ZhenQiang Ye

List of Publications by Year
in descending order

72	2,308	236833 25	223716 46
papers	citations	h-index	g-index

73	73	73	1820
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular Momentum Transport at Fluid-Solid Interfaces in MEMS/NEMS: A Review. International Journal of Molecular Sciences, 2009, 10, 4638-4706.	1.8	261
2	Equation of motion of a phonon gas and non-Fourier heat conduction. Journal of Applied Physics, 2007, 102, .	1.1	165
3	Liquid flow in surface-nanostructured channels studied by molecular dynamics simulation. Physical Review E, 2006, 74, 066311.	0.8	117
4	Spectral phonon mean free path and thermal conductivity accumulation in defected graphene: The effects of defect type and concentration. Physical Review B, 2015, 91, .	1.1	97
5	Generalized heat conduction laws based on thermomass theory and phonon hydrodynamics. Journal of Applied Physics, 2011, 110, .	1.1	91
6	Temperature dependence of the tangential momentum accommodation coefficient for gases. Applied Physics Letters, 2005, 86, 091905.	1.5	86
7	Molecular dynamics study on evaporation and condensation of n-dodecane at liquidâ€“vapor phase equilibria. Journal of Chemical Physics, 2011, 134, 164309.	1.2	67
8	Phonon thermal properties of graphene from molecular dynamics using different potentials. Journal of Chemical Physics, 2016, 145, 134705.	1.2	67
9	Impacts of potential models on calculating the thermal conductivity of graphene using non-equilibrium molecular dynamics simulations. International Journal of Heat and Mass Transfer, 2017, 107, 450-460.	2.5	67
10	Enhanced thermal transport across multilayer graphene and water by interlayer functionalization. Applied Physics Letters, 2018, 112, .	1.5	62
11	Thermal transport properties of GaN with biaxial strain and electron-phonon coupling. Journal of Applied Physics, 2020, 127, .	1.1	59
12	Ballistic-diffusive heat conduction in multiply-constrained nanostructures. International Journal of Thermal Sciences, 2016, 101, 126-132.	2.6	57
13	Networked nanoconstrictions: An effective route to tuning the thermal transport properties of graphene. Carbon, 2016, 96, 711-719.	5.4	55
14	Machine learning interatomic potential developed for molecular simulations on thermal properties of Î²-Ga2O3. Journal of Chemical Physics, 2020, 153, 144501.	1.2	54
15	Molecular dynamics study of the processes in the vicinity of the n-dodecane vapour/liquid interface. Physics of Fluids, 2011, 23, .	1.6	51
16	Thermal resistance between crossed carbon nanotubes: Molecular dynamics simulations and analytical modeling. Journal of Applied Physics, 2013, 114, .	1.1	50
17	Thermal Spreading Resistance in Ballistic-Diffusive Regime for GaN HEMTs. IEEE Transactions on Electron Devices, 2019, 66, 3296-3301.	1.6	48
18	Slip Boundary Conditions in Ballisticâ€“Diffusive Heat Transport in Nanostructures. Nanoscale and Microscale Thermophysical Engineering, 2017, 21, 159-176.	1.4	46

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19	Phonon thermal properties of graphene on h-BN from molecular dynamics simulations. Applied Physics Letters, 2017, 110, .	1.5	45
20	Thermal wave propagation in graphene studied by molecular dynamics simulations. Science Bulletin, 2014, 59, 3495-3503.	1.7	40
21	Anomalous orientations of a rigid carbon nanotube in a sheared fluid. Scientific Reports, 2014, 4, 6120.	1.6	40
22	Polymer Nanowire Arrays With High Thermal Conductivity and Superhydrophobicity Fabricated by a Nano-Molding Technique. Heat Transfer Engineering, 2013, 34, 131-139.	1.2	38
23	Molecular dynamics calculation of rotational diffusion coefficient of a carbon nanotube in fluid. Journal of Chemical Physics, 2014, 140, 034703.	1.2	33
24	Nanoscale thermal cloaking in graphene via chemical functionalization. Physical Chemistry Chemical Physics, 2016, 18, 32952-32961.	1.3	32
25	Molecular Dynamics Study of Condensation/Evaporation and Velocity Distribution of N-Dodecane at Liquid-Vapour Phase Equilibria. Journal of Thermal Science and Technology, 2012, 7, 288-300.	0.6	26
26	Capillary filling dynamics of polymer melts in nanopores: experiments and rheological modelling. RSC Advances, 2016, 6, 7553-7559.	1.7	26
27	Non-Maxwell slippage induced by surface roughness for microscale gas flow: a molecular dynamics simulation. Molecular Physics, 2007, 105, 1403-1410.	0.8	25
28	A uniform source-and-sink scheme for calculating thermal conductivity by nonequilibrium molecular dynamics. Journal of Chemical Physics, 2010, 133, 024106.	1.2	25
29	Anisotropic Heat Conduction in Two-Dimensional Periodic Silicon Nanoporous Films. Journal of Physical Chemistry C, 2017, 121, 5293-5301.	1.5	25
30	High and anisotropic thermal conductivity of body-centered tetragonal C4 calculated using molecular dynamics. Carbon, 2014, 66, 567-575.	5.4	23
31	An efficient two-step Monte Carlo method for heat conduction in nanostructures. Journal of Computational Physics, 2017, 342, 253-266.	1.9	23
32	Extended social force model with a dynamic navigation field for bidirectional pedestrian flow. Frontiers of Physics, 2017, 12, 1.	2.4	23
33	Translational thermophoresis and rotational movement of peanut-like colloids under temperature gradient. Microfluidics and Nanofluidics, 2015, 19, 805-811.	1.0	19
34	Thermal Wave in Phonon Hydrodynamic Regime by Phonon Monte Carlo Simulations. Nanoscale and Microscale Thermophysical Engineering, 2020, 24, 94-122.	1.4	19
35	Nonequilibrium molecular dynamics calculation of the thermal conductivity based on an improved relaxation scheme. Journal of Chemical Physics, 2008, 129, 074106.	1.2	18
36	Size-dependent mode contributions to the thermal transport of suspended and supported graphene. Applied Physics Letters, 2019, 115, .	1.5	18

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37	Thermal and flow characterization in nanochannels with tunable surface wettability: A comprehensive molecular dynamics study. Numerical Heat Transfer; Part A: Applications, 2020, 78, 231-251.	1.2	17
38	Topological effects of phonons in GaN and AlGaN: A potential perspective for tuning phonon transport. Journal of Applied Physics, 2021, 129, .	1.1	17
39	Triggering wave-domain heat conduction in graphene. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2105-2110.	0.9	15
40	Radial ballistic-diffusive heat conduction in nanoscale. Nanoscale and Microscale Thermophysical Engineering, 2019, 23, 10-24.	1.4	15
41	Molecular dynamics simulations of heat conduction in multi-walled carbon nanotubes. Molecular Simulation, 2012, 38, 823-829.	0.9	14
42	Effect of various surface conditions on nanochannel flows past permeable walls. Molecular Simulation, 2017, 43, 65-75.	0.9	14
43	Entropy and Entropy Production in Multiscale Dynamics. Journal of Non-Equilibrium Thermodynamics, 2019, 44, 217-233.	2.4	13
44	Fractional-order heat conduction models from generalized Boltzmann transport equation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190280.	1.6	13
45	Spectral Thermal Spreading Resistance of Wide-Bandgap Semiconductors in Ballistic-Diffusive Regime. IEEE Transactions on Electron Devices, 2022, 69, 3047-3054.	1.6	13
46	Superhigh-speed unidirectional rotation of a carbon nanotube in a sheared fluid and its decoupled dynamics. RSC Advances, 2015, 5, 88719-88724.	1.7	12
47	Effects of torsion on the thermal conductivity of multi-layer graphene. Journal of Applied Physics, 2017, 121, .	1.1	12
48	A comprehensive analysis about thermal conductivity of multi-layer graphene with N-doping, -CH3 group, and single vacancy. Journal of Applied Physics, 2018, 123, .	1.1	11
49	Effects of nanosized constriction on thermal transport properties of graphene. Nanoscale Research Letters, 2014, 9, 408.	3.1	10
50	Natural convection of power-law fluids under wall vibrations: A lattice Boltzmann study. Numerical Heat Transfer; Part A: Applications, 2017, 72, 600-627.	1.2	10
51	Fast nanofluidics by travelling surface waves. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	10
52	Investigation of the Parameter-Dependence of Topology-Optimized Heat Sinks in Natural Convection. Heat Transfer Engineering, 2022, 43, 922-936.	1.2	10
53	On Entropic Framework Based on Standard and Fractional Phonon Boltzmann Transport Equations. Entropy, 2019, 21, 204.	1.1	9
54	Hybrid Monte Carlo-Diffusion Studies of Modeling Self-Heating in Ballistic-Diffusive Regime for Gallium Nitride HEMTs. Journal of Electronic Packaging, Transactions of the ASME, 2023, 145, .	1.2	9

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55	Non-Fourier Heat Conduction in Carbon Nanotubes. Journal of Heat Transfer, 2012, 134, .	1.2	8
56	Thermal Conductivity of Single-Walled Carbon Nanotube with Internal Heat Source Studied by Molecular Dynamics Simulation. International Journal of Thermophysics, 2013, 34, 2361-2370.	1.0	8
57	Transient in-plane thermal transport in nanofilms with internal heating. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20150811.	1.0	8
58	Diffusion Tensors of Arbitrary-Shaped Nanoparticles in Fluid by Molecular Dynamics Simulation. Scientific Reports, 2019, 9, 18943.	1.6	7
59	C4+ Surrogate Models for Thermophysical Properties of Aviation Kerosene RP-3 at Supercritical Pressures. Energy & Fuels, 2021, 35, 7858-7865.	2.5	7
60	Superhydrophobicity of Self-Organized Surfaces of Polymer Nanowire Arrays Fabricated by a Nano-Injection Moulding Technique. Journal of Thermal Science and Technology, 2011, 6, 204-209.	0.6	6
61	Thermomass Theory in the Framework of GENERIC. Entropy, 2020, 22, 227.	1.1	6
62	Lorentz covariance of heat conduction laws and a Lorentz-covariant heat conduction model. Applied Mathematical Modelling, 2016, 40, 5532-5541.	2.2	5
63	Size effects in non-linear heat conduction with flux-limited behaviors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3621-3626.	0.9	5
64	Mathematical and information-geometrical entropy for phenomenological Fourier and non-Fourier heat conduction. Physical Review E, 2017, 96, 032131.	0.8	5
65	Application of the uniform sourceâ€andâ€sink scheme to molecular dynamics calculation of the selfâ€diffusion coefficient of fluids. International Journal for Numerical Methods in Engineering, 2012, 92, 229-237.	1.5	4
66	Approximate analyses of Fourier and non-Fourier heat conduction models by the variational principles based on Laplace transforms. Numerical Heat Transfer; Part A: Applications, 2017, 71, 962-977.	1.2	4
67	An electrical thermometry platform for measuring cross-plane thermal conductivity of 2D flakes on substrate. Applied Physics Letters, 2019, 115, .	1.5	3
68	A superstatistical model for anomalous heat conduction and diffusion. Applied Mathematical Modelling, 2020, 79, 392-401.	2.2	3
69	Molecular Dynamics Study on Thermal Conductivity of Carbon Nanotubes. Heat Transfer - Asian Research, 2010, 39, 455-459.	2.8	2
70	Molecular Dynamics Studies on Ballistic Thermal Resistance of Graphene Nano-Junctions. Communications in Theoretical Physics, 2015, 63, 619-624.	1.1	2
71	Study on Non-Newtonian Behaviors of Lennard-Jones Fluids via Molecular Dynamics Simulations. Chinese Journal of Chemical Physics, 2016, 29, 754-760.	0.6	2
72	Microfabrication and Characterization of Parylene AF<inf>4</inf>. , 2018, , .		1