

Herbert Levine

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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	Pattern selection in fingered growth phenomena. <i>Advances in Physics</i> , 1988 , 37, 255-339	18.4	831
408	Guidelines and definitions for research on epithelial-mesenchymal transition. <i>Nature Reviews Molecular Cell Biology</i> , 2020 , 21, 341-352	48.7	469
407	Cooperative self-organization of microorganisms. <i>Advances in Physics</i> , 2000 , 49, 395-554	18.4	415
406	Implications of the Hybrid Epithelial/Mesenchymal Phenotype in Metastasis. <i>Frontiers in Oncology</i> , 2015 , 5, 155	5.3	414
405	Phase-field model of mode III dynamic fracture. <i>Physical Review Letters</i> , 2001 , 87, 045501	7.4	391
404	Experimental demonstration of the role of anisotropy in interfacial pattern formation. <i>Physical Review Letters</i> , 1985 , 55, 1315-1318	7.4	378
403	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
402	Diffuse interface model of diffusion-limited crystal growth. <i>Physical Review B</i> , 1985 , 31, 6119-6122	3.3	297
401	Self-organization in systems of self-propelled particles. <i>Physical Review E</i> , 2001 , 63, 017101	2.4	282
400	Electron Delocalization by a Magnetic Field in Two Dimensions. <i>Physical Review Letters</i> , 1983 , 51, 1915-1918	7.4	273
399	Stability of the hybrid epithelial/mesenchymal phenotype. <i>Oncotarget</i> , 2016 , 7, 27067-84	3.3	259
398	Tumor Budding: The Name is EMT. Partial EMT. <i>Journal of Clinical Medicine</i> , 2016 , 5,	5.1	258
397	Geometrical models of interface evolution. <i>Physical Review A</i> , 1984 , 29, 1335-1342	2.6	223
396	Vortex reconnection in superfluid helium. <i>Physical Review Letters</i> , 1993 , 71, 1375-1378	7.4	220
395	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
394	Bacterial linguistic communication and social intelligence. <i>Trends in Microbiology</i> , 2004 , 12, 366-72	12.4	209
393	EMT and MET: necessary or permissive for metastasis?. <i>Molecular Oncology</i> , 2017 , 11, 755-769	7.9	204

392	RNA virus evolution via a fitness-space model. <i>Physical Review Letters</i> , 1996 , 76, 4440-4443	7.4	201
391	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
390	Geometrical Approach to Moving-Interface Dynamics. <i>Physical Review Letters</i> , 1983 , 51, 1111-1114	7.4	178
389	Dynamic instabilities of fracture under biaxial strain using a phase field model. <i>Physical Review Letters</i> , 2004 , 93, 105504	7.4	177
388	Computational model for cell morphodynamics. <i>Physical Review Letters</i> , 2010 , 105, 108104	7.4	170
387	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
386	Stability of dendritic crystals. <i>Physical Review Letters</i> , 1986 , 57, 3069-3072	7.4	145
385	Modeling the Genetic Regulation of Cancer Metabolism: Interplay between Glycolysis and Oxidative Phosphorylation. <i>Cancer Research</i> , 2017 , 77, 1564-1574	10.1	142
384	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
383	Hybrid epithelial/mesenchymal phenotypes promote metastasis and therapy resistance across carcinomas. <i>Pharmacology & Therapeutics</i> , 2019 , 194, 161-184	13.9	140
382	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
381	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
380	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
379	Theory of the quantized Hall effect (I). <i>Nuclear Physics B</i> , 1984 , 240, 30-48	2.8	130
378	Controlling spatiotemporal chaos. <i>Physical Review Letters</i> , 1994 , 72, 2561-2564	7.4	129
377	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
376	Viscosity renormalization in the Brinkman equation. <i>Physics of Fluids</i> , 1983 , 26, 2864		127
375	Towards elucidating the connection between epithelial-mesenchymal transitions and stemness. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20140962	4.1	126

374	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
373	Geometrical models of interface evolution. II. Numerical simulation. <i>Physical Review A</i> , 1984 , 30, 3161-3174	2.6	122
372	Incoherent feedforward control governs adaptation of activated ras in a eukaryotic chemotaxis pathway. <i>Science Signaling</i> , 2012 , 5, ra2	8.8	117
371	Self-organized Vortex State in Two-Dimensional Dictyostelium Dynamics. <i>Physical Review Letters</i> , 1999 , 83, 1247-1250	7.4	117
370	Coupling the modules of EMT and stemness: A tunable 'stemness window' model. <i>Oncotarget</i> , 2015 , 6, 25161-74	3.3	116
369	Steady-state dendritic crystal growth. <i>Physical Review A</i> , 1986 , 33, 3352-3357	2.6	111
368	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
367	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
366	Geometrical models of interface evolution. III. Theory of dendritic growth. <i>Physical Review A</i> , 1985 , 31, 1712-1717	2.6	105
365	Elucidating the Metabolic Plasticity of Cancer: Mitochondrial Reprogramming and Hybrid Metabolic States. <i>Cells</i> , 2018 , 7,	7.9	104
364	Interface moving through a random background. <i>Physical Review B</i> , 1985 , 32, 280-292	3.3	104
363	Pattern formation in Dictyostelium via the dynamics of cooperative biological entities. <i>Physical Review E</i> , 1993 , 48, 4801-4804	2.4	103
362	Interface fluctuations in random media. <i>Physical Review A</i> , 1991 , 43, 4551-4554	2.6	103
361	Stochastic spreading of intracellular Ca(2+) release. <i>Physical Review E</i> , 2000 , 62, 2636-43	2.4	102
360	The astrocyte as a gatekeeper of synaptic information transfer. <i>Neural Computation</i> , 2007 , 19, 303-26	2.9	100
359	Fluctuation-induced diffusive instabilities. <i>Nature</i> , 1998 , 394, 556-558	50.4	98
358	Complex bacterial patterns. <i>Nature</i> , 1995 , 373, 566-7	50.4	95
357	Self-engineering capabilities of bacteria. <i>Journal of the Royal Society Interface</i> , 2006 , 3, 197-214	4.1	94

356	OVOL guides the epithelial-hybrid-mesenchymal transition. <i>Oncotarget</i> , 2015 , 6, 15436-48	3.3	92
355	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
354	Bacterial survival strategies suggest rethinking cancer cooperativity. <i>Trends in Microbiology</i> , 2012 , 20, 403-10	12.4	87
353	Interfacial velocity corrections due to multiplicative noise. <i>Physical Review E</i> , 1999 , 59, 3893-3900	2.4	86
352	Molecular-beam epitaxial growth and surface diffusion. <i>Physical Review Letters</i> , 1992 , 69, 100-103	7.4	86
351	Interrogating the topological robustness of gene regulatory circuits by randomization. <i>PLoS Computational Biology</i> , 2017 , 13, e1005456	5	86
350	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
349	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
348	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
347	Inflammatory breast cancer: a model for investigating cluster-based dissemination. <i>Npj Breast Cancer</i> , 2017 , 3, 21	7.8	81
346	Physical limits on cellular sensing of spatial gradients. <i>Physical Review Letters</i> , 2010 , 105, 048104	7.4	80
345	Small regulatory RNAs may sharpen spatial expression patterns. <i>PLoS Computational Biology</i> , 2007 , 3, e233	5	79
344	Numb prevents a complete epithelial-mesenchymal transition by modulating Notch signalling. <i>Journal of the Royal Society Interface</i> , 2017 , 14,	4.1	78
343	Stress-induced plasticity of dynamic collagen networks. <i>Nature Communications</i> , 2017 , 8, 842	17.4	77
342	Establishing direction during chemotaxis in eukaryotic cells. <i>Biophysical Journal</i> , 2002 , 83, 1361-7	2.9	77
341	Velocity selection in dendritic growth. <i>Physical Review B</i> , 1986 , 33, 7867-7870	3.3	77
340	Dendritic growth in a channel. <i>Physical Review A</i> , 1986 , 34, 4980-4987	2.6	77
339	Numerical simulation of two-dimensional snowflake growth. <i>Physical Review A</i> , 1984 , 30, 2820-2823	2.6	77

338	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
337	Membrane-bound Turing patterns. <i>Physical Review E</i> , 2005 , 72, 061912	2.4	76
336	Pattern selection in three dimensional dendritic growth. <i>Acta Metallurgica</i> , 1988 , 36, 2693-2706		75
335	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
334	Possible cooperation of differential adhesion and chemotaxis in mound formation of Dictyostelium. <i>Biophysical Journal</i> , 1998 , 75, 2615-25	2.9	72
333	Emergent Collective Chemotaxis without Single-Cell Gradient Sensing. <i>Physical Review Letters</i> , 2016 , 116, 098101	7.4	71
332	Folding time predictions from all-atom replica exchange simulations. <i>Journal of Molecular Biology</i> , 2007 , 372, 756-63	6.5	71
331	Aggregation Patterns in Stressed Bacteria. <i>Physical Review Letters</i> , 1995 , 75, 1859-1862	7.4	71
330	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
329	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
328	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
327	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
326	Effective stochastic dynamics on a protein folding energy landscape. <i>Journal of Chemical Physics</i> , 2006 , 125, 054910	3.9	68
325	Theory of the quantized hall effect (II). <i>Nuclear Physics B</i> , 1984 , 240, 49-70	2.8	68
324	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
323	Embryonic pattern scaling achieved by oppositely directed morphogen gradients. <i>Physical Biology</i> , 2006 , 3, 107-20	3	66
322	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
321	Transient localized patterns in noise-driven reaction-diffusion systems. <i>Physical Review Letters</i> , 2010 , 104, 158301	7.4	65

320	Discrete stochastic modeling of calcium channel dynamics. <i>Physical Review Letters</i> , 2000 , 84, 5664-7	7.4	65
319	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
318	Motion of extended charges in classical electrodynamics. <i>American Journal of Physics</i> , 1977 , 45, 75-78	0.7	64
317	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
316	Spatiotemporal dynamics of HIV propagation. <i>Journal of Theoretical Biology</i> , 2002 , 218, 85-96	2.3	63
315	Recombination dramatically speeds up evolution of finite populations. <i>Physical Review Letters</i> , 2005 , 94, 098102	7.4	62
314	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
313	Theory of the Saffman-Taylor "finger" pattern. I. <i>Physical Review A</i> , 1986 , 33, 2621-2633	2.6	61
312	Theory of the quantized Hall effect (III). <i>Nuclear Physics B</i> , 1984 , 240, 71-90	2.8	61
311	Steady-state cellular growth during directional solidification. <i>Physical Review A</i> , 1989 , 39, 3041-3052	2.6	60
310	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
309	Evolution on a smooth landscape. <i>Journal of Statistical Physics</i> , 1997 , 87, 519-544	1.5	57
308	Streaming instability of aggregating slime mold amoebae. <i>Physical Review Letters</i> , 1991 , 66, 2400-2403	7.4	57
307	Coexistence of amplitude and frequency modulations in intracellular calcium dynamics. <i>Physical Review E</i> , 2008 , 77, 030903	2.4	56
306	Scaling of conductivities in the fractional quantum Hall effect. <i>Physical Review B</i> , 1985 , 32, 1311-1314	3.3	56
305	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
304	Activated membrane patches guide chemotactic cell motility. <i>PLoS Computational Biology</i> , 2011 , 7, e1002044	5.5	55
303	Astrocytes optimize the synaptic transmission of information. <i>PLoS Computational Biology</i> , 2008 , 4, e1000088	5.5	55

302	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
301	Computational approach for modeling intra- and extracellular dynamics. <i>Physical Review E</i> , 2003 , 68, 037702	2.4	54
300	Stability of finger patterns in Hele-Shaw cells. <i>Physical Review A</i> , 1985 , 32, 1930-1933	2.6	54
299	Monopole Condensation and the Lattice-Quantum-Chromodynamics Crossover. <i>Physical Review Letters</i> , 1981 , 47, 621-624	7.4	54
298	Receptor noise and directional sensing in eukaryotic chemotaxis. <i>Physical Review Letters</i> , 2008 , 100, 2281-2284	7.0	53
297	The role of cell contraction and adhesion in dictyostelium motility. <i>Biophysical Journal</i> , 2010 , 99, 50-8	2.9	52
296	Mean-field theory for diffusion-limited aggregation in low dimensions. <i>Physical Review Letters</i> , 1991 , 66, 1978-1981	7.4	52
295	A mechanism for epithelial-mesenchymal heterogeneity in a population of cancer cells. <i>PLoS Computational Biology</i> , 2020 , 16, e1007619	5	52
294	Phenotypic Plasticity and Cell Fate Decisions in Cancer: Insights from Dynamical Systems Theory. <i>Cancers</i> , 2017 , 9,	6.6	51
293	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
292	Quantifying noise levels of intercellular signals. <i>Physical Review E</i> , 2007 , 75, 061905	2.4	51
291	On the large-N limit in symplectic matrix models. <i>Nuclear Physics B</i> , 1983 , 215, 307-315	2.8	50
290	Periodic migration in a physical model of cells on micropatterns. <i>Physical Review Letters</i> , 2013 , 111, 1581-2	7.2	49
289	Modelling vesicular release at hippocampal synapses. <i>PLoS Computational Biology</i> , 2010 , 6, e1000983	5	49
288	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
287	Epithelial/mesenchymal plasticity: how have quantitative mathematical models helped improve our understanding?. <i>Molecular Oncology</i> , 2017 , 11, 739-754	7.9	48
286	The artistry of nature. <i>Nature</i> , 2001 , 409, 985-6	50.4	48
285	Theory of the Saffman-Taylor "finger" pattern. II. <i>Physical Review A</i> , 1986 , 33, 2634-2639	2.6	48

284	Nonlinear elasticity of disordered fiber networks. <i>Soft Matter</i> , 2016 , 12, 1419-24	3.6	47
283	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
282	Distinguishing mechanisms underlying EMT tristability 2017 , 1, 2		47
281	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
280	Spiral competition in three-component excitable media. <i>Physical Review Letters</i> , 1996 , 76, 1170-1173	7.4	46
279	Interconnected feedback loops among ESRP1, HAS2, and CD44 regulate epithelial-mesenchymal plasticity in cancer. <i>APL Bioengineering</i> , 2018 , 2, 031908	6.6	46
278	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
277	The physics of eukaryotic chemotaxis. <i>Physics Today</i> , 2013 , 66,	0.9	45
276	Scattering of superfluid vortex rings. <i>Physical Review Letters</i> , 1996 , 76, 4745-4748	7.4	45
275	Target-specific and global effectors in gene regulation by MicroRNA. <i>Biophysical Journal</i> , 2007 , 93, L52-42.9		44
274	Phenotypic plasticity in prostate cancer: role of intrinsically disordered proteins. <i>Asian Journal of Andrology</i> , 2016 , 18, 704-10	2.8	44
273	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
272	Interaction between a drifting spiral and defects. <i>Physical Review E</i> , 1993 , 47, R800-R803	2.4	43
271	Multimodal encoding in a simplified model of intracellular calcium signaling. <i>Cognitive Processing</i> , 2009 , 10 Suppl 1, S55-70	1.5	42
270	Semiclassical Approach to Planar Diagrams. <i>Physical Review Letters</i> , 1980 , 44, 1443-1446	7.4	42
269	Quantifying Cancer Epithelial-Mesenchymal Plasticity and its Association with Stemness and Immune Response. <i>Journal of Clinical Medicine</i> , 2019 , 8,	5.1	41
268	Physical schemata underlying biological pattern formation-examples, issues and strategies. <i>Physical Biology</i> , 2004 , 1, P14-22	3	41
267	Structure of infectious prions: stabilization by domain swapping. <i>FASEB Journal</i> , 2005 , 19, 1778-82	0.9	41

266	Growth velocity of three-dimensional dendritic crystals. <i>Physical Review A</i> , 1987 , 36, 4123-4126	2.6	40
265	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
264	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
263	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
262	The Artistry of Microorganisms. <i>Scientific American</i> , 1998 , 279, 82-87	0.5	37
261	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
260	Alignment and nonlinear elasticity in biopolymer gels. <i>Physical Review E</i> , 2015 , 91, 042710	2.4	36
259	Catalysis at single-crystal Pt(110) surfaces: Global coupling and standing waves. <i>Physical Review E</i> , 1993 , 48, 50-64	2.4	36
258	Determining the Wavelength of Dendritic Sidebranches. <i>Europhysics Letters</i> , 1987 , 4, 215-221	1.6	36
257	The Physics of Cellular Decision Making During Epithelial-Mesenchymal Transition. <i>Annual Review of Biophysics</i> , 2020 , 49, 1-18	21.1	36
256	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
255	Resistance to chemotherapy: patient variability and cellular heterogeneity. <i>Cancer Research</i> , 2014 , 74, 4663-70	10.1	35
254	Dynamics of SU(2) lattice gauge theories. <i>Nuclear Physics B</i> , 1982 , 205, 77-106	2.8	35
253	Gradient sensing in defined chemotactic fields. <i>Integrative Biology (United Kingdom)</i> , 2010 , 2, 659-68	3.7	34
252	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
251	Differential Contributions of Pre- and Post-EMT Tumor Cells in Breast Cancer Metastasis. <i>Cancer Research</i> , 2020 , 80, 163-169	10.1	33
250	A thermodynamic model for receptor clustering. <i>Biophysical Journal</i> , 1999 , 77, 2358-65	2.9	32
249	Numerical study for traveling waves in directional solidification. <i>Physical Review A</i> , 1990 , 42, 7475-7478	2.6	32

248	Theory of pulse instabilities in electrophysiological models of excitable tissues. <i>Physica D: Nonlinear Phenomena</i> , 1994 , 73, 113-127	3.3	31
247	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
246	Mechanisms of cooperativity underlying sequence-independent β sheet formation. <i>Journal of Chemical Physics</i> , 2002 , 116, 4353-4365	3.9	30
245	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
244	The motility-proliferation-metabolism interplay during metastatic invasion. <i>Scientific Reports</i> , 2015 , 5, 13538	4.9	29
243	Mutator Dynamics on a Smooth Evolutionary Landscape. <i>Physical Review Letters</i> , 1998 , 80, 2012-2015	7.4	29
242	Spiral core in singly diffusive excitable media. <i>Physical Review Letters</i> , 1992 , 68, 401-404	7.4	29
241	Effective elastic parameters of random composites. <i>Applied Physics Letters</i> , 1980 , 37, 377-379	3.4	29
240	The fixation probability of rare mutators in finite asexual populations. <i>Genetics</i> , 2009 , 181, 1595-612	4	28
239	Resonant interactions and traveling-solidification cells. <i>Physical Review A</i> , 1991 , 43, 1122-1125	2.6	28
238	Pattern Selection by Gene Expression in Dictyostelium Discoideum. <i>Physical Review Letters</i> , 1998 , 80, 3875-3878	7.4	27
237	Steady-state cracks in viscoelastic lattice models. <i>Physical Review E</i> , 1999 , 59, 5154-64	2.4	27
236	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
235	Optimal strategy for competence differentiation in bacteria. <i>PLoS Genetics</i> , 2010 , 6, e1001108	6	26
234	Effects of input noise on a simple biochemical switch. <i>Physical Review Letters</i> , 2011 , 107, 148101	7.4	26
233	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
232	Intercellular stress reconstitution from traction force data. <i>Biophysical Journal</i> , 2014 , 107, 548-554	2.9	25
231	Connecting thermal and mechanical protein (un)folding landscapes. <i>Biophysical Journal</i> , 2014 , 107, 2950-2961	2.9	25

230	A comparison of deterministic and stochastic simulations of neuronal vesicle release models. <i>Physical Biology</i> , 2010 , 7, 026008	3	25
229	Computational systems biology of epithelial-hybrid-mesenchymal transitions. <i>Current Opinion in Systems Biology</i> , 2017 , 3, 1-6	3.2	24
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