Zhiyong Wei

List of Publications by Year
in descending order

49 papers	1,036 citations	394421 19 h-index	414414 32 g-index
50 all docs	50 docs citations	50 times ranked	1262 citing authors

#	Article	IF	Citations
1	In-plane lattice thermal conductivities of multilayer graphene films. Carbon, 2011, 49, 2653-2658.	10.3	156
2	Interfacial thermal resistance in multilayer graphene structures. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 1195-1199.	2.1	106
3	Phonon mean free path of graphite along thec-axis. Applied Physics Letters, 2014, 104, 081903.	3.3	67
4	Mode dependent lattice thermal conductivity of single layer graphene. Journal of Applied Physics, 2014, 116, .	2.5	61
5	Phonon Transport through Point Contacts between Graphitic Nanomaterials. Physical Review Letters, 2014, 112, .	7.8	60
6	Anisotropic Debye model for the thermal boundary conductance. Physical Review B, 2013, 87, .	3.2	54
7	Negative correlation between in-plane bonding strength and cross-plane thermal conductivity in a model layered material. Applied Physics Letters, 2013, 102, .	3.3	50
8	Phonon transport properties of bulk and monolayer GaN from first-principles calculations. Computational Materials Science, 2017, 138, 419-425.	3.0	39
9	Phonon transport properties in pillared silicon film. Journal of Applied Physics, 2015, 118, .	2.5	38
10	Thermal transport properties of all-sp2 three-dimensional graphene: Anisotropy, size and pressure effects. Carbon, 2017, 113, 212-218.	10.3	31
11	Wave packet simulations of phonon boundary scattering at graphene edges. Journal of Applied Physics, 2012, 112, 024328.	2.5	29
12	Electron contributions to the heat conduction across Au/graphene/Au interfaces. Carbon, 2017, 115, 665-671.	10.3	24
13	Phonon energy dissipation in friction between graphene/graphene interface. Journal of Applied Physics, 2020, 127, .	2.5	24
14	Defect Facilitated Phonon Transport through Kinks in Boron Carbide Nanowires. Nano Letters, 2017, 17, 3550-3555.	9.1	23
15	Mean free path dependent phonon contributions to interfacial thermal conductance. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 1899-1904.	2.1	23
16	Geometric tuning of thermal conductivity in three-dimensional anisotropic phononic crystals. Nanoscale, 2016, 8, 16612-16620.	5.6	22
17	Tunable Anisotropic Thermal Conductivity and Elastic Properties in Intercalated Graphite via Lithium Ions. Journal of Physical Chemistry C, 2018, 122, 1447-1455.	3.1	22
18	Tuning the interfacial thermal conductance via the anisotropic elastic properties of graphite. Carbon, 2019, 144, 109-115.	10.3	20

#	Article	IF	Citations
19	Resonance in Atomic-Scale Sliding Friction. Nano Letters, 2021, 21, 4615-4621.	9.1	20
20	Pressure effects on the thermal resistance of few-layer graphene. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 248-254.	2.1	16
21	Effects of interfacial roughness on phonon transport in bilayer silicon thin films. Physical Review B, 2015, 92, .	3.2	14
22	Inter- and intramolecular adhesion mechanisms of mussel foot proteins. Science China Technological Sciences, 2020, 63, 1675-1698.	4.0	14
23	Significant enhancement of thermal boundary conductance in graphite/Al interface by ion intercalation. International Journal of Heat and Mass Transfer, 2020, 157, 119946.	4.8	12
24	The enhancement of heat conduction across the metal/graphite interface treated with a focused ion beam. Nanoscale, 2020, 12, 14838-14846.	5.6	12
25	Kink as a new degree of freedom to tune the thermal conductivity of Si nanoribbons. Journal of Applied Physics, 2019, 126, .	2.5	11
26	The contact area dependent interfacial thermal conductance. AIP Advances, 2015, 5, .	1.3	10
27	The frictional energy dissipation and interfacial heat conduction in the sliding interface. AIP Advances, 2018, 8, .	1.3	9
28	Glycerol-Assisted Construction of Long-Life Three-Dimensional Surface-Enhanced Raman Scattering Hot Spot Matrix. Langmuir, 2019, 35, 15795-15804.	3.5	8
29	Anisotropic thermal transport property of defect-free GaN. AIP Advances, 2016, 6, .	1.3	7
30	Direct detection of DNA using 3D surface enhanced Raman scattering hotspot matrix. Electrophoresis, 2019, 40, 2104-2111.	2.4	7
31	Thermal boundary conductance between high thermal conductivity boron arsenide and silicon. Journal of Applied Physics, 2020, 127, 055105.	2.5	6
32	Cross-plane phonon transport properties of molybdenum disulphide. Journal Physics D: Applied Physics, 2015, 48, 465303.	2.8	5
33	Diminishing Cohesion of Chitosan Films in Acidic Solution by Multivalent Metal Cations. Langmuir, 2020, 36, 4964-4974.	3.5	5
34	Significantly improved measurement accuracy in determining the thermal expansion coefficient of single layer graphene. Diamond and Related Materials, 2020, 109, 108007.	3.9	4
35	Intercalated ion tuning of the cross-plane thermal transport properties of graphite. AIP Advances, 2020, 10, 095225.	1.3	4
36	Effects of electrolyte concentration on the morphology control of gold nanotips in electrochemical etching. Journal of Applied Electrochemistry, 2020, 50, 799-807.	2.9	4

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37	Phonon filtering for reduced thermal conductance in unconventional superlattices. Applied Physics Express, 2017, 10, 085801.	2.4	3
38	Developing machine learning potential for classical molecular dynamics simulation with superior phonon properties. Computational Materials Science, 2022, 202, 111012.	3.0	3
39	The effects of different doping patterns on the lattice thermal conductivity of solid Ar. Journal of Physics and Chemistry of Solids, 2012, 73, 204-208.	4.0	2
40	Axial tensile strain effects on the contact thermal conductance between cross contacted single-walled carbon nanotubes. Journal of Applied Physics, 2017, 121, .	2.5	2
41	Interfacial coupling effects on the thermal conductivity of few-layer graphene. Materials Research Express, 2020, 7, 095602.	1.6	2
42	Nanoscale friction behavior of monolayer MoxW1â^'xS2 alloy. Tribology International, 2022, 166, 107363.	5.9	2
43	Effects of Commensurability on the Friction and Energy Dissipation in Graphene/Graphene Interface. , 2020, , .		2
44	Impact of bonding energy on thermal conductance of metal/graphene/metal interfaces. Materials Research Express, 2019, 6, 085015.	1.6	1
45	Phonon dispersion relations of crystalline solids based on LAMMPS package. Chinese Physics B, 0, , .	1.4	1
46	Interfacial Thermal Conductance Between Carbon Nanotubes From Nonequilibrium Greenâ€™s Function Method. , 2013, , .		1
47	The effect of substrate on the tribological properties of graphene. , 2020, , .		0
48	Twoâ€dimensional oxide based pressure sensors with high sensitivity. Nano Select, 0, , .	3.7	0
49	Anisotropic phonon transport in van der Waals nanostructures. Physics Letters, Section A: General, Atomic and Solid State Physics, 2022, 427, 127920.	2.1	0