, 2, 031908.	6.2	71
82	Confluent and nonconfluent phases in a model of cell tissue. Physical Review E, 2018, 98, .	2.1	21
83	Modeling of Actomyosin Networks with a Molecular Underpinning of Cross-Linker Proteins. Biophysical Journal, 2018, 114, 143a.	0.5	0
84	Role of the supracellular actomyosin cable during epithelial wound healing. Soft Matter, 2018, 14, 4866-4873.	2.7	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.	2.8	15
87	Phenotypic Plasticity, Bet-Hedging, and Androgen Independence in Prostate Cancer: Role of Non-Genetic Heterogeneity. Frontiers in Oncology, 2018, 8, 50.	2.8	122
88	Elucidating the Metabolic Plasticity of Cancer: Mitochondrial Reprogramming and Hybrid Metabolic States. Cells, 2018, 7, 21.	4.1	167
89	Hybrid epithelial/mesenchymal phenotype(s): The â€fittestâ€™™ for metastasis?. Biochimica Et Biophysica Acta: Reviews on Cancer, 2018, 1870, 151-157.	7.4	122
90	Designing bacterial signaling interactions with coevolutionary landscapes. PLoS ONE, 2018, 13, e0201734.	2.5	7

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91	Properties of gene expression and chromatin structure with mechanically regulated elongation. Nucleic Acids Research, 2018, 46, 5924-5934.	14.5	33
92	PAGE4 and Conformational Switching: Insights from Molecular Dynamics Simulations and Implications for Prostate Cancer. Journal of Molecular Biology, 2018, 430, 2422-2438.	4.2	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.	1.8	67
94	Modularity of the metabolic gene network as a prognostic biomarker for hepatocellular carcinoma. Oncotarget, 2018, 9, 15015-15026.	1.8	2
95	Crawling and turning in a minimal reaction-diffusion cell motility model: Coupling cell shape and biochemistry. Physical Review E, 2017, 95, 012401.	2.1	69
96	Computational systems biology of epithelial-hybrid-mesenchymal transitions. Current Opinion in Systems Biology, 2017, 3, 1-6.	2.6	30
97	Modeling the Genetic Regulation of Cancer Metabolism: Interplay between Glycolysis and Oxidative Phosphorylation. Cancer Research, 2017, 77, 1564-1574.	0.9	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.	2.6	90
99	<scp>EMT</scp> and <scp>MET</scp>: necessary or permissive for metastasis?. Molecular Oncology, 2017, 11, 755-769.	4.6	319
100	Epithelial/mesenchymal plasticity: how have quantitative mathematical models helped improve our understanding?. Molecular Oncology, 2017, 11, 739-754.	4.6	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.	7.1	72
102	Stress-induced plasticity of dynamic collagen networks. Nature Communications, 2017, 8, 842.	12.8	121
103	Survival Outcomes in Cancer Patients Predicted by a Partial EMT Gene Expression Scoring Metric. Cancer Research, 2017, 77, 6415-6428.	0.9	206
104	Molecular Simulations Suggest a Force-Dependent Mechanism of Vinculin Activation. Biophysical Journal, 2017, 113, 1697-1710.	0.5	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.	7.1	32
106	Induction of Mesenchymal-Epithelial Transitions in Sarcoma Cells. Journal of Visualized Experiments, 2017, , .	0.3	4
107	Operating principles of tristable circuits regulating cellular differentiation. Physical Biology, 2017, 14, 035007.	1.8	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.	7.1	48

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109	Numb prevents a complete epithelialâ€mesenchymal transition by modulating Notch signalling. Journal of the Royal Society Interface, 2017, 14, 20170512.	3.4	104
110	Morphodynamics of a growing microbial colony driven by cell death. Physical Review E, 2017, 96, 052404.	2.1	10
111	MCAM Mediates Chemoresistance in Small-Cell Lung Cancer via the PI3K/AKT/SOX2 Signaling Pathway. Cancer Research, 2017, 77, 4414-4425.	0.9	85
112	Boundary-driven anomalous spirals in oscillatory media. New Journal of Physics, 2017, 19, 063026.	2.9	2
113	Inflammatory breast cancer: a model for investigating cluster-based dissemination. Npj Breast Cancer, 2017, 3, 21.	5.2	117
114	Mechanical Properties of Transcription. Physical Review Letters, 2017, 118, 268101.	7.8	29
115	Phenomenological modeling of durotaxis. Physical Review E, 2017, 96, 010402.	2.1	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.	3.7	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.	3.2	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.	1.8	1
122	Stability of the hybrid epithelial/mesenchymal phenotype. Oncotarget, 2016, 7, 27067-27084.	1.8	367
123	Tumor Budding: The Name is EMT. Partial EMT.. Journal of Clinical Medicine, 2016, 5, 51.	2.4	369
124	Nonlinear self-adapting wave patterns. New Journal of Physics, 2016, 18, 122001.	2.9	9
125	Uniform modeling of bacterial colony patterns with varying nutrient and substrate. Physica D: Nonlinear Phenomena, 2016, 318-319, 91-99.	2.8	11
126	Connecting the Sequence-Space of Bacterial Signaling Proteins to Phenotypes Using Coevolutionary Landscapes. Molecular Biology and Evolution, 2016, 33, 3054-3064.	8.9	63



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127	How to eat on the go. <i>Nature Physics</i> , 2016, 12, 1091-1091.	16.7	0
128	Mechanical bounds to transcriptional noise. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 13983-13988.	7.1	32
129	Modeling delayed processes in biological systems. <i>Physical Review E</i> , 2016, 94, 032408.	2.1	14
130	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, 20151106.	3.4	130
131	Mesenchymal-Epithelial Transition in Sarcomas Is Controlled by the Combinatorial Expression of MicroRNA 200s and GRHL2. <i>Molecular and Cellular Biology</i> , 2016, 36, 2503-2513.	2.3	88
132	Emergent Collective Chemotaxis without Single-Cell Gradient Sensing. <i>Physical Review Letters</i> , 2016, 116, 098101.	7.8	96
133	Modeling closure of circular wounds through coordinated collective motion. <i>Physical Biology</i> , 2016, 13, 016006.	1.8	7
134	Loss of immunoproteasome driven by EMT is associated with immune evasion and poor prognosis in non-small cell lung cancer. <i>Journal of Thoracic Oncology</i> , 2016, 11, S48-S49.	1.1	0
135	Nonlinear elasticity of disordered fiber networks. <i>Soft Matter</i> , 2016, 12, 1419-1424.	2.7	59
136	The Role of Exosome-Mediated Cell-Cell Communication in Inducing Phenotypic Changes. <i>Biophysical Journal</i> , 2016, 110, 479a.	0.5	0
137	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, 2660-2665.	7.1	109
138	Excitable waves and direction-sensing in <i>Dictyostelium discoideum</i> : steps towards a chemotaxis model. <i>Physical Biology</i> , 2016, 13, 016002.	1.8	17
139	Immunoproteasome deficiency is a feature of non-small cell lung cancer with a mesenchymal phenotype and is associated with a poor outcome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E1555-64.	7.1	174
140	Collective Signal Processing in Cluster Chemotaxis: Roles of Adaptation, Amplification, and Co-attraction in Collective Guidance. <i>PLoS Computational Biology</i> , 2016, 12, e1005008.	3.2	52
141	Phenotypic plasticity in prostate cancer: role of intrinsically disordered proteins. <i>Asian Journal of Andrology</i> , 2016, 18, 704.	1.6	68
142	Properties of cooperatively induced phases in sensing models. <i>Physical Review E</i> , 2015, 91, 052707.	2.1	2
143	The motility-proliferation-metabolism interplay during metastatic invasion. <i>Scientific Reports</i> , 2015, 5, 13538.	3.3	31
144	Implications of the Hybrid Epithelial/Mesenchymal Phenotype in Metastasis. <i>Frontiers in Oncology</i> , 2015, 5, 155.	2.8	581

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145	Scaling Solution in the Large Population Limit of the General Asymmetric Stochastic Luria-Haldane Evolution Process. Journal of Statistical Physics, 2015, 158, 783-805.	1.2	33
146	Alignment and nonlinear elasticity in biopolymer gels. Physical Review E, 2015, 91, 042710.	2.1	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.	7.1	95
148	Micromechanics of cellularized biopolymer networks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5117-22.	7.1	77
149	OVOL guides the epithelial-hybrid-mesenchymal transition. Oncotarget, 2015, 6, 15436-15448.	1.8	121
150	Coupling the modules of EMT and stemness: A tunable "stemness window" model. Oncotarget, 2015, 6, 25161-25174.	1.8	157
151	Connecting Thermal and Mechanical Protein (Un)folding Landscapes. Biophysical Journal, 2014, 107, 2950-2961.	0.5	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.	7.1	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.	7.1	65
154	Calculating Intercellular Stress in a Model of Collectively Moving Cells. Biophysical Journal, 2014, 106, 173a.	0.5	0
155	Cellular memory in eukaryotic chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14448-14453.	7.1	115
156	Towards elucidating the connection between epithelial-mesenchymal transitions and stemness. Journal of the Royal Society Interface, 2014, 11, 20140962.	3.4	156
157	Learning physics of living systems from <i>Dictyostelium</i> . Physical Biology, 2014, 11, 053011.	1.8	2
158	<i>Physical Biology</i> : challenges for our second decade. Physical Biology, 2014, 11, 030201.	1.8	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.	7.1	131
160	Intercellular Stress Reconstitution from Traction Force Data. Biophysical Journal, 2014, 107, 548-554.	0.5	28
161	Resistance to Chemotherapy: Patient Variability and Cellular Heterogeneity. Cancer Research, 2014, 74, 4663-4670.	0.9	54
162	How input noise limits biochemical sensing in ultrasensitive systems. Physical Review E, 2014, 90, 032702.	2.1	3

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163	Introduction to Physics in Cancer Research. Cancer Research, 2014, 74, 4572-4573.	0.9	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.	2.6	14
165	We need theoretical physics approaches to study living systems. Physical Biology, 2013, 10, 040201.	1.8	5
166	Scientific priorities for the BRAIN Initiative. Nature Methods, 2013, 10, 713-714.	19.0	6
167	MicroRNA-based regulation of epithelial-hybrid-mesenchymal fate determination. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18144-18149.	7.1	442
168	The physics of eukaryotic chemotaxis. Physics Today, 2013, 66, 24-30.	0.3	61
169	Energy Evaluation of $\beta^2$ -Strand Packing in a Fibril-Forming SH3 Domain. Journal of Physical Chemistry B, 2013, 117, 13051-13057.	2.6	2
170	Modeling cell-death patterning during biofilm formation. Physical Biology, 2013, 10, 066006.	1.8	24
171	Large population solution of the stochastic Luria-Delbrück evolution model. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11682-11687.	7.1	64
172	Periodic Migration in a Physical Model of Cells on Micropatterns. Physical Review Letters, 2013, 111, 158102.	7.8	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.	7.1	184
174	Noise effects in nonlinear biochemical signaling. Physical Review E, 2012, 85, 011901.	2.1	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.	7.1	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.	7.1	46
177	Incoherent Feedforward Control Governs Adaptation of Activated Ras in a Eukaryotic Chemotaxis Pathway. Science Signaling, 2012, 5, ra2.	3.6	154
178	How input fluctuations reshape the dynamics of a biological switching system. Physical Review E, 2012, 86, 061910.	2.1	12
179	Bacterial survival strategies suggest rethinking cancer cooperativity. Trends in Microbiology, 2012, 20, 403-410.	7.7	103
180	Measurement Noise Limitations in Eukaryotic Chemotaxis. Biophysical Journal, 2011, 100, 7a.	0.5	0

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181	“Self-Assisted” Amoeboid Navigation in Complex Environments. PLoS ONE, 2011, 6, e21955.	2.5	18
182	Quantifying Information Transmission in Eukaryotic Gradient Sensing and Chemotactic Response. Journal of Statistical Physics, 2011, 142, 1167-1186.	1.2	21
183	Propagating mode-I fracture in amorphous materials using the continuous random network model. Physical Review E, 2011, 84, 026102.	2.1	10
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