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	New Directions for Low-Dimensional Thermoelectric Materials. Advanced Materials, 2007, 19, 1043-1053.	21.0	3,468
2	Scalable-manufactured randomized glass-polymer hybrid metamaterial for daytime radiative cooling. Science, 2017, 355, 1062-1066.	12.6	1,432
3	Highly efficient solar vapour generation via hierarchically nanostructured gels. Nature Nanotechnology, 2018, 13, 489-495.	31.5	1,356
4	A radiative cooling structural material. Science, 2019, 364, 760-763.	12.6	856
5	Flexible n-type thermoelectric materials by organic intercalation of layered transition metalÂdichalcogenide TiS2. Nature Materials, 2015, 14, 622-627.	27.5	612
6	Thermal conductivity of polymers and polymer nanocomposites. Materials Science and Engineering Reports, 2018, 132, 1-22.	31.8	551
7	The nature of strength enhancement and weakening by pentagonâ€“heptagon defects inÂgraphene. Nature Materials, 2012, 11, 759-763.	27.5	548
8	Radiative sky cooling: Fundamental principles, materials, and applications. Applied Physics Reviews, 2019, 6, .	11.3	442
9	Quasi-ballistic thermal transport from nanoscale interfaces observed using ultrafast coherent soft X-ray beams. Nature Materials, 2010, 9, 26-30.	27.5	378
10	Strain effects on the thermal conductivity of nanostructures. Physical Review B, 2010, 81, .	3.2	375
11	Terrestrial radiative cooling: Using the cold universe as a renewable and sustainable energy source. Science, 2020, 370, 786-791.	12.6	370
12	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
13	Cellulose ionic conductors with high differential thermal voltage for low-grade heat harvesting. Nature Materials, 2019, 18, 608-613.	27.5	343
14	Scalable thermochromic smart windows with passive radiative cooling regulation. Science, 2021, 374, 1501-1504.	12.6	339
15	Anisotropic, lightweight, strong, and super thermally insulating nanowood with naturally aligned nanocellulose. Science Advances, 2018, 4, eaar3724.	10.3	336
16	Subambient Cooling of Water: Toward Real-World Applications of Daytime Radiative Cooling. Joule, 2019, 3, 111-123.	24.0	334
17	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
18	Lightweight, Mesoporous, and Highly Absorptive All-Nanofiber Aerogel for Efficient Solar Steam Generation. ACS Applied Materials & Interfaces, 2018, 10, 1104-1112.	8.0	327

#	Article	IF	Citations
19	Phonon transport in single-layer transition metal dichalcogenides: A first-principles study. Applied Physics Letters, 2014, 105, .	3.3	309
20	Bending Rigidity and Gaussian Bending Stiffness of Single-Layered Graphene. Nano Letters, 2013, 13, 26-30.	9.1	299
21	Thermal conductivity modeling of periodic two-dimensional nanocomposites. Physical Review B, 2004, 69, .	3.2	281
22	Modeling the Thermal Conductivity and Phonon Transport in Nanoparticle Composites Using Monte Carlo Simulation. Journal of Heat Transfer, 2008, 130, .	2.1	258
23	Highâ€Performance Solar Steam Device with Layered Channels: Artificial Tree with a Reversed Design. Advanced Energy Materials, 2018, 8, 1701616.	19.5	255
24	Al₂O₃ and TiO₂ Atomic Layer Deposition on Copper for Water Corrosion Resistance. ACS Applied Materials & Interfaces, 2011, 3, 4593-4601.	8.0	240
25	Colloquium: Phononic thermal properties of two-dimensional materials. Reviews of Modern Physics, 2018, 90, .	45.6	238
26	Three-Dimensional Ni/TiO₂ Nanowire Network for High Areal Capacity Lithium Ion Microbattery Applications. Nano Letters, 2012, 12, 655-660.	9.1	225
27	Thermal conductivity of simple and tubular nanowire composites in the longitudinal direction. Physical Review B, 2005, 72, .	3.2	210
28	First-principles prediction of phononic thermal conductivity of silicene: A comparison with graphene. Journal of Applied Physics, 2015, 117, .	2.5	204
29	Tutorial: Time-domain thermoreflectance (TDTR) for thermal property characterization of bulk and thin film materials. Journal of Applied Physics, 2018, 124, .	2.5	197
30	Three-Dimensional Superhydrophobic Nanowire Networks for Enhancing Condensation Heat Transfer. Joule, 2018, 2, 269-279.	24.0	190
31	High-performance wearable thermoelectric generator with self-healing, recycling, and Lego-like reconfiguring capabilities. Science Advances, 2021, 7, .	10.3	189
32	Enhancing Flow Boiling Heat Transfer in Microchannels for Thermal Management with Monolithically-Integrated Silicon Nanowires. Nano Letters, 2012, 12, 3385-3390.	9.1	181
33	Hydrophobic copper nanowires for enhancing condensation heat transfer. Nano Energy, 2017, 33, 177-183.	16.0	181
34	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
35	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
36	Liquid-Vapor Phase-Change Heat Transfer on Functionalized Nanowired Surfaces and Beyond. Joule, 2018, 2, 2307-2347.	24.0	164

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37	Length-dependent thermal conductivity of single extended polymer chains. Physical Review B, 2012, 86, .	3.2	163
38	Probing Anisotropic Thermal Conductivity of Transition Metal Dichalcogenides MX₂ (M =) Tj ETQq0 0 0 rgBT /Overlock 10 T	21.0	163
39	Ultrafast thermoreflectance techniques for measuring thermal conductivity and interface thermal conductance of thin films. Journal of Applied Physics, 2010, 108, .	2.5	161
40	Thermal Conductivity Modeling of Coreâ^'Shell and Tubular Nanowires. Nano Letters, 2005, 5, 1111-1115.	9.1	160
41	Simulation of Nanoscale Multidimensional Transient Heat Conduction Problems Using Ballistic-Diffusive Equations and Phonon Boltzmann Equation. Journal of Heat Transfer, 2005, 127, 298-306.	2.1	151
42	Tuning the thermal conductivity of polymers with mechanical strains. Physical Review B, 2010, 81, .	3.2	147
43	Mechanics and Mechanically Tunable Band Gap in Single-Layer Hexagonal Boron-Nitride. Materials Research Letters, 2013, 1, 200-206.	8.7	141
44	Layer thickness-dependent phonon properties and thermal conductivity of MoS2. Journal of Applied Physics, 2016, 119, .	2.5	136
45	Ultrahigh thermoelectric power factor in flexible hybrid inorganic-organic superlattice. Nature Communications, 2017, 8, 1024.	12.8	136
46	Supercooling of Peltier cooler using a current pulse. Journal of Applied Physics, 2002, 92, 1564-1569.	2.5	132
47	Effect of filler loading, geometry, dispersion and temperature on thermal conductivity of polymer nanocomposites. Polymer Testing, 2017, 57, 101-106.	4.8	126
48	Thermochromic smart windows with highly regulated radiative cooling and solar transmission. Nano Energy, 2021, 89, 106440.	16.0	126
49	A Clear, Strong, and Thermally Insulated Transparent Wood for Energy Efficient Windows. Advanced Functional Materials, 2020, 30, 1907511.	14.9	124
50	Effect of lattice mismatch on phonon transmission and interface thermal conductance across dissimilar material interfaces. Physical Review B, 2012, 86, .	3.2	120
51	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
52	Transient cooling of thermoelectric coolers and its applications for microdevices. Energy Conversion and Management, 2005, 46, 1407-1421.	9.2	119
53	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
54	Hierarchical Superhydrophobic Surfaces with Micropatterned Nanowire Arrays for High-Efficiency Jumping Droplet Condensation. ACS Applied Materials & Interfaces, 2017, 9, 44911-44921.	8.0	115

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55	Selection of polymers with functional groups for daytime radiative cooling. Materials Today Physics, 2019, 10, 100127.	6.0	113
56	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
57	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
58	Capillary-driven liquid film boiling heat transfer on hybrid mesh wicking structures. Nano Energy, 2018, 51, 373-382.	16.0	108
59	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
60	The mechanical robustness of atomic-layer- and molecular-layer-deposited coatings on polymer substrates. Journal of Applied Physics, 2009, 105, .	2.5	100
61	Personal thermal management using portable thermoelectrics for potential building energy saving. Applied Energy, 2018, 218, 282-291.	10.1	100
62	Lattice thermal conductivity of organic-inorganic hybrid perovskite CH3NH3PbI3. Applied Physics Letters, 2016, 108, .	3.3	97
63	Micromembrane-enhanced capillary evaporation. International Journal of Heat and Mass Transfer, 2013, 64, 1101-1108.	4.8	95
64	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
65	Ultralow Thermal Conductivity of Atomic/Molecular Layer-Deposited Hybrid Organicâ€“Inorganic Zincone Thin Films. Nano Letters, 2013, 13, 5594-5599.	9.1	94
66	Anisotropic thermal conductivity of 4H and 6H silicon carbide measured using time-domain thermoreflectance. Materials Today Physics, 2017, 3, 70-75.	6.0	91
67	Temperature Dependence of Anisotropic Thermalâ€Conductivity Tensor of Bulk Black Phosphorus. Advanced Materials, 2017, 29, 1603297.	21.0	89
68	Next-generation thermoelectric cooling modules based on high-performance Mg3(Bi,Sb)2 material. Joule, 2022, 6, 193-204.	24.0	89
69	The Development of Polymer-Based Flat Heat Pipes. Journal of Microelectromechanical Systems, 2011, 20, 410-417.	2.5	86
70	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
71	Semiclassical model for thermoelectric transport in nanocomposites. Physical Review B, 2010, 82, .	3.2	85
72	Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus. Advanced Electronic Materials, 2016, 2, 1600040.	5.1	85

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73	Three-dimensional anisotropic thermal conductivity tensor of single crystalline Î²-Ga2O3. Applied Physics Letters, 2018, 113, .	3.3	84
74	Flat flexible polymer heat pipes. Journal of Micromechanics and Microengineering, 2013, 23, 015001.	2.6	83
75	Hydrophobic nanostructured wood membrane for thermally efficient distillation. Science Advances, 2019, 5, eaaw3203.	10.3	81
76	Thermal Conductivity during Phase Transitions. Advanced Materials, 2019, 31, e1806518.	21.0	80
77	Optimal Bandwidth for High Efficiency Thermoelectrics. Physical Review Letters, 2011, 107, 226601.	7.8	79
78	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
79	Flexible Hybrid Semiconductors with Low Thermal Conductivity: The Role of Organic Diamines. Angewandte Chemie - International Edition, 2009, 48, 7871-7874.	13.8	78
80	Nanomechanics of graphene. National Science Review, 2019, 6, 324-348.	9.5	75
81	Anisotropic thermal transport in bulk hexagonal boron nitride. Physical Review Materials, 2018, 2, .	2.4	73
82	On the thermal conductivity of particulate nanocomposites. Applied Physics Letters, 2011, 98, .	3.3	71
83	Anisotropic Tuning of Graphite Thermal Conductivity by Lithium Intercalation. Journal of Physical Chemistry Letters, 2016, 7, 4744-4750.	4.6	69
84	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
85	Roof-integrated radiative air-cooling system to achieve cooler attic for building energy saving. Energy and Buildings, 2019, 203, 109453.	6.7	67
86	Radiative sky cooling-assisted thermoelectric cooling system for building applications. Energy, 2020, 190, 116322.	8.8	66
87	Flexible transparent aerogels as window retrofitting films and optical elements with tunable birefringence. Nano Energy, 2018, 48, 266-274.	16.0	63
88	Dielectric Mismatch Mediates Carrier Mobility in Organic-Intercalated Layered TiS₂. Nano Letters, 2015, 15, 6302-6308.	9.1	62
89	Thermoelectric Properties of Molecular Nanowires. Journal of Physical Chemistry C, 2011, 115, 24418-24428.	3.1	61
90	Modified pulse operation of thermoelectric coolers for building cooling applications. Energy Conversion and Management, 2017, 140, 145-156.	9.2	61

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91	Thermoelectric air conditioning undergarment for personal thermal management and HVAC energy saving. Energy and Buildings, 2020, 226, 110374.	6.7	59
92	PHONON TRANSPORT AND THERMAL CONDUCTIVITY IN TWO-DIMENSIONAL MATERIALS. Annual Review of Heat Transfer, 2016, 19, 1-65.	1.0	57
93	High-frequency surface acoustic wave propagation in nanostructures characterized by coherent extreme ultraviolet beams. Applied Physics Letters, 2009, 94, .	3.3	56
94	On the influence of junction structures on the mechanical and thermal properties of carbon honeycombs. Carbon, 2017, 119, 278-286.	10.3	56
95	Thermal conductivity modeling of compacted nanowire composites. Journal of Applied Physics, 2007, 101, 054320.	2.5	55
96	Thin Flexible Thermal Ground Planes: Fabrication and Scaling Characterization. Journal of Microelectromechanical Systems, 2015, 24, 2040-2048.	2.5	54
97	Thermal performance of a flat polymer heat pipe heat spreader under high acceleration. Journal of Micromechanics and Microengineering, 2012, 22, 045018.	2.6	53
98	An Energyâ€Efficient, Woodâ€Derived Structural Material Enabled by Pore Structure Engineering towards Building Efficiency. Small Methods, 2020, 4, 1900747.	8.6	53
99	Effect of interface scattering on phonon thermal conductivity percolation in random nanowire composites. Applied Physics Letters, 2007, 90, 263105.	3.3	51
100	Electroplating to visualize defects in Al2O3 thin films grown using atomic layer deposition. Thin Solid Films, 2009, 517, 3269-3272.	1.8	51
101	Sustaining enhanced condensation on hierarchical mesh-covered surfaces. National Science Review, 2018, 5, 878-887.	9.5	51
102	Microfabricated ultra-thin all-polymer thermal ground planes. Science Bulletin, 2015, 60, 701-706.	9.0	50
103	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
104	Stable planar single-layer hexagonal silicene under tensile strain and its anomalous Poisson's ratio. Applied Physics Letters, 2014, 104, 081902.	3.3	49
105	Diffused Lattice Vibration and Ultralow Thermal Conductivity in the Binary Lnâ€“Nbâ€“O Oxide System. Advanced Materials, 2019, 31, e1808222.	21.0	49
106	A three-dimensional carbon nano-network for high performance lithium ion batteries. Nano Energy, 2015, 11, 500-509.	16.0	48
107	High temperature thermal management with boron nitride nanosheets. Nanoscale, 2018, 10, 167-173.	5.6	48
108	Thermal resistance matching for thermoelectric cooling systems. Energy Conversion and Management, 2018, 169, 186-193.	9.2	48

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109	Thermal conductivity modeling using machine learning potentials: application to crystalline and amorphous silicon. Materials Today Physics, 2019, 10, 100140.	6.0	48
110	The effect of the electron-phonon coupling on the effective thermal conductivity of metal-nonmetal multilayers. Journal of Applied Physics, 2011, 109, .	2.5	47
111	Generation and control of ultrashort-wavelength two-dimensional surface acoustic waves at nanoscale interfaces. Physical Review B, 2012, 85, .	3.2	47
112	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
113	Binder-free three-dimensional silicon/carbon nanowire networks for high performance lithium-ion battery anodes. Nano Energy, 2013, 2, 943-950.	16.0	47
114	Development of a single-phase thermosiphon for cold collection and storage of radiative cooling. Applied Energy, 2017, 205, 1260-1269.	10.1	47
115	Thermal conductivity model for nanofiber networks. Journal of Applied Physics, 2018, 123, .	2.5	45
116	Investigation of the defect density in ultra-thin Al2O3 films grown using atomic layer deposition. Surface and Coatings Technology, 2011, 205, 3334-3339.	4.8	44
117	Topology optimization of multi-component flows using a multi-relaxation time lattice Boltzmann method. Computers and Fluids, 2012, 67, 104-114.	2.5	44
118	Size effect on the thermal conductivity of ultrathin polystyrene films. Applied Physics Letters, 2014, 104, 153110.	3.3	43
119	Iridescent Daytime Radiative Cooling with No Absorption Peaks in the Visible Range. Small, 2022, 18, e2202400.	10.0	42
120	Capillary evaporation on micromembrane-enhanced microchannel wicks with atomic layer deposited silica. Applied Physics Letters, 2013, 103, .	3.3	41
121	Multistage thermoelectric microcoolers. Journal of Applied Physics, 2004, 95, 8226-8232.	2.5	40
122	Increasing greenhouse production by spectral-shifting and unidirectional light-extracting photonics. Nature Food, 2021, 2, 434-441.	14.0	40
123	Temperature effect on the phonon dispersion stability of zirconium by machine learning driven atomistic simulations. Physical Review B, 2018, 98, .	3.2	39
124	Radiative sky cooling potential maps of China based on atmospheric spectral emissivity. Solar Energy, 2021, 218, 195-210.	6.1	39
125	On-Demand Solar and Thermal Radiation Management Based on Switchable Interwoven Surfaces. ACS Energy Letters, 2022, 7, 1758-1763.	17.4	39
126	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

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127	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
128	Optimized Silicon Electrode Architecture, Interface, and Microgeometry for Nextâ€Generation Lithiumâ€ion Batteries. Advanced Materials, 2016, 28, 188-193.	21.0	37
129	Enhancing Niâ€“Sn nanowire lithium-ion anode performance by tailoring active/inactive material interfaces. Journal of Power Sources, 2011, 196, 10207-10212.	7.8	36
130	Machine learning for predicting thermal transport properties of solids. Materials Science and Engineering Reports, 2021, 146, 100642.	31.8	36
131	Thermal transport across carbon nanotubes connected by molecular linkers. Carbon, 2012, 50, 1063-1070.	10.3	35
132	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
133	Dynamically adaptive window design with thermo-responsive hydrogel for energy efficiency. Applied Energy, 2021, 287, 116573.	10.1	34
134	Thermal conductivity modeling of hybrid organic-inorganic crystals and superlattices. Nano Energy, 2017, 41, 394-407.	16.0	32
135	Anisotropic thermal transport in van der Waals layered alloys WSe2(1-x)Te2x. Applied Physics Letters, 2018, 112, .	3.3	32
136	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
137	Optically-switchable thermally-insulating VO2-aerogel hybrid film for window retrofits. Applied Energy, 2020, 278, 115663.	10.1	30
138	A low band gap iron sulfide hybrid semiconductor with unique 2D [Fe16S20]8â^' layer and reduced thermal conductivity. Chemical Communications, 2010, 46, 1649.	4.1	29
139	A constitutive equation for nano-to-macro-scale heat conduction based on the Boltzmann transport equation. Journal of Applied Physics, 2011, 109, .	2.5	29
140	Wafer-scale fabrication of silicon nanowire arrays with controllable dimensions. Applied Surface Science, 2012, 258, 8649-8655.	6.1	29
141	Fluorescent tags to visualize defects in Al2O3 thin films grown using atomic layer deposition. Thin Solid Films, 2009, 517, 6794-6797.	1.8	28
142	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
143	Thermoelectric Transport in Nanocomposites. Materials, 2017, 10, 418.	2.9	27
144	Passive sub-ambient cooling: radiative cooling versus evaporative cooling. Applied Thermal Engineering, 2022, 202, 117909.	6.0	27

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145	Multiscale Thermal Analysis for Nanometer-Scale Integrated Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2009, 28, 860-873.	2.7	26
146	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
147	Dynamic glazing with switchable solar reflectance for radiative cooling and solar heating. Cell Reports Physical Science, 2022, 3, 100853.	5.6	26
148	Size-dependent phonon transmission across dissimilar material interfaces. Journal of Physics Condensed Matter, 2012, 24, 155302.	1.8	25
149	A crowding factor model for the thermal conductivity of particulate composites at non-dilute limit. Journal of Applied Physics, 2013, 114, .	2.5	25
150	Biphilic nanoporous surfaces enabled exceptional drag reduction and capillary evaporation enhancement. Applied Physics Letters, 2014, 105, .	3.3	25
151	Quantum and classical thermoelectric transport in quantum dot nanocomposites. Journal of Applied Physics, 2011, 110, .	2.5	23
152	In-situ inspection of cracking in atomic-layer-deposited barrier films on surface and in buried structures. Thin Solid Films, 2011, 520, 251-257.	1.8	23
153	A model for the effective thermal conductivity of metal-nonmetal particulate composites. Journal of Applied Physics, 2012, 111, .	2.5	23
154	Interfacial thermal conductance across metal-insulator/semiconductor interfaces due to surface states. Physical Review B, 2016, 93, .	3.2	23
155	ZT > 0.1 Electronâ€Carrying Polymer Thermoelectric Composites with In Situ SnCl₂ Microstructure Growth. Advanced Science, 2015, 2, 1500015.	11.2	22
156	Super-stretchable borophene. Europhysics Letters, 2016, 116, 36001.	2.0	22
157	Flexible Thermal Ground Planes Fabricated With Printed Circuit Board Technology. Journal of Electronic Packaging, Transactions of the ASME, 2017, 139, .	1.8	22
158	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
159	Reduced-scale hot box method for thermal characterization of window insulation materials. Applied Thermal Engineering, 2019, 160, 114026.	6.0	21
160	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
161	Reduction of water consumption in thermal power plants with radiative sky cooling. Applied Energy, 2021, 302, 117515.	10.1	21
162	Ballistic thermoelectric transport in structured nanowires. New Journal of Physics, 2014, 16, 065018.	2.9	20

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163	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
164	Rare earth chalcogenide Ce3Te4 as high efficiency high temperature thermoelectric material. Applied Physics Letters, 2011, 98, .	3.3	18
165	Equilibrium molecular dynamics simulations for the thermal conductivity of Si/Ge nanocomposites. Journal of Applied Physics, 2013, 113, .	2.5	18
166	Phonon transport in single-layerMo1âˆ’xWxS2alloy embedded withWS2nanodomains. Physical Review B, 2016, 94, .	3.2	18
167	Curvature effect on the phonon thermal conductivity of dielectric nanowires. Journal of Applied Physics, 2009, 105, 104313.	2.5	17
168	Hierarchical polymer patterns driven by capillary instabilities at mobile and corrugated polymerâ€“polymer interfaces. Soft Matter, 2010, 6, 4900.	2.7	17
169	Thermal conductivity model for nanoporous thin films. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 277-281.	2.7	17
170	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
171	Thermoelectric transport in strongly correlated quantum dot nanocomposites. Physical Review B, 2010, 82, .	3.2	16
172	Ballistic thermoelectricity in double-bend nanowires. Applied Physics Letters, 2011, 98, 173107.	3.3	16
173	Thermoelectric Transport Across Nanoscale Polymerâ€“Semiconductorâ€“Polymer Junctions. Journal of Physical Chemistry C, 2013, 117, 24716-24725.	3.1	16
174	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></mml:msub></mml:mrow></mml:math>Si/Mg2Si(001) interfaces: A first-principles-based atomistic Green's function study. Physical Review B, 2015, 91, .	3.2	16
175	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
176	Passive cooling in an urban setting. Nature Sustainability, 2019, 2, 663-664.	23.7	16
177	Colored radiative cooling coatings using phosphor dyes. Materials Today Nano, 2022, 19, 100239.	4.6	15
178	Solid particle solar receivers in the nextâ€generation concentrated solar power plant. EcoMat, 2022, 4, .	11.9	14
179	Optimal 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
180	Global Radiative Sky Cooling Potential Adjusted for Population Density and Cooling Demand. Atmosphere, 2021, 12, 1379.	2.3	13

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181	Performance evaluation of radiative cooling for commercial-scale warehouse. Materials Today Energy, 2022, 24, 100927.	4.7	13
182	A novel thermal comfort and energy saving evaluation model for radiative cooling and heating textiles. Energy and Buildings, 2022, 258, 111842.	6.7	13
183	Hybrid radiation modeling for multi-phase solar-thermal reactor systems operated at high-temperature. Solar Energy, 2016, 140, 130-140.	6.1	12
184	Harnessing Reversible Wetting Transition to Sweep Contaminated Superhydrophobic Surfaces. Langmuir, 2021, 37, 3929-3938.	3.5	12
185	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
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