Ronggui Yang

List of Publications by Year
in descending order

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243 papers	25,526 citations	8181 76 h-index	6836 155 g-index
251 all docs	251 docs citations	251 times ranked	21209 citing authors

#	Article	IF	Citations
1	Experimental study on a hybrid solar photothermic and radiative cooling collector equipped with a rotatable absorber/emitter plate. Applied Energy, 2022, 306, 118096.	10.1	20
2	Significant suppression of phonon transport in polar semiconductors owing to electron-phonon-induced dipole coupling: An effect of breaking centrosymmetry. Materials Today Physics, 2022, 22, 100598.	6.0	5
3	Passive sub-ambient cooling: radiative cooling versus evaporative cooling. Applied Thermal Engineering, 2022, 202, 117909.	6.0	27
4	Performance evaluation of radiative cooling for commercial-scale warehouse. Materials Today Energy, 2022, 24, 100927.	4.7	13
5	Liquid film boiling enabled ultra-high conductance and high flux heat spreaders. Cell Reports Physical Science, 2022, 3, 100746.	5.6	5
6	Effects of electron-phonon intervalley scattering and band non-parabolicity on electron transport properties of high-temperature phase SnSe: An ab initio study. Materials Today Physics, 2022, 22, 100592.	6.0	5
7	Next-generation thermoelectric cooling modules based on high-performance Mg3(Bi,Sb)2 material. Joule, 2022, 6, 193-204.	24.0	89
8	Confinement effect on thermopower of electrolytes. Materials Today Physics, 2022, 23, 100627.	6.0	4
9	A novel thermal comfort and energy saving evaluation model for radiative cooling and heating textiles. Energy and Buildings, 2022, 258, 111842.	6.7	13
10	Radiative cooling and cold storage for concentrated solar power plants. Energy Storage and Saving, 2022, 1, 93-101.	7.5	4
11	Solid particle solar receivers in the nextâ€generation concentrated solar power plant. EcoMat, 2022, 4, .	11.9	14
12	A new spatial-domain thermoreflectance method to measure a broad range of anisotropic in-plane thermal conductivity. International Journal of Heat and Mass Transfer, 2022, 191, 122849.	4.8	8
13	Spectral decoupling of cooperative emissivity in silica-polymer metamaterials for radiative cooling. Optics Letters, 2022, 47, 2506.	3.3	4
14	Dynamic glazing with switchable solar reflectance for radiative cooling and solar heating. Cell Reports Physical Science, 2022, 3, 100853.	5.6	26
15	Theoretical analysis of bubble nucleation in liquid film boiling. International Journal of Heat and Mass Transfer, 2022, 192, 122911.	4.8	7
16	On-Demand Solar and Thermal Radiation Management Based on Switchable Interwoven Surfaces. ACS Energy Letters, 2022, 7, 1758-1763.	17.4	39
17	Iridescent Daytime Radiative Cooling with No Absorption Peaks in the Visible Range. Small, 2022, 18, e2202400.	10.0	42
18	A general <scp>Whiteâ€“Box</scp> strategy for designing thermoelectric cooling system. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	6

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19	Sustainable anti-frosting surface for efficient thermal transport. Cell Reports Physical Science, 2022, 3, 100937.	5.6	6
20	Colored radiative cooling coatings using phosphor dyes. Materials Today Nano, 2022, 19, 100239.	4.6	15
21	High-performance wearable thermoelectric generator with self-healing, recycling, and Lego-like reconfiguring capabilities. Science Advances, 2021, 7, .	10.3	189
22	Harnessing Reversible Wetting Transition to Sweep Contaminated Superhydrophobic Surfaces. Langmuir, 2021, 37, 3929-3938.	3.5	12
23	Radiative sky cooling potential maps of China based on atmospheric spectral emissivity. Solar Energy, 2021, 218, 195-210.	6.1	39
24	Dynamically adaptive window design with thermo-responsive hydrogel for energy efficiency. Applied Energy, 2021, 287, 116573.	10.1	34
25	Energy saving analysis of a transparent radiative cooling film for buildings with roof glazing. Energy and Built Environment, 2021, 2, 214-222.	5.9	50
26	Improving cabin thermal environment of parked vehicles under direct sunlight using a daytime radiative cooling cover. Applied Thermal Engineering, 2021, 190, 116776.	6.0	21
27	Increasing greenhouse production by spectral-shifting and unidirectional light-extracting photonics. Nature Food, 2021, 2, 434-441.	14.0	40
28	Thermal conductance of nanostructured interfaces from Monte Carlo simulations with ab initio-based phonon properties. Journal of Applied Physics, 2021, 129, .	2.5	4
29	Coupling droplets/bubbles with a liquid film for enhancing phase-change heat transfer. IScience, 2021, 24, 102531.	4.1	8
30	Machine learning-based data processing technique for time-domain thermoreflectance (TDTR) measurements. Journal of Applied Physics, 2021, 130, .	2.5	10
31	A CPFD simulation on the particle flow characteristics in a packed moving bed solar receiver with an added insert. Solar Energy, 2021, 224, 1144-1159.	6.1	11
32	Machine learning for predicting thermal transport properties of solids. Materials Science and Engineering Reports, 2021, 146, 100642.	31.8	36
33	Reduction of water consumption in thermal power plants with radiative sky cooling. Applied Energy, 2021, 302, 117515.	10.1	21
34	Thermochromic smart windows with highly regulated radiative cooling and solar transmission. Nano Energy, 2021, 89, 106440.	16.0	126
35	Global Radiative Sky Cooling Potential Adjusted for Population Density and Cooling Demand. Atmosphere, 2021, 12, 1379.	2.3	13
36	Electrostatic interaction determines thermal conductivity anisotropy of Bi2O2Se. Cell Reports Physical Science, 2021, 2, 100624.	5.6	8

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37	Bilayer structured coating for radiative cooling applications. Journal of Photonics for Energy, 2021, 11, .	1.3	0
38	Scalable thermochromic smart windows with passive radiative cooling regulation. Science, 2021, 374, 1501-1504.	12.6	339
39	A novel technique to enhance thermal performance of a thermoelectric cooler using phase-change materials. Journal of Thermal Analysis and Calorimetry, 2020, 140, 1003-1014.	3.6	34
40	Radiative sky cooling-assisted thermoelectric cooling system for building applications. Energy, 2020, 190, 116322.	8.8	66
41	A Clear, Strong, and Thermally Insulated Transparent Wood for Energy Efficient Windows. Advanced Functional Materials, 2020, 30, 1907511.	14.9	124
42	An Energyâ€Efficient, Woodâ€Derived Structural Material Enabled by Pore Structure Engineering towards Building Efficiency. Small Methods, 2020, 4, 1900747.	8.6	53
43	Nano Heat Pump Based on Reverse Thermo-osmosis Effect. Journal of Physical Chemistry Letters, 2020, 11, 9856-9861.	4.6	8
44	Thermoelectric air conditioning undergarment for personal thermal management and HVAC energy saving. Energy and Buildings, 2020, 226, 110374.	6.7	59
45	Terrestrial radiative cooling: Using the cold universe as a renewable and sustainable energy source. Science, 2020, 370, 786-791.	12.6	370
46	Optically-switchable thermally-insulating VO2-aerogel hybrid film for window retrofits. Applied Energy, 2020, 278, 115663.	10.1	30
47	Performance of an integrated greenhouse equipped with Light-Splitting material and an HDH desalination unit. Energy Conversion and Management: X, 2020, 7, 100045.	1.6	2
48	Utilization of size-tunable hollow silica nanospheres for building thermal insulation applications. Journal of Building Engineering, 2020, 31, 101336.	3.4	8
49	Thermal Conductivity during Phase Transitions. Advanced Materials, 2019, 31, e1806518.	21.0	80
50	Nanomechanics of graphene. National Science Review, 2019, 6, 324-348.	9.5	75
51	Passive cooling in an urban setting. Nature Sustainability, 2019, 2, 663-664.	23.7	16
52	Hydrophobic nanostructured wood membrane for thermally efficient distillation. Science Advances, 2019, 5, eaaw3203.	10.3	81
53	Selection of polymers with functional groups for daytime radiative cooling. Materials Today Physics, 2019, 10, 100127.	6.0	113
54	Reduced-scale hot box method for thermal characterization of window insulation materials. Applied Thermal Engineering, 2019, 160, 114026.	6.0	21

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55	Roof-integrated radiative air-cooling system to achieve cooler attic for building energy saving. Energy and Buildings, 2019, 203, 109453.	6.7	67
56	Thermal conductivity modeling using machine learning potentials: application to crystalline and amorphous silicon. Materials Today Physics, 2019, 10, 100140.	6.0	48
57	The linear-dependence of adhesion strength and adhesion range on temperature in soft membranes. Journal of the Mechanics and Physics of Solids, 2019, 132, 103697.	4.8	17
58	Performance evaluation of a metamaterial-based new cool roof using improved Roof Thermal Transfer Value model. Applied Energy, 2019, 248, 589-599.	10.1	69
59	Falling-droplet-enhanced filmwise condensation in the presence of non-condensable gas. International Journal of Heat and Mass Transfer, 2019, 140, 173-186.	4.8	28
60	A radiative cooling structural material. Science, 2019, 364, 760-763.	12.6	856
61	Radiative sky cooling: Fundamental principles, materials, and applications. Applied Physics Reviews, 2019, 6, .	11.3	442
62	Diffused Lattice Vibration and Ultralow Thermal Conductivity in the Binary Lnâ€“Nbâ€“O Oxide System. Advanced Materials, 2019, 31, e1808222.	21.0	49
63	Cellulose ionic conductors with high differential thermal voltage for low-grade heat harvesting. Nature Materials, 2019, 18, 608-613.	27.5	343
64	A kW-scale, 24-hour continuously operational, radiative sky cooling system: Experimental demonstration and predictive modeling. Energy Conversion and Management, 2019, 186, 586-596.	9.2	86
65	Subambient Cooling of Water: Toward Real-World Applications of Daytime Radiative Cooling. Joule, 2019, 3, 111-123.	24.0	334
66	Scalable and Highly Efficient Mesoporous Woodâ€Based Solar Steam Generation Device: Localized Heat, Rapid Water Transport. Advanced Functional Materials, 2018, 28, 1707134.	14.9	366
67	Thermal conductivity model for nanofiber networks. Journal of Applied Physics, 2018, 123, .	2.5	45
68	Personal thermal management using portable thermoelectrics for potential building energy saving. Applied Energy, 2018, 218, 282-291.	10.1	100
69	Anisotropic, lightweight, strong, and super thermally insulating nanowood with naturally aligned nanocellulose. Science Advances, 2018, 4, eaar3724.	10.3	336
70	Three-Dimensional Superhydrophobic Nanowire Networks for Enhancing Condensation Heat Transfer. Joule, 2018, 2, 269-279.	24.0	190
71	Highly efficient solar vapour generation via hierarchically nanostructured gels. Nature Nanotechnology, 2018, 13, 489-495.	31.5	1,356
72	Flexible transparent aerogels as window retrofitting films and optical elements with tunable birefringence. Nano Energy, 2018, 48, 266-274.	16.0	63

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73	Thermal conductivity model for nanoporous thin films. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 277-281.	2.7	17
74	Lightweight, Mesoporous, and Highly Absorptive All-Nanofiber Aerogel for Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2018, 10, 1104-1112.	8.0	327
75	Highâ€Performance Solar Steam Device with Layered Channels: Artificial Tree with a Reversed Design. Advanced Energy Materials, 2018, 8, 1701616.	19.5	255
76	High temperature thermal management with boron nitride nanosheets. Nanoscale, 2018, 10, 167-173.	5.6	48
77	Colloquium: Phononic thermal properties of two-dimensional materials. Reviews of Modern Physics, 2018, 90, .	45.6	238
78	A new elliptical-beam method based on time-domain thermoreflectance (TDTR) to measure the in-plane anisotropic thermal conductivity and its comparison with the beam-offset method. Review of Scientific Instruments, 2018, 89, 094902.	1.3	30
79	Tutorial: Time-domain thermoreflectance (TDTR) for thermal property characterization of bulk and thin film materials. Journal of Applied Physics, 2018, 124, .	2.5	197
80	Temperature effect on the phonon dispersion stability of zirconium by machine learning driven atomistic simulations. Physical Review B, 2018, 98, .	3.2	39
81	Three-dimensional anisotropic thermal conductivity tensor of single crystalline Î²-Ga2O3. Applied Physics Letters, 2018, 113, .	3.3	84
82	Liquid-Vapor Phase-Change Heat Transfer on Functionalized Nanowired Surfaces and Beyond. Joule, 2018, 2, 2307-2347.	24.0	164
83	Sustaining enhanced condensation on hierarchical mesh-covered surfaces. National Science Review, 2018, 5, 878-887.	9.5	51
84	Energy saving and economic analysis of a new hybrid radiative cooling system for single-family houses in the USA. Applied Energy, 2018, 224, 371-381.	10.1	112
85	Thermal resistance matching for thermoelectric cooling systems. Energy Conversion and Management, 2018, 169, 186-193.	9.2	48
86	Capillary-driven liquid film boiling heat transfer on hybrid mesh wicking structures. Nano Energy, 2018, 51, 373-382.	16.0	108
87	Electronic band structure of carbon honeycombs. Materials Today Physics, 2018, 5, 72-77.	6.0	5
88	Thermal conductivity of polymers and polymer nanocomposites. Materials Science and Engineering Reports, 2018, 132, 1-22.	31.8	551
89	Micromesh-Enabled Low-Cost Thermal Ground Planes for High Heat Flux Power Electronics. , 2018, , .		1
90	Anisotropic thermal transport in van der Waals layered alloys WSe2(1-x)Te2x. Applied Physics Letters, 2018, 112, .	3.3	32

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91	Anisotropic thermal transport in bulk hexagonal boron nitride. Physical Review Materials, 2018, 2, .	2.4	73
92	Hydrophobic copper nanowires for enhancing condensation heat transfer. Nano Energy, 2017, 33, 177-183.	16.0	181
93	Flexible Thermal Ground Planes Fabricated With Printed Circuit Board Technology. Journal of Electronic Packaging, Transactions of the ASME, 2017, 139, .	1.8	22
94	Modified pulse operation of thermoelectric coolers for building cooling applications. Energy Conversion and Management, 2017, 140, 145-156.	9.2	61
95	Scalable-manufactured randomized glass-polymer hybrid metamaterial for daytime radiative cooling. Science, 2017, 355, 1062-1066.	12.6	1,432
96	On the influence of junction structures on the mechanical and thermal properties of carbon honeycombs. Carbon, 2017, 119, 278-286.	10.3	56
97	Bottom-up Design of Three-Dimensional Carbon-Honeycomb with Superb Specific Strength and High Thermal Conductivity. Nano Letters, 2017, 17, 179-185.	9.1	95
98	Enhanced bubble nucleation and liquid rewetting for highly efficient boiling heat transfer on two-level hierarchical surfaces with patterned copper nanowire arrays. Nano Energy, 2017, 38, 59-65.	16.0	174
99	Wetting Transition of Condensed Droplets on Nanostructured Superhydrophobic Surfaces: Coordination of Surface Properties and Condensing Conditions. ACS Applied Materials & Interfaces, 2017, 9, 13770-13777.	8.0	116
100	Thermal conductivity modeling of hybrid organic-inorganic crystals and superlattices. Nano Energy, 2017, 41, 394-407.	16.0	32
101	Development of a single-phase thermosiphon for cold collection and storage of radiative cooling. Applied Energy, 2017, 205, 1260-1269.	10.1	47
102	Ultrahigh thermoelectric power factor in flexible hybrid inorganic-organic superlattice. Nature Communications, 2017, 8, 1024.	12.8	136
103	Modelling study of the low-pump-power demand constructal T-shaped pipe network for a large scale radiative cooled-cold storage system. Applied Thermal Engineering, 2017, 127, 1564-1573.	6.0	22
104	Probing Anisotropic Thermal Conductivity of Transition Metal Dichalcogenides MX₂ (M =) Tj ETQq0 0 0 rgBT /Overlock 10 T	21.6	163
105	Time-domain thermoreflectance (TDTR) measurements of anisotropic thermal conductivity using a variable spot size approach. Review of Scientific Instruments, 2017, 88, 074901.	1.3	101
106	Hierarchical Superhydrophobic Surfaces with Micropatterned Nanowire Arrays for High-Efficiency Jumping Droplet Condensation. ACS Applied Materials & Interfaces, 2017, 9, 44911-44921.	8.0	115
107	Effect of filler loading, geometry, dispersion and temperature on thermal conductivity of polymer nanocomposites. Polymer Testing, 2017, 57, 101-106.	4.8	126
108	Temperature Dependence of Anisotropic Thermalâ€Conductivity Tensor of Bulk Black Phosphorus. Advanced Materials, 2017, 29, 1603297.	21.0	89

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109	Anisotropic thermal conductivity of 4H and 6H silicon carbide measured using time-domain thermoreflectance. Materials Today Physics, 2017, 3, 70-75.	6.0	91
110	Micromesh-covered superhydrophobic surfaces for efficient condensation heat transfer. , 2017, , .		1
111	Thermoelectric Transport in Nanocomposites. Materials, 2017, 10, 418.	2.9	27
112	Large Scale Random Metamaterial for Effective Day-time Radiative Cooling. , 2017, , .		2
113	Large-scale Day-time Radiative Cooling Metafilm. , 2017, , .		0
114	Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus. Advanced Electronic Materials, 2016, 2, 1600040.	5.1	85
115	Super-stretchable borophene. Europhysics Letters, 2016, 116, 36001.	2.0	22
116	Lattice thermal conductivity of organic-inorganic hybrid perovskite CH3NH3PbI3. Applied Physics Letters, 2016, 108, .	3.3	97
117	Layer thickness-dependent phonon properties and thermal conductivity of MoS2. Journal of Applied Physics, 2016, 119, .	2.5	136
118	Measurement Techniques for Thermal Conductivity and Interfacial Thermal Conductance of Bulk and Thin Film Materials. Journal of Electronic Packaging, Transactions of the ASME, 2016, 138, .	1.8	328
119	Optimized Silicon Electrode Architecture, Interface, and Microgeometry for Nextâ€Generation Lithiumâ€Ion Batteries. Advanced Materials, 2016, 28, 188-193.	21.0	37
120	Development of Ultra-Thin Thermal Ground Planes by Using Stainless-Steel Mesh as Wicking Structure. Journal of Microelectromechanical Systems, 2016, 25, 842-844.	2.5	38
121	Phonon transport in single-layerMo1â^'xWxS2alloy embedded withWS2nanodomains. Physical Review B, 2016, 94, .	3.2	18
122	Interfacial thermal conductance across metal-insulator/semiconductor interfaces due to surface states. Physical Review B, 2016, 93, .	3.2	23
123	Atomic Layer Deposited Coatings on Nanowires for High Temperature Water Corrosion Protection. ACS Applied Materials & Interfaces, 2016, 8, 32616-32623.	8.0	6
124	Hybrid radiation modeling for multi-phase solar-thermal reactor systems operated at high-temperature. Solar Energy, 2016, 140, 130-140.	6.1	12
125	Anisotropic Tuning of Graphite Thermal Conductivity by Lithium Intercalation. Journal of Physical Chemistry Letters, 2016, 7, 4744-4750.	4.6	69
126	Black Phosphorus: Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus (Adv. Electron. Mater. 5/2016). Advanced Electronic Materials, 2016, 2, .	5.1	4

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127	PHONON TRANSPORT AND THERMAL CONDUCTIVITY IN TWO-DIMENSIONAL MATERIALS. Annual Review of Heat Transfer, 2016, 19, 1-65.	1.0	57
128	ZT > 0.1 Electronâ€Carrying Polymer Thermoelectric Composites with In Situ SnCl₂ Microstructure Growth. Advanced Science, 2015, 2, 1500015.	11.2	22
129	Phonon transmission across<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mg</mml:mi><mml:mn>2</mml:mn></m A first-principles-based atomistic Green's function study. Physical Review B, 2015, 91, .	3.2	16
130	An electrohydrodynamics model for non-equilibrium electron and phonon transport in metal films after ultra-short pulse laser heating. European Physical Journal B, 2015, 88, 1.	1.5	7
131	Microfabricated ultra-thin all-polymer thermal ground planes. Science Bulletin, 2015, 60, 701-706.	9.0	50
132	Anisotropic Thermal Transport in Organicâ€“Inorganic Hybrid Crystal Î²-ZnTe(en)0.5. Journal of Physical Chemistry C, 2015, 119, 28300-28308.	3.1	16
133	Effect of a metallic coating on the thermal conductivity of carbon nanofiberâ€“dielectric matrix composites. Composites Science and Technology, 2015, 109, 18-24.	7.8	9
134	First-principles prediction of phononic thermal conductivity of silicene: A comparison with graphene. Journal of Applied Physics, 2015, 117, .	2.5	204
135	Bubble dynamics and nucleate pool boiling heat transfer on microporous copper surfaces. International Journal of Heat and Mass Transfer, 2015, 89, 1297-1315.	4.8	112
136	Mechanical and thermal properties of nanomaterials at sub-50nm dimensions characterized using coherent EUV beams. , 2015, , .		0
137	A new regime of nanoscale thermal transport: Collective diffusion increases dissipation efficiency. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4846-4851.	7.1	170
138	Flexible n-type thermoelectric materials by organic intercalation of layered transition metalÂdichalcogenide TiS2. Nature Materials, 2015, 14, 622-627.	27.5	612
139	Capillary rupture of suspended polymer concentric rings. Soft Matter, 2015, 11, 7264-7269.	2.7	9
140	Using atomic layer deposited tungsten to increase thermal conductivity of a packed bed. Applied Physics Letters, 2015, 106, 153102.	3.3	6
141	Dielectric Mismatch Mediates Carrier Mobility in Organic-Intercalated Layered TiS₂. Nano Letters, 2015, 15, 6302-6308.	9.1	62
142	Steady state and modulated heat conduction in layered systems predicted by the analytical solution of the phonon Boltzmann transport equation. Journal of Applied Physics, 2015, 118, .	2.5	26
143	Thin Flexible Thermal Ground Planes: Fabrication and Scaling Characterization. Journal of Microelectromechanical Systems, 2015, 24, 2040-2048.	2.5	54
144	A three-dimensional carbon nano-network for high performance lithium ion batteries. Nano Energy, 2015, 11, 500-509.	16.0	48

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145	A New Regime of Nanoscale Thermal Transport: Collective Diffusion Counteracts Dissipation Inefficiency. Springer Proceedings in Physics, 2015, , 341-344.	0.2	3
146	Inhomogeneous thermal conductivity enhances thermoelectric cooling. AIP Advances, 2014, 4, .	1.3	10
147	Ballistic thermoelectric transport in structured nanowires. New Journal of Physics, 2014, 16, 065018.	2.9	20
148	Biphilic nanoporous surfaces enabled exceptional drag reduction and capillary evaporation enhancement. Applied Physics Letters, 2014, 105, .	3.3	25
149	Size effect on the thermal conductivity of ultrathin polystyrene films. Applied Physics Letters, 2014, 104, 153110.	3.3	43
150	Phonon transport in single-layer transition metal dichalcogenides: A first-principles study. Applied Physics Letters, 2014, 105, .	3.3	309
151	Stable planar single-layer hexagonal silicene under tensile strain and its anomalous Poisson's ratio. Applied Physics Letters, 2014, 104, 081902.	3.3	49
152	Effect of flow rate and subcooling on spray heat transfer on microporous copper surfaces. International Journal of Heat and Mass Transfer, 2014, 69, 493-505.	4.8	38
153	Thermal Conductivity of Particulate Nanocomposites. Lecture Notes in Nanoscale Science and Technology, 2014, , 93-139.	0.8	6
154	A New Regime of Nanoscale Thermal Transport: Collective Diffusion Counteracts Dissipation Inefficiency. , 2014, , .		0
155	Remarkable thermal conductivity reduction in metal-semiconductor nanocomposites. Applied Physics Letters, 2013, 103, .	3.3	8
156	Ultralow Thermal Conductivity of Atomic/Molecular Layer-Deposited Hybrid Organicâ€“Inorganic Zincone Thin Films. Nano Letters, 2013, 13, 5594-5599.	9.1	94
157	Mechanics and Mechanically Tunable Band Gap in Single-Layer Hexagonal Boron-Nitride. Materials Research Letters, 2013, 1, 200-206.	8.7	141
158	A crowding factor model for the thermal conductivity of particulate composites at non-dilute limit. Journal of Applied Physics, 2013, 114, .	2.5	25
159	Micromembrane-enhanced capillary evaporation. International Journal of Heat and Mass Transfer, 2013, 64, 1101-1108.	4.8	95
160	From 1D Chain to 3D Network: A New Family of Inorganicâ€“Organic Hybrid Semiconductors MO₃(L)_x (M = Mo, W; L = Organic Linker) Built on Perovskite-like Structure Modules. Journal of the American Chemical Society, 2013, 135, 17401-17407.	13.7	47
161	Effect of the Electronâ€“Phonon Coupling on the Effective Thermal Conductivity of Metallic Bilayers. International Journal of Thermophysics, 2013, 34, 1817-1827.	2.1	9
162	Binder-free three-dimensional silicon/carbon nanowire networks for high performance lithium-ion battery anodes. Nano Energy, 2013, 2, 943-950.	16.0	47

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163	Bending Rigidity and Gaussian Bending Stiffness of Single-Layered Graphene. Nano Letters, 2013, 13, 26-30.	9.1	299
164	Thermoelectric Transport Across Nanoscale Polymerâ€“Semiconductorâ€“Polymer Junctions. Journal of Physical Chemistry C, 2013, 117, 24716-24725.	3.1	16
165	Simultaneous measurement of thermal conductivity and heat capacity of bulk and thin film materials using frequency-dependent transient thermoreflectance method. Review of Scientific Instruments, 2013, 84, 034902.	1.3	120
166	Flat flexible polymer heat pipes. Journal of Micromechanics and Microengineering, 2013, 23, 015001.	2.6	83
167	Equilibrium molecular dynamics simulations for the thermal conductivity of Si/Ge nanocomposites. Journal of Applied Physics, 2013, 113, .	2.5	18
168	Capillary evaporation on micromembrane-enhanced microchannel wicks with atomic layer deposited silica. Applied Physics Letters, 2013, 103, .	3.3	41
169	Length-dependent thermal conductivity of single extended polymer chains. Physical Review B, 2012, 86, .	3.2	163
170	A model for the effective thermal conductivity of metal-nonmetal particulate composites. Journal of Applied Physics, 2012, 111, .	2.5	23
171	Enhancing Flow Boiling Heat Transfer in Microchannels for Thermal Management with Monolithically-Integrated Silicon Nanowires. Nano Letters, 2012, 12, 3385-3390.	9.1	181
172	Layered Hybrid Selenoantimonates with Reduced Thermal Conductivity. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 2604-2609.	1.2	10
173	Effective Thermal Conductivity of Metalâ€“Dielectric Composites at the Non-dilute Limit. International Journal of Thermophysics, 2012, 33, 2118-2124.	2.1	6
174	Thermal performance of a flat polymer heat pipe heat spreader under high acceleration. Journal of Micromechanics and Microengineering, 2012, 22, 045018.	2.6	53
175	Three-Dimensional Ni/TiO₂ Nanowire Network for High Areal Capacity Lithium Ion Microbattery Applications. Nano Letters, 2012, 12, 655-660.	9.1	225
176	Wafer-scale fabrication of silicon nanowire arrays with controllable dimensions. Applied Surface Science, 2012, 258, 8649-8655.	6.1	29
177	Topology optimization of multi-component flows using a multi-relaxation time lattice Boltzmann method. Computers and Fluids, 2012, 67, 104-114.	2.5	44
178	Size-dependent phonon transmission across dissimilar material interfaces. Journal of Physics Condensed Matter, 2012, 24, 155302.	1.8	25
179	The nature of strength enhancement and weakening by pentagonâ€“heptagon defects inÂgraphene. Nature Materials, 2012, 11, 759-763.	27.5	548
180	Effect of lattice mismatch on phonon transmission and interface thermal conductance across dissimilar material interfaces. Physical Review B, 2012, 86, .	3.2	120

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181	thermoelectric figure of merit in Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Te<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/Sb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow />	3.2	13
182	Generation and control of ultrashort-wavelength two-dimensional surface acoustic waves at nanoscale interfaces. Physical Review B, 2012, 85, .	3.2	47
183	Thermal transport across carbon nanotubes connected by molecular linkers. Carbon, 2012, 50, 1063-1070.	10.3	35
184	Stable high areal capacity lithium-ion battery anodes based on three-dimensional Niâ€“Sn nanowire networks. Journal of Power Sources, 2012, 211, 46-51.	7.8	79
185	Thermoelectric Properties of Molecular Nanowires. Journal of Physical Chemistry C, 2011, 115, 24418-24428.	3.1	61
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