Hong Zhao

List of Publications by Year
in descending order

56 papers	1,369 citations	430874 18 h-index	345221 36 g-index
56 all docs	56 docs citations	56 times ranked	606 citing authors

#	Article	IF	Citations
1	Heat conduction in one-dimensional chains. Physical Review E, 1998, 57, 2992-2995.	2.1	278
2	Heat conduction in one-dimensional nonintegrable systems. Physical Review E, 2000, 61, 3828-3831.	2.1	181
3	Identifying Diffusion Processes in One-Dimensional Lattices in Thermal Equilibrium. Physical Review Letters, 2006, 96, 140602.	7.8	108
4	Can Disorder Induce a Finite Thermal Conductivity in 1D Lattices?. Physical Review Letters, 2001, 86, 63-66.	7.8	94
5	Normal heat conduction in one-dimensional momentum conserving lattices with asymmetric interactions. Physical Review E, 2012, 85, 060102.	2.1	70
6	Diffusion of heat, energy, momentum, and mass in one-dimensional systems. Physical Review E, 2013, 87, .	2.1	46
7	Nonuniversal heat conduction of one-dimensional lattices. Physical Review E, 2012, 85, 020102.	2.1	42
8	Temperature dependence of heat conduction in the Fermi-Pasta-Ulam-β lattice with next-nearest-neighbor coupling. Physical Review E, 2014, 90, 022117.	2.1	34
9	Dynamics of Solitary Wave Scattering in the Fermi-Pasta-Ulam Model. Physical Review Letters, 2005, 94, 025507.	7.8	33
10	Impeded Mass Transportation Due to Defects in Thermally Driven Nanotube Nanomotor. Journal of Physical Chemistry C, 2015, 119, 17362-17368.	3.1	33
11	Ice or water: thermal properties of monolayer water adsorbed on a substrate. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P06009.	2.3	28
12	Supervised Machine Learning Model for High Dimensional Gene Data in Colon Cancer Detection. , 2015, , .		27
13	Designing asymmetric neural networks with associative memory. Physical Review E, 2004, 70, 066137.	2.1	26
14	Heat conduction in two-dimensional disk models. Physical Review E, 2010, 82, 030101.	2.1	25
15	Heat transport enhanced by optical phonons in one-dimensional anharmonic lattices with alternating bonds. Physical Review E, 2013, 88, 052128.	2.1	23
16	Heat conduction in a one-dimensional aperiodic system. Physical Review E, 2002, 66, 026106.	2.1	21
17	Wave-Turbulence Origin of the Instability of Anderson Localization against Many-Body Interactions. Physical Review Letters, 2020, 124, 186401.	7.8	21
18	Pattern recognition using asymmetric attractor neural networks. Physical Review E, 2005, 72, 066111.	2.1	19

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19	Key role of asymmetric interactions in low-dimensional heat transport. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 033205.	2.3	19
20	Thermal rectification in asymmetric U-shaped graphene flakes. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P06011.	2.3	18
21	Finite-size effects on current correlation functions. Physical Review E, 2014, 89, 022111.	2.1	18
22	Non-Gaussian normal diffusion induced by delocalization. Physical Review E, 2016, 93, 032144.	2.1	15
23	Heat conduction in graphene flakes with inhomogeneous mass interface. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P10031.	2.3	14
24	Connection between heat diffusion and heat conduction in one-dimensional systems. Science China: Physics, Mechanics and Astronomy, 2013, 56, 1466-1471.	5.1	14
25	Universal law of thermalization for one-dimensional perturbed Toda lattices. New Journal of Physics, 2019, 21, 043009.	2.9	13
26	Universal scaling of the thermalization time in one-dimensional lattices. Physical Review E, 2019, 100, 010101.	2.1	12
27	Comment on "Simple One-Dimensional Model of Heat Conduction which Obeys Fourier's Law". Physical Review Letters, 2002, 89, 079401; author reply 079402.	7.8	10
28	Spatial shift of lattice soliton scattering in the Fermi-Pasta-Ulam model. Physical Review E, 2010, 81, 037601.	2.1	10
29	Testing the Stokes-Einstein relation with the hard-sphere fluid model. Physical Review E, 2021, 103, L030103.	2.1	10
30	Inferring the dynamics of "black-box" systems using a learning machine. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	5.1	9
31	Correlation Between Eigenvalue Spectra and Dynamics of Neural Networks. Neural Computation, 2009, 21, 2931-2941.	2.2	8
32	Normal thermal conduction in lattice models with asymmetric harmonic interparticle interactions. Chinese Physics B, 2013, 22, 070505.	1.4	8
33	Nonintegrability and thermalization of one-dimensional diatomic lattices. Physical Review E, 2019, 100, 052102.	2.1	8
34	Effects of interaction symmetry on delocalization and energy transport in one-dimensional disordered lattices. Physical Review E, 2015, 92, 032138.	2.1	7
35	Modulating thermal conduction by the axial strain. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 093208.	2.3	7
36	Kinetic behavior of subsonic solitary wave in graphene nanoribbon. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P06007.	2.3	6

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37	Thermal expansion and its impacts on thermal transport in the FPU-α-β model. AIP Advances, 2015, 5, 053203.	1.3	6
38	Energy-transfer process in gas models of Lennard-Jones interactions. Physical Review E, 2011, 83, 052104.	2.1	5
39	An Evaluation of the Dynamics of Diluted Neural Network. International Journal of Computational Intelligence Systems, 2016, 9, 1191-1199.	2.7	5
40	Ultraslow diffusion and weak ergodicity breaking in right triangular billiards. Physical Review E, 2017, 95, 032209.	2.1	5
41	Anharmonicity induced thermal modulation in stressed graphene. Science China: Physics, Mechanics and Astronomy, 2017, 60, 1.	5.1	5
42	Pattern recognition with weighted complex networks. Physical Review E, 2008, 78, 056107.	2.1	4
43	Feed-back neural networks with discrete weights. Neural Computing and Applications, 2013, 22, 1063-1069.	5.6	4
44	Effect of pressure on thermalization of one-dimensional nonlinear chains. Physical Review E, 2021, 104, L032104.	2.1	4
45	Estimates of storage capacity in the q-state Potts-glass neural network. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 445001.	2.1	3
46	Scattering of lattice solitons and decay of heat-current correlation in the Fermi-Pasta-Ulam-α-β model. Physical Review E, 2017, 96, 022116.	2.1	3
47	Controlling the dynamics of multi-state neural networks. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P06002.	2.3	2
48	q-state Potts-glass neural network based on pseudoinverse rule. Physical Review E, 2010, 82, 026114.	2.1	2
49	Violation of the virial theorem and generalized equipartition theorem for logarithmic oscillators serving as a thermostat. Scientific Reports, 2017, 7, 3460.	3.3	2
50	STORING LIMIT CYCLES USING DELAYED FEEDBACK NEURAL NETWORKS. International Journal of Modeling, Simulation, and Scientific Computing, 2008, 11, 433-442.	1.4	1
51	Time series forecasting using multilayer neural network constructed by a Monte-Carlo based algorithm. , 2009, , .		1
52	The anti-Fermi–Pasta–Ulam–Tsingou problem in one-dimensional diatomic lattices. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 053104.	2.3	1
53	Phonon damping in one-dimensional lattices with asymmetric interactions. Science China: Physics, Mechanics and Astronomy, 2022, 65, .	5.1	1
54	Solving Langevin equation with the bicolour rooted tree method. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 3769-3778.	2.6	0

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55	A trade-off formula in designing asymmetric neural networks. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 435002.	2.1	0
56	Less is more: a new machine learning methodology for spatiotemporal systems. Communications in Theoretical Physics, 0, , .	2.5	0