Ping Ao

List of Publications by Year
in descending order

69 papers	1,363 citations	331670 21 h-index	361022 35 g-index
70 all docs	70 docs citations	70 times ranked	956 citing authors

#	Article	IF	Citations
1	Fundamental Structure of General Stochastic Dynamical Systems: High-Dimension Case. Journal of Mathematics, 2022, 2022, 1-24.	1.0	4
2	Towards predictive neural network dynamical theory. Physics of Life Reviews, 2021, 36, 30-32.	2.8	1
3	Existence of a smooth Lyapunov function for any smooth planar dynamical system with one limit cycle. Nonlinear Dynamics, 2021, 105, 3117-3130.	5.2	2
4	Global potential, topology, and pattern selection in a noisy stabilized Kuramoto–Sivashinsky equation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23227-23234.	7.1	7
5	Comment on "Sign-Reversing Hall Effect in Atomically Thin High-Temperature Bi2.1Sr1.9CaCu2.0O8+δ Superconductors". Physical Review Letters, 2020, 124, 249701.	7.8	4
6	Adaptive Landscape Shaped by Core Endogenous Network Coordinates Complex Early Progenitor Fate Commitments in Embryonic Pancreas. Scientific Reports, 2020, 10, 1112.	3.3	7
7	Resonant Confinement of an Excitonic Polariton and Ultraefficient Light Harvest in Artificial Photosynthesis. Physical Review Letters, 2019, 122, 257402.	7.8	12
8	Dynamical modelling of secondary metabolism and metabolic switches in *Streptomyces xiamenensis* 318. Royal Society Open Science, 2019, 6, 190418.	2.4	4
9	Escape rate for nonequilibrium processes dominated by strong non-detailed balance force. Journal of Chemical Physics, 2018, 148, 064102.	3.0	1
10	Endogenous Molecular-Cellular Network Cancer Theory: A Systems Biology Approach. Methods in Molecular Biology, 2018, 1702, 215-245.	0.9	5
11	Statistical Analysis Can Fail to Reveal Underlying True Biological Mechanism: A Demonstration of Expression Profile Generation. , 2018, , .		0
12	Structural diversity of anti-pancreatic cancer capsimycins identified in mangrove-derived Streptomyces xiamenensis 318 and post-modification via a novel cytochrome P450 monooxygenase. Scientific Reports, 2017, 7, 40689.	3.3	31
13	Cancer as robust intrinsic state shaped by evolution: a key issues review. Reports on Progress in Physics, 2017, 80, 042701.	20.1	58
14	Generating transverse response explicitly from harmonic oscillators. Physical Review B, 2017, 96, .	3.2	4
15	SDE decomposition and A-type stochastic interpretation in nonequilibrium processes. Frontiers of Physics, 2017, 12, 1.	5.0	18
16	Decoding early myelopoiesis from dynamics of core endogenous network. Science China Life Sciences, 2017, 60, 627-646.	4.9	23
17	Potential landscape of high dimensional nonlinear stochastic dynamics with large noise. Scientific Reports, 2017, 7, 15762.	3.3	34
18	Beyond cancer genes: colorectal cancer as robust intrinsic states formed by molecular interactions. Open Biology, 2017, 7, 170169.	3.6	17

#	ARTICLE	IF	CITATIONS
19	Core level regulatory network of osteoblast as molecular mechanism for osteoporosis and treatment. Oncotarget, 2016, 7, 3692-3701.	1.8	16
20	Comment on "Construction of the landscape for multi-stable systems: Potential landscape, quasi-potential, A-type integral and beyond"[J. Chem. Phys. 144, 094109 (2016)]. Journal of Chemical Physics, 2016, 145, 147104.	3.0	2
21	Deciphering the streamlined genome of Streptomyces xiamenensis 318 as the producer of the anti-fibrotic drug candidate xiamenmycin. Scientific Reports, 2016, 6, 18977.	3.3	21
22	Towards stable kinetics of large metabolic networks: Nonequilibrium potential function approach. Physical Review E, 2016, 93, 062409.	2.1	6
23	A framework towards understanding mesoscopic phenomena: Emergent unpredictability, symmetry breaking and dynamics across scales. Chemical Physics Letters, 2016, 665, 153-161.	2.6	27
24	From molecular interaction to acute promyelocytic leukemia: Calculating leukemogenesis and remission from endogenous molecular-cellular network. Scientific Reports, 2016, 6, 24307.	3.3	18
25	Endogenous network states predict gain or loss of functions for genetic mutations in hepatocellular carcinoma. Journal of the Royal Society Interface, 2016, 13, 20151115.	3.4	8
26	Kinetic model of metabolic network for xiamenmycin biosynthetic optimisation. IET Systems Biology, 2016, 10, 17-22.	1.5	5
27	Anomalous free energy changes induced by topology. Physical Review E, 2015, 92, 062129.	2.1	7
28	Biological Sources of Intrinsic and Extrinsic Noise in cI Expression of Lysogenic Phage Lambda. Scientific Reports, 2015, 5, 13597.	3.3	22
29	Endogenous molecular-cellular hierarchical modeling of prostate carcinogenesis uncovers robust structure. Progress in Biophysics and Molecular Biology, 2015, 117, 30-42.	2.9	23
30	Work relations connecting nonequilibrium steady states without detailed balance. Physical Review E, 2015, 91, 042108.	2.1	12
31	Endogenous molecular network reveals two mechanisms of heterogeneity within gastric cancer. Oncotarget, 2015, 6, 13607-13627.	1.8	32
32	Potential Function in a Continuous Dissipative Chaotic System: Decomposition Scheme and Role of Strange Attractor. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1450015.	1.7	18
33	Summing over trajectories of stochastic dynamics with multiplicative noise. Journal of Chemical Physics, 2014, 141, 044125.	3.0	24
34	Two-time-scale population evolution on a singular landscape. Physical Review E, 2014, 89, 012724.	2.1	11
35	Controlling symmetry-breaking states by a hidden quantity in multiplicative noise. Physical Review E, 2014, 90, 052121.	2.1	5
36	Quantitative implementation of the endogenous molecular–cellular network hypothesis in hepatocellular carcinoma. Interface Focus, 2014, 4, 20130064.	3.0	26

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37	Nonequilibrium work relation beyond the Boltzmann-Gibbs distribution. Physical Review E, 2014, 89, 062112.	2.1	12
38	Lyapunov function as potential function: A dynamical equivalence. Chinese Physics B, 2014, 23, 010505.	1.4	23
39	Equivalent formulations of â€œthe equation of lifeâ€. Chinese Physics B, 2014, 23, 070513.	1.4	3
40	Two programmed replicative lifespans of Saccharomyces cerevisiae formed by the endogenous molecular-cellular network. Journal of Theoretical Biology, 2014, 362, 69-74.	1.7	4
41	From Phage lambda to human cancer: endogenous molecularâ€cellular network hypothesis. Quantitative Biology, 2013, 1, 32-49.	0.5	27
42	Towards kinetic modeling of metabolic networks with incomplete parameters. , 2013, , .		2
43	Robust reconstruction of the Fokker-Planck equations from time series at different sampling rates. Europhysics Letters, 2013, 102, 40003.	2.0	9
44	Exploring a noisy van der Pol type oscillator with a stochastic approach. Physical Review E, 2013, 87, 062109.	2.1	28
45	Mapping noise disturbed oscillators onto quasi-symplectic dynamics. , 2013, , .		0
46	Dynamical Decomposition of Markov Processes without Detailed Balance. Chinese Physics Letters, 2013, 30, 070201.	3.3	17
47	Wrightâ€"Fisher dynamics on adaptive landscape. IET Systems Biology, 2013, 7, 153-164.	1.5	2
48	Identification and Characterization of an Anti-Fibrotic Benzopyran Compound Isolated from Mangrove-Derived Streptomyces xiamenensis. Marine Drugs, 2012, 10, 639-654.	4.6	32
49	Relation of a New Interpretation of Stochastic Differential Equations to Ito Process. Journal of Statistical Physics, 2012, 148, 579-590.	1.2	32
50	Dynamics of coexistence of asexual and sexual reproduction in adaptive landscape. , 2012, , .		0
51	Escape from infinite adaptive peak. , 2012, , .		1
52	Beyond ItÃ´ versus Stratonovich. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P07010.	2.3	49
53	Absorbing phenomena and escaping time for Muller's ratchet in adaptive landscape. BMC Systems Biology, 2012, 6, S10.	3.0	5
54	Extrinsic vs. intrinsic noises in phage lambda genetic switch. , 2011, , .		1

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55	Kinetics of muller's ratchet from adaptive landscape viewpoint. , 2011, , .		1
56	Generic Enzymatic Rate Equation*. Progress in Biochemistry and Biophysics, 2011, 38, 759-767.	0.3	6
57	Global view of bionetwork dynamics: adaptive landscape. Journal of Genetics and Genomics, 2009, 36, 63-73.	3.9	68
58	Cancer as robust intrinsic state of endogenous molecular-cellular network shaped by evolution. Medical Hypotheses, 2008, 70, 678-684.	1.5	141
59	Towards Kinetic Modeling of Global Metabolic Networks: Methylobacterium extorquens AM1 Growth as Validation. Shengwu Gongcheng Xuebao/Chinese Journal of Biotechnology, 2008, 24, 980-994.	0.2	21
60	Borges dilemma, fundamental laws, and systems biology. Bioinformatics and Biology Insights, 2008, 2, 201-2.	2.0	2
61	Darwinian Dynamics Implies Developmental Ascendency. Biological Theory, 2007, 2, 113-115.	1.5	2
62	On the existence of potential landscape in the evolution of complex systems. Complexity, 2007, 12, 19-27.	1.6	74
63	Efficiency, Robustness, and Stochasticity of Gene Regulatory Networks in Systems Biology: Î» Switch as a Working Example. , 2007, , 336-371.		7
64	Orders of Magnitude Change in Phenotype Rate Caused by Mutation. Analytical Cellular Pathology, 2007, 29, 67-69.	1.4	7
65	Noise in a small genetic circuit that undergoes bifurcation. Complexity, 2005, 11, 45-51.	1.6	28
66	Effective vortex mass from microscopic theory. Physical Review B, 2005, 71, .	3.2	13
67	Structure of stochastic dynamics near fixed points. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13029-13033.	7.1	134
68	Tunneling of a quantized vortex: Roles of pinning and dissipation. Physical Review Letters, 1994, 72, 132-135.	7.8	94
69	Influence of an environment on equilibrium properties of a charged quantum bead constrained to a ring. Superlattices and Microstructures, 1992, 11, 265-268.	3.1	3