Ming Hu

List of Publications by Year
in descending order

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185 papers	7,601 citations	44069 48 h-index	64796 79 g-index
189 all docs	189 docs citations	189 times ranked	6662 citing authors

#	Article	IF	Citations
1	Strong laser polarization control of coherent phonon excitation in van der Waals material Fe3GeTe2. Npj 2D Materials and Applications, 2022, 6, .	7.9	5
2	Large scale dataset of real space electronic charge density of cubic inorganic materials from density functional theory (DFT) calculations. Scientific Data, 2022, 9, 59.	5.3	1
3	Four-Phonon Scattering Effect and Two-Channel Thermal Transport in Two-Dimensional Paraelectric SnSe. ACS Applied Materials & Interfaces, 2022, 14, 11493-11499.	8.0	25
4	Zintl Phase Compounds Mg3Sb2â^'xBix (x = 0, 1, and 2) Monolayers: Electronic, Phonon and Thermoelectric Properties From ab Initio Calculations. Frontiers in Mechanical Engineering, 2022, 8, .	1.8	7
5	Electrically-driven robust tuning of lattice thermal conductivity. Physical Chemistry Chemical Physics, 2022, 24, 17479-17484.	2.8	5
6	Giant Manipulation of Phonon Hydrodynamics in Ferroelectric Bilayer Boron Nitride at Room Temperature and Beyond. ACS Applied Energy Materials, 2022, 5, 8781-8790.	5.1	4
7	Efficiently searching extreme mechanical properties via boundless objective-free exploration and minimal first-principles calculations. Npj Computational Materials, 2022, 8, .	8.7	8
8	Significant Enhancement of Two-Photon Excited Fluorescence in Water-Soluble Triphenylamine-Based All-Organic Compounds. Journal of Physical Chemistry B, 2022, 126, 5513-5522.	2.6	1
9	Perspective on multi-scale simulation of thermal transport in solids and interfaces. Physical Chemistry Chemical Physics, 2021, 23, 1785-1801.	2.8	11
10	Lattice Thermal Conductivity Prediction Using Symbolic Regression and Machine Learning. Journal of Physical Chemistry A, 2021, 125, 435-450.	2.5	32
11	The exceptionally high thermal conductivity after â€˜alloyingâ€™ two-dimensional gallium nitride (GaN) and aluminum nitride (AlN). Nanotechnology, 2021, 32, 135401.	2.6	22
12	Enhanced Two-Photon Absorption in Two Triphenylamine-Based All-Organic Compounds. Journal of Physical Chemistry A, 2021, 125, 1870-1879.	2.5	4
13	Probing the phonon mean free paths in dislocation core by molecular dynamics simulation. Journal of Applied Physics, 2021, 129, .	2.5	9
14	Metavalent bonding induced abnormal phonon transport in diamondlike structures: Beyond conventional theory. Physical Review B, 2021, 103, .	3.2	22
15	Intrinsically low lattice thermal conductivity of monolayer hexagonal aluminum nitride (h-AlN) from first-principles: A comparative study with graphene. International Journal of Thermal Sciences, 2021, 162, 106772.	4.9	23
16	Uniform Strain-Dependent Thermal Conductivity of Pentagonal and Hexagonal Silicene. Frontiers in Materials, 2021, 8, .	2.4	1
17	Electronic charge density as a fast approach for predicting Li-ion migration pathways in superionic conductors with first-principles level precision. Computational Materials Science, 2021, 192, 110380.	3.0	8
18	High-Throughput Computation of New Carbon Allotropes with Diverse Hybridization and Ultrahigh Hardness. Crystals, 2021, 11, 783.	2.2	23

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19	The lattice thermal conductivity in monolayers group-VA: from elements to binary compounds. Materials Research Express, 2021, 8, 075007.	1.6	2
20	Ab Initio Energetic Barriers of Gas Permeation across Nanoporous Graphene. ACS Applied Materials & Interfaces, 2021, 13, 39701-39710.	8.0	4
21	Highâ€Throughput Discovery of Novel Cubic Crystal Materials Using Deep Generative Neural Networks. Advanced Science, 2021, 8, e2100566.	11.2	38
22	Phonon transport anomaly in metavalent bonded materials: contradictory to the conventional theory. Journal of Materials Science, 2021, 56, 18534-18549.	3.7	11
23	Phonon scattering in the complex strain field of a dislocation in PbTe. Journal of Materials Chemistry C, 2021, 9, 8506-8514.	5.5	7
24	Why thermal conductivity of CaO is lower than that of CaS: a study from the perspective of phonon splitting of optical mode. Nanotechnology, 2021, 32, 025709.	2.6	13
25	The intrinsic thermal transport properties of the biphenylene network and the influence of hydrogenation: a first-principles study. Journal of Materials Chemistry C, 2021, 9, 16945-16951.	5.5	26
26	Thermodynamic and Transport Properties of LiF and FLiBe Molten Salts with Deep Learning Potentials. ACS Applied Materials & Interfaces, 2021, 13, 55367-55379.	8.0	37
27	High-throughput computation of novel ternary Bâ€“Câ€“N structures and carbon allotropes with electronic-level insights into superhard materials from machine learning. Journal of Materials Chemistry A, 2021, 9, 27596-27614.	10.3	21
28	Evaluating explorative prediction power of machine learning algorithms for materials discovery using<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mi>k</mml:mi></mml:mrow></mml:math>-fold forward cross-validation. Computational Materials Science, 2020, 171, 109203.	3.0	176
29	BaWO₂F₄: a mixed anion X-ray scintillator with excellent photoluminescence quantum efficiency. Dalton Transactions, 2020, 49, 10734-10739.	3.3	12
30	Spatial density neural network force fields with first-principles level accuracy and application to thermal transport. Physical Review B, 2020, 102, .	3.2	20
31	Electric field tuned anisotropic to isotropic thermal transport transition in monolayer borophene without altering its atomic structure. Nanoscale, 2020, 12, 19178-19190.	5.6	15
32	Predicting Elastic Properties of Materials from Electronic Charge Density Using 3D Deep Convolutional Neural Networks. Journal of Physical Chemistry C, 2020, 124, 17262-17273.	3.1	23
33	Machine Learning based prediction of noncentrosymmetric crystal materials. Computational Materials Science, 2020, 183, 109792.	3.0	18
34	Generative adversarial networks (GAN) based efficient sampling of chemical composition space for inverse design of inorganic materials. Npj Computational Materials, 2020, 6, .	8.7	117
35	Giant effect of spinâ€“lattice coupling on the thermal transport in two-dimensional ferromagnetic CrI₃. Journal of Materials Chemistry C, 2020, 8, 3520-3526.	5.5	31
36	Molecular dynamics simulations of the effect of dislocations on the thermal conductivity of iron. Journal of Applied Physics, 2020, 127, 045106.	2.5	11

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37	Strong electron-phonon coupling induced anomalous phonon transport in ultrahigh temperature ceramics ZrB2 and TiB2. International Journal of Heat and Mass Transfer, 2020, 152, 119481.	4.8	15
38	Thermal transport properties of GaN with biaxial strain and electron-phonon coupling. Journal of Applied Physics, 2020, 127, .	2.5	59
39	Hydrothermal syntheses and crystal structures of molybdenum tellurites. Journal of Solid State Chemistry, 2020, 287, 121317.	2.9	4
40	Fluorideâ€Based Anion Doping: A New Strategy for Improving the Performance of Protonic Ceramic Conductors of the Form BaZrO₃. ChemElectroChem, 2020, 7, 2242-2247.	3.4	11
41	First-principles study of electronic, optical and thermal transport properties of group IIIâ€“VI monolayer MX (Mâ€‰=â€‰Ga, In; Xâ€‰=â€‰S, Se). Journal of Applied Physics, 2019, 125, .	2.5	61
42	A nonlinear hyperelasticity model for single layer blue phosphorus based on ab initio calculations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190149.	2.1	4
43	Strong phonon localization in PbTe with dislocations and large deviation to Matthiessenâ€™s rule. Npj Computational Materials, 2019, 5, .	8.7	29
44	Insight of the thermal conductivity of Ïµ-iron at Earthâ€™s core conditions from the newly developed direct ab initio methodology. Journal of Applied Physics, 2019, 125, .	2.5	5
45	Decoupling thermal and electrical transport in Î±-MgAgSb with synergic pressure and doping strategy. Journal of Applied Physics, 2019, 125, .	2.5	8
46	Exploring T-carbon for energy applications. Nanoscale, 2019, 11, 5798-5806.	5.6	38
47	Ultrahigh thermal conductivity of carbon allotropes with correlations with the scaled Pugh ratio. Journal of Materials Chemistry A, 2019, 7, 6259-6266.	10.3	23
48	First Principles Investigation of Anomalous Pressure-Dependent Thermal Conductivity of Chalcopyrites. Materials, 2019, 12, 3491.	2.9	8
49	Unusual Thermal Boundary Resistance in Halide Perovskites: A Way To Tune Ultralow Thermal Conductivity for Thermoelectrics. ACS Applied Materials & Interfaces, 2019, 11, 47507-47515.	8.0	24
50	On the development of continuum material models for 2D materials from Density Functional Theory data. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900486.	0.2	0
51	Two-dimensional magnetic metalâ€“organic frameworks with the Shastry-Sutherland lattice. Chemical Science, 2019, 10, 10381-10387.	7.4	21
52	Large improvement of thermal transport and mechanical performance of polyvinyl alcohol composites based on interface enhanced by SiO2 nanoparticle-modified-hexagonal boron nitride. Composites Science and Technology, 2019, 169, 167-175.	7.8	80
53	Unexpected anisotropy of (14,14,14)-Graphyne: A comprehensive study on the thermal transport properties of graphyne based nanomaterials. Carbon, 2019, 143, 189-199.	10.3	23
54	A C20 fullerene-based sheet with ultrahigh thermal conductivity. Nanoscale, 2018, 10, 6099-6104.	5.6	12

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55	Lone-Pair Electrons Do Not Necessarily Lead to Low Lattice Thermal Conductivity: An Exception of Two-Dimensional Penta-CN₂. Journal of Physical Chemistry Letters, 2018, 9, 2474-2483.	4.6	38
56	Extremely Low Thermal Conductivity of Polycrystalline Silicene. Journal of Physical Chemistry C, 2018, 122, 9220-9228.	3.1	20
57	Strong anharmonic phonon scattering induced giant reduction of thermal conductivity in PbTe nanotwin boundary. Physical Review B, 2018, 97, .	3.2	34
58	Thermal transport properties of monolayer phosphorene: a mini-review of theoretical studies. Frontiers in Energy, 2018, 12, 87-96.	2.3	6
59	Accelerating evaluation of converged lattice thermal conductivity. Npj Computational Materials, 2018, 4, .	8.7	50
60	Thermal Transport in Phosphorene. Small, 2018, 14, e1702465.	10.0	36
61	Unusual strain response of thermal transport in dimerized three-dimensional graphene. Nanoscale, 2018, 10, 5229-5238.	5.6	22
62	Bond saturation significantly enhances thermal energy transport in two-dimensional pentagonal materials. Nano Energy, 2018, 45, 1-9.	16.0	15
63	Hot-pressing induced alignment of boron nitride in polyurethane for composite films with thermal conductivity over 50â€Wmâ^'1â€Kâ^'1. Composites Science and Technology, 2018, 160, 199-207.	7.8	212
64	Methodology Perspective of Computing Thermal Transport in Low-Dimensional Materials and Nanostructures: The Old and the New. ACS Omega, 2018, 3, 3278-3284.	3.5	11
65	Unconventional thermal transport enhancement with large atom mass: a comparative study of 2D transition dichalcogenides. 2D Materials, 2018, 5, 015022.	4.4	12
66	Accurate quantification of PGE 2 in the polyposis in rat colon (Pirc) model by surrogate analyte-based UPLCâ€“MS/MS. Journal of Pharmaceutical and Biomedical Analysis, 2018, 148, 42-50.	2.8	8
67	Electronâ€“phonon interaction and superconductivity in the high-pressure cI16 phase of lithium from first principles. Physical Chemistry Chemical Physics, 2018, 20, 27125-27130.	2.8	12
68	Thermal transport crossover from crystalline to partial-crystalline partial-liquid state. Nature Communications, 2018, 9, 4712.	12.8	39
69	Hyperelastic material modeling of graphene based on density functional calculations. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800419.	0.2	7
70	Thermoelectric properties of four typical silicon allotropes. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 085006.	2.0	7
71	Anomalous pressure effect on the thermal conductivity of ZnO, GaN, and AlN from first-principles calculations. Physical Review B, 2018, 98, .	3.2	42
72	Two-Channel Thermal Transport in Orderedâ€“Disordered Superionic Ag₂Te and Its Traditionally Contradictory Enhancement by Nanotwin Boundary. Journal of Physical Chemistry Letters, 2018, 9, 5704-5709.	4.6	12

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73	Enormous suppression of phonon transport in silicon nanowires with five-fold twin boundary. Journal of Materials Chemistry A, 2018, 6, 18533-18542.	10.3	16
74	Strong electronâ€“phonon interaction retarding phonon transport in superconducting hydrogen sulfide at high pressures. Physical Chemistry Chemical Physics, 2018, 20, 24222-24226.	2.8	7
75	Lone-pair electrons induced anomalous enhancement of thermal transport in strained planar two-dimensional materials. Nano Energy, 2018, 50, 425-430.	16.0	55
76	Tutorial: Determination of thermal boundary resistance by molecular dynamics simulations. Journal of Applied Physics, 2018, 123, .	2.5	32
77	On the diversity in the thermal transport properties of graphene: A first-principles-benchmark study testing different exchange-correlation functionals. Computational Materials Science, 2018, 151, 153-159.	3.0	34
78	Exploration of exciton behavior in atomically thin WS2 layers by ionic gating. Applied Physics Letters, 2018, 113, .	3.3	4
79	Dependence of phonon transport properties with stacking thickness in layered ZnO. Journal Physics D: Applied Physics, 2018, 51, 315303.	2.8	9
80	Origin of anisotropic negative Poisson's ratio in graphene. Nanoscale, 2018, 10, 10365-10370.	5.6	43
81	Improvement of Thermoelectricity Through Magnetic Interactions in Layered Cr₂Ge₂Te₆. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800172.	2.4	9
82	Doping Induced Abnormal Contraction and Significant Reduction of Lattice Thermal Conductivity of Open Framework Si24. ES Energy & Environments, 2018, , .	1.1	7
83	MOLECULAR DYNAMICS STUDY OF THERMAL RECTIFICATION BASED ON DOMINO EFFECT. , 2018, , .		0
84	Nonmonotonic Diameter Dependence of Thermal Conductivity of Extremely Thin Si Nanowires: Competition between Hydrodynamic Phonon Flow and Boundary Scattering. Nano Letters, 2017, 17, 1269-1276.	9.1	56
85	Analytical study on the size effect of phonon spectral energy density resolution. Computational Materials Science, 2017, 132, 6-9.	3.0	2
86	Thermal transport in novel carbon allotropes with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn> or <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn> hybridization: An ab initio study. Physical Review B, 2017, 95, .	3.2	42
87	Low thermal conductivity of monolayer ZnO and its anomalous temperature dependence. Physical Chemistry Chemical Physics, 2017, 19, 12882-12889.	2.8	55
88	A facile method to prepare flexible boron nitride/poly(vinyl alcohol) composites with enhanced thermal conductivity. Composites Science and Technology, 2017, 149, 41-47.	7.8	170
89	External electric field driving the ultra-low thermal conductivity of silicene. Nanoscale, 2017, 9, 7227-7234.	5.6	69
90	Development of a validated UPLCâ€“MS/MS method for determination of humantenmine in rat plasma and its application in pharmacokinetics and bioavailability studies. Biomedical Chromatography, 2017, 31, e4017.	1.7	13

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91	Full quantification of frequency-dependent interfacial thermal conductance contributed by two- and three-phonon scattering processes from nonequilibrium molecular dynamics simulations. Physical Review B, 2017, 95, .	3.2	75
92	Orbitally driven low thermal conductivity of monolayer gallium nitride (GaN) with planar honeycomb structure: a comparative study. Nanoscale, 2017, 9, 4295-4309.	5.6	155
93	Mechanical behaviors of nanocrystalline Cu/SiC composites: An atomistic investigation. Computational Materials Science, 2017, 129, 129-136.	3.0	25
94	First-principles study of thermal transport in nitrogenated holey graphene. Nanotechnology, 2017, 28, 045709.	2.6	29
95	Molecular Origin of Electric Double-Layer Capacitance at Multilayer Graphene Edges. Journal of Physical Chemistry Letters, 2017, 8, 153-160.	4.6	52
96	Enhanced thermoelectric properties of the AGNRâ€“GYNR heterojunctions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3766-3772.	2.1	13
97	Giant reduction in thermal conductivity of extended type-I silicon clathrates and prominent thermal effect of 6d guest Wyckoff positions. Journal of Materials Chemistry C, 2017, 5, 10578-10588.	5.5	18
98	Sustainable design rating system comparison using a life-cycle methodology. Building and Environment, 2017, 126, 410-421.	6.9	11
99	First-principles and molecular dynamics study of thermoelectric transport properties of N-type silicon-based superlattice-nanocrystalline heterostructures. Journal of Applied Physics, 2017, 122, 085105.	2.5	12
100	The role of phononâ€“phonon and electronâ€“phonon scattering in thermal transport in PdCoO₂. Physical Chemistry Chemical Physics, 2017, 19, 21714-21721.	2.8	14
101	Metric for strong intrinsic fourth-order phonon anharmonicity. Physical Review B, 2017, 95, .	3.2	26
102	Enhanced thermal conductivity of free-standing 3D hierarchical carbon nanotube-graphene hybrid paper. Composites Part A: Applied Science and Manufacturing, 2017, 102, 1-8.	7.6	70
103	Temperature-Induced Large Broadening and Blue Shift in the Electronic Band Structure and Optical Absorption of Methylammonium Lead Iodide Perovskite. Journal of Physical Chemistry Letters, 2017, 8, 3720-3725.	4.6	29
104	An LCâ€“MS/MS method for simultaneous determination of nine steroidal saponins from Paris polyphylla var. in rat plasma and its application to pharmacokinetic study. Journal of Pharmaceutical and Biomedical Analysis, 2017, 145, 675-681.	2.8	15
105	Probing phononâ€“surface interaction by wave-packet simulation: Effect of roughness and morphology. Journal of Applied Physics, 2017, 122, .	2.5	35
106	Anomalously temperature-dependent thermal conductivity of monolayer GaN with large deviations from the traditional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mi>T</mml:mi></mml:math law. Physical Review B, 2017, 95, .	3.2	101
107	Decouple electronic and phononic transport in nanotwinned structures: a new strategy for enhancing the figure-of-merit of thermoelectrics. Nanoscale, 2017, 9, 9987-9996.	5.6	31
108	Unprecedented mechanical response of the lattice thermal conductivity of auxetic carbon crystals. Carbon, 2017, 122, 374-380.	10.3	12

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109	Unravelling the progressive role of rattlers in thermoelectric clathrate and strategies for performance improvement: Concurrently enhancing electronic transport and blocking phononic transport. Applied Physics Letters, 2017, 111, .	3.3	11
110	Spin-dependent Seebeck effects in a graphene superlatticepâ€“njunction with different shapes. Journal of Physics Condensed Matter, 2017, 29, 405303.	1.8	6
111	Two-dimensional silicon. Series in Materials Science and Engineering, 2017, , 43-76.	0.1	0
112	Si nanowires for evolutionary nanotechnology. Series in Materials Science and Engineering, 2017, , 515-536.	0.1	0
113	Bidirectional effect of magnetic field on electronic thermal transport of metals from all-electron first-principles calculations. Physical Review B, 2016, 94, .	3.2	6
114	Tailoring thermal conductivity of AlN films by periodically aligned surface nano-grooves. Applied Physics Letters, 2016, 109, 133107.	3.3	2
115	Nontrivial contribution of FrÃ¶hlich electron-phonon interaction to lattice thermal conductivity of wurtzite GaN. Applied Physics Letters, 2016, 109, .	3.3	53
116	Strong Surface Orientation Dependent Thermal Transport in Si Nanowires. Scientific Reports, 2016, 6, 24903.	3.3	20
117	Disparate Strain Dependent Thermal Conductivity of Two-dimensional Penta-Structures. Nano Letters, 2016, 16, 3831-3842.	9.1	183
118	Strain-modulated electronic and thermal transport properties of two-dimensional O-silica. Nanotechnology, 2016, 27, 265706.	2.6	18
119	Diverse anisotropy of phonon transport in two-dimensional group IVâ€“VI compounds: A comparative study. Nanoscale, 2016, 8, 11306-11319.	5.6	234
120	Surface Chemical Tuning of Phonon and Electron Transport in Free-Standing Silicon Nanowire Arrays. Nano Letters, 2016, 16, 6364-6370.	9.1	16
121	Record Low Thermal Conductivity of Polycrystalline Si Nanowire: Breaking the Casimir Limit by Severe Suppression of Propagons. Nano Letters, 2016, 16, 6178-6187.	9.1	59
122	Insight into the collective vibrational modes driving ultralow thermal conductivity of perovskite solar cells. Physical Review B, 2016, 94, .	3.2	52
123	Methodology for determining the electronic thermal conductivity of metals via direct nonequilibriumab initiomolecular dynamics. Physical Review B, 2016, 94, .	3.2	17
124	Phonon transport in the ground state of two-dimensional silicon and germanium. RSC Advances, 2016, 6, 69956-69965.	3.6	20
125	Large tunability of lattice thermal conductivity of monolayer silicene via mechanical strain. Physical Review B, 2016, 93, .	3.2	166
126	Robustly Engineering Thermal Conductivity of Bilayer Graphene by Interlayer Bonding. Scientific Reports, 2016, 6, 22011.	3.3	27

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127	Resonant bonding driven giant phonon anharmonicity and low thermal conductivity of phosphorene. Physical Review B, 2016, 94, .	3.2	114
128	Thermal boundary conductance enhancement using experimentally achievable nanostructured interfaces â€“ analytical study combined with molecular dynamics simulation. Physical Chemistry Chemical Physics, 2016, 18, 16794-16801.	2.8	23
129	Boundary scattering effect on the thermal conductivity of nanowires. Semiconductor Science and Technology, 2016, 31, 074004.	2.0	8
130	On the Mechanism of Hydrophilicity of Graphene. Nano Letters, 2016, 16, 4447-4453.	9.1	148
131	Anisotropic thermal transport in Weyl semimetal TaAs: a first principles calculation. Physical Chemistry Chemical Physics, 2016, 18, 16709-16714.	2.8	36
132	An excellent candidate for largely reducing interfacial thermal resistance: a nano-confined mass graded interface. Nanoscale, 2016, 8, 1994-2002.	5.6	59
133	The typical manners of dynamic crack propagation along the metal/ceramics interfaces: A molecular dynamics study. Computational Materials Science, 2016, 112, 27-33.	3.0	26
134	Low thermal conductivity of graphyne nanotubes from molecular dynamics study. Physical Review B, 2015, 91, .	3.2	65
135	Quantitatively analyzing phonon spectral contribution of thermal conductivity based on nonequilibrium molecular dynamics simulations. I. From space Fourier transform. Physical Review B, 2015, 92, .	3.2	62
136	Quantitatively analyzing phonon spectral contribution of thermal conductivity based on nonequilibrium molecular dynamics simulations. II. From time Fourier transform. Physical Review B, 2015, 92, .	3.2	37
137	Competing mechanism driving diverse pressure dependence of thermal conductivity of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>X</mml:mi><mml:mtext>Te</mml:mtext></mml:math><mml:math		

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145	The unexpected non-monotonic inter-layer bonding dependence of the thermal conductivity of bilayered boron nitride. Nanoscale, 2015, 7, 7143-7150.	5.6	24
146	On the origin of abnormal phonon transport of graphyne. International Journal of Heat and Mass Transfer, 2015, 85, 880-889.	4.8	27
147	First-principles study on lattice thermal conductivity of thermoelectrics HgTe in different phases. Journal of Applied Physics, 2015, 117, .	2.5	16
148	Mechanics of nanoscale wrinkling of graphene on a non-developable surface. Carbon, 2015, 84, 263-271.	10.3	40
149	Enhancement of interfacial thermal transport by carbon nanotube-graphene junction. Journal of Applied Physics, 2014, 115, .	2.5	40
150	Thermal conductivity of silicene from first-principles. Applied Physics Letters, 2014, 104, .	3.3	155
151	Thermal conductivity of silicene calculated using an optimized Stillinger-Weber potential. Physical Review B, 2014, 89, .	3.2	213
152	Thermal transport and thermoelectric properties of beta-graphyne nanostructures. Nanotechnology, 2014, 25, 245401.	2.6	51
153	Graphene mediated thermal resistance reduction at strongly coupled interfaces. International Journal of Heat and Mass Transfer, 2013, 62, 205-213.	4.8	57
154	Thermal conductivity of hybrid graphene/silicon heterostructures. Journal of Applied Physics, 2013, 114, .	2.5	25
155	Anomalous thermal response of silicene to uniaxial stretching. Physical Review B, 2013, 87, .	3.2	179
156	Thermal rectification at silicon/horizontally aligned carbon nanotube interfaces. Journal of Applied Physics, 2013, 113, 194307.	2.5	51
157	Enhancement of Interfacial Thermal Transport by Carbon Nanotube-Graphene Junction. , 2013, , .		0
158	Schemes for and Mechanisms of Reduction in Thermal Conductivity in Nanostructured Thermoelectrics. Journal of Heat Transfer, 2012, 134, .	2.1	24
159	A Low-Frequency Wave Motion Mechanism Enables Efficient Energy Transport in Carbon Nanotubes at High Heat Fluxes. Nano Letters, 2012, 12, 3410-3416.	9.1	47
160	Si/Ge Superlattice Nanowires with Ultralow Thermal Conductivity. Nano Letters, 2012, 12, 5487-5494.	9.1	194
161	Significant Reduction of Thermal Conductivity in Si/Ge Coreâ^'Shell Nanowires. Nano Letters, 2011, 11, 618-623.	9.1	205
162	Thermal conductivity reduction in core-shell nanowires. Physical Review B, 2011, 84, .	3.2	92

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163	Large â€œnear junctionâ€•thermal resistance reduction in electronics by interface nanoengineering. International Journal of Heat and Mass Transfer, 2011, 54, 5183-5183.	4.8	32
164	Interfacial mixing during annealing of zinc oxide nanoparticle junctions. Applied Physics Letters, 2011, 98, .	3.3	9
165	Surface Functionalization Mechanisms of Enhancing Heat Transfer at Solid-Liquid Interfaces. Journal of Heat Transfer, 2011, 133, .	2.1	55
166	Surface Functionalization Mechanisms of Enhancing Heat Transfer at Solid-Liquid Interfaces. , 2010, , .		0
167	Phonon interference at self-assembled monolayer interfaces: Molecular dynamics simulations. Physical Review B, 2010, 81, .	3.2	79
168	Recrystallization of picosecond laser-melted ZnO nanoparticles in a liquid: A molecular dynamics study. Journal of Chemical Physics, 2010, 132, 164504.	3.0	23
169	Surface segregation of bimetallic alloys in nanoscale confinement. Applied Physics Letters, 2010, 97, .	3.3	8
170	Water Nanoconfinement Induced Thermal Enhancement at Hydrophilic Quartz Interfaces. Nano Letters, 2010, 10, 279-285.	9.1	76
171	Thermal rectification at water/functionalized silica interfaces. Applied Physics Letters, 2009, 95, .	3.3	65
172	Kapitza conductance of siliconâ€“amorphous polyethylene interfaces by molecular dynamics simulations. Physical Review B, 2009, 79, .	3.2	165
173	Molecular/cluster statistical thermodynamics methods to simulate quasi-static deformations at finite temperature. International Journal of Solids and Structures, 2008, 45, 3918-3933.	2.7	17
174	Interfacial thermal conductance between silicon and a vertical carbon nanotube. Journal of Applied Physics, 2008, 104, .	2.5	103
175	Thermal rectification at silicon-amorphous polyethylene interface. Applied Physics Letters, 2008, 92, 211908.	3.3	88
176	Air flow through carbon nanotube arrays. Applied Physics Letters, 2007, 91, 131905.	3.3	8
177	Molecular Dynamics Simulation of Thermal Conductivity of Diamondoid Crystals. Materials Research Society Symposia Proceedings, 2007, 1022, 1.	0.1	0
178	Thermal energy exchange between carbon nanotube and air. Applied Physics Letters, 2007, 90, 231905.	3.3	29
179	Molecular dynamics simulation of interfacial thermal conductance between silicon and amorphous polyethylene. Applied Physics Letters, 2007, 91, .	3.3	71
180	Multi-scale analysis of AFM tip and surface interactions. Chemical Engineering Science, 2007, 62, 3589-3594.	3.8	7

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181	Cluster Statistical Thermodynamics (CST) â€" To Efficiently Calculate Quasi-Static Deformation at Finite Temperature Based on Molecular Potential. , 2007, , 163-170.		4
182	Equivalency and Locality in Nano-scale Measurement. International Journal of Nonlinear Sciences and Numerical Simulation, 2005, 6, .	1.0	0
183	Nonlocality Effect in Atomic Force Microscopy Measurement and Its Reduction by an Approaching Method. Journal of Engineering Materials and Technology, Transactions of the ASME, 2005, 127, 444-450.	1.4	1
184	Diverse Thermal Transport Properties of Two-Dimensional Materials: A Comparative Review. , 0, , .		2
185	Activated Lone-Pair Electrons Lead to Low Lattice Thermal Conductivity: A Case Study of Boron Arsenide. SSRN Electronic Journal, 0, , .	0.4	0