Ronggui Yang

List of Publications by Citations

227 papers	17,533 citations	64 h-index	129 g-index
251 ext. papers	21,318 ext. citations	8.5 avg, IF	7.15 L-index

#	Paper	IF	Citations
227	New Directions for Low-Dimensional Thermoelectric Materials. *Advanced Materials*, **2007**, 19, 1043-1053	24	2967
226	Scalable-manufactured randomized glass-polymer hybrid metamaterial for daytime radiative cooling. *Science*, **2017**, 355, 1062-1066	33.3	834
225	Highly efficient solar vapour generation via hierarchically nanostructured gels. *Nature Nanotechnology*, **2018**, 13, 489-495	28.7	825
224	Flexible n-type thermoelectric materials by organic intercalation of layered transition metal□dichalcogenide TiS2. *Nature Materials*, **2015**, 14, 622-7	27	494
223	The nature of strength enhancement and weakening by pentagon-heptagon defects in graphene. *Nature Materials*, **2012**, 11, 759-63	27	461
222	A radiative cooling structural material. *Science*, **2019**, 364, 760-763	33.3	419
221	Quasi-ballistic thermal transport from nanoscale interfaces observed using ultrafast coherent soft X-ray beams. *Nature Materials*, **2010**, 9, 26-30	27	325
220	Strain effects on the thermal conductivity of nanostructures. *Physical Review B*, **2010**, 81,	3.3	320
219	Thermal conductivity of polymers and polymer nanocomposites. *Materials Science and Engineering Reports*, **2018**, 132, 1-22	30.9	318
218	Scalable and Highly Efficient Mesoporous Wood-Based Solar Steam Generation Device: Localized Heat, Rapid Water Transport. *Advanced Functional Materials*, **2018**, 28, 1707134	15.6	254
217	Thermal conductivity modeling of periodic two-dimensional nanocomposites. *Physical Review B*, **2004**, 69,	3.3	251
216	Bending rigidity and Gaussian bending stiffness of single-layered graphene. *Nano Letters*, **2013**, 13, 26-30	11.5	250
215	Phonon transport in single-layer transition metal dichalcogenides: A first-principles study. *Applied Physics Letters*, **2014**, 105, 131903	3.4	229
214	Modeling the Thermal Conductivity and Phonon Transport in Nanoparticle Composites Using Monte Carlo Simulation. *Journal of Heat Transfer*, **2008**, 130, 042410	1.8	229
213	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,	2	228
212	Lightweight, Mesoporous, and Highly Absorptive All-Nanofiber Aerogel for Efficient Solar Steam Generation. *ACS Applied Materials & Interfaces*, **2018**, 10, 1104-1112	9.5	227
211	Three-dimensional Ni/TiO2 nanowire network for high areal capacity lithium ion microbattery applications. *Nano Letters*, **2012**, 12, 655-60	11.5	212

210	Radiative sky cooling: Fundamental principles, materials, and applications. *Applied Physics Reviews*, **2019**, 6, 021306	17.3	211
209	Al2O3 and TiO2 atomic layer deposition on copper for water corrosion resistance. *ACS Applied Materials & Interfaces*, **2011**, 3, 4593-601	9.5	207
208	Anisotropic, lightweight, strong, and super thermally insulating nanowood with naturally aligned nanocellulose. *Science Advances*, **2018**, 4, eaar3724	14.3	204
207	Thermal conductivity of simple and tubular nanowire composites in the longitudinal direction. *Physical Review B*, **2005**, 72,	3.3	199
206	Cellulose ionic conductors with high differential thermal voltage for low-grade heat harvesting. *Nature Materials*, **2019**, 18, 608-613	27	187
205	Subambient Cooling of Water: Toward Real-World Applications of Daytime Radiative Cooling. *Joule*, **2019**, 3, 111-123	27.8	184
204	High-Performance Solar Steam Device with Layered Channels: Artificial Tree with a Reversed Design. *Advanced Energy Materials*, **2018**, 8, 1701616	21.8	174
203	First-principles prediction of phononic thermal conductivity of silicene: A comparison with graphene. *Journal of Applied Physics*, **2015**, 117, 025102	2.5	158
202	Thermal conductivity modeling of core-shell and tubular nanowires. *Nano Letters*, **2005**, 5, 1111-5	11.5	152
201	Colloquium: Phononic thermal properties of two-dimensional materials. *Reviews of Modern Physics*, **2018**, 90,	40.5	141
200	Enhancing flow boiling heat transfer in microchannels for thermal management with monolithically-integrated silicon nanowires. *Nano Letters*, **2012**, 12, 3385-90	11.5	138
199	Length-dependent thermal conductivity of single extended polymer chains. *Physical Review B*, **2012** , 86,	3.3	132
198	Hydrophobic copper nanowires for enhancing condensation heat transfer. *Nano Energy*, **2017**, 33, 177-183	17.1	129
197	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, 4846-51	11.5	127
196	Tuning the thermal conductivity of polymers with mechanical strains. *Physical Review B*, **2010**, 81,	3.3	126
195	Simulation of Nanoscale Multidimensional Transient Heat Conduction Problems Using Ballistic-Diffusive Equations and Phonon Boltzmann Equation. *Journal of Heat Transfer*, **2005**, 127, 298-306	1.8	120
194	Three-Dimensional Superhydrophobic Nanowire Networks for Enhancing Condensation Heat Transfer. *Joule*, **2018**, 2, 269-279	27.8	118
193	Supercooling of Peltier cooler using a current pulse. *Journal of Applied Physics*, **2002**, 92, 1564-1569	2.5	115

192	Tutorial: Time-domain thermoreflectance (TDTR) for thermal property characterization of bulk and thin film materials. *Journal of Applied Physics*, **2018**, 124, 161103	2.5	114
191	Mechanics and Mechanically Tunable Band Gap in Single-Layer Hexagonal Boron-Nitride. *Materials Research Letters*, **2013**, 1, 200-206	7.4	113
190	Ultrafast thermoreflectance techniques for measuring thermal conductivity and interface thermal conductance of thin films. *Journal of Applied Physics*, **2010**, 108, 094315	2.5	111
189	Terrestrial radiative cooling: Using the cold universe as a renewable and sustainable energy source. *Science*, **2020**, 370, 786-791	33.3	110
188	Ultrahigh thermoelectric power factor in flexible hybrid inorganic-organic superlattice. *Nature Communications*, **2017**, 8, 1024	17.4	109
187	Probing Anisotropic Thermal Conductivity of Transition Metal Dichalcogenides MX (M = Mo, W and X = S, Se) using Time-Domain Thermoreflectance. *Advanced Materials*, **2017**, 29, 1701068	24	107
186	Effect of lattice mismatch on phonon transmission and interface thermal conductance across dissimilar material interfaces. *Physical Review B*, **2012**, 86,	3.3	97
185	Effect of filler loading, geometry, dispersion and temperature on thermal conductivity of polymer nanocomposites. *Polymer Testing*, **2017**, 57, 101-106	4.5	96
184	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	1.7	96
183	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	17.1	94
182	The mechanical robustness of atomic-layer- and molecular-layer-deposited coatings on polymer substrates. *Journal of Applied Physics*, **2009**, 105, 093527	2.5	94
181	Transient cooling of thermoelectric coolers and its applications for microdevices. *Energy Conversion and Management*, **2005**, 46, 1407-1421	10.6	94
180	Layer thickness-dependent phonon properties and thermal conductivity of MoS2. *Journal of Applied Physics*, **2016**, 119, 085106	2.5	89
179	Liquid-Vapor Phase-Change Heat Transfer on Functionalized Nanowired Surfaces and Beyond. *Joule* , **2018**, 2, 2307-2347	27.8	86
178	Lattice thermal conductivity of organic-inorganic hybrid perovskite CH3NH3PbI3. *Applied Physics Letters*, **2016**, 108, 063902	3.4	84
177	Ultralow thermal conductivity of atomic/molecular layer-deposited hybrid organic-inorganic zincone thin films. *Nano Letters*, **2013**, 13, 5594-9	11.5	82
176	Semiclassical model for thermoelectric transport in nanocomposites. *Physical Review B*, **2010**, 82,	3.3	82
175	Hierarchical Superhydrophobic Surfaces with Micropatterned Nanowire Arrays for High-Efficiency Jumping Droplet Condensation. *ACS Applied Materials & Interfaces*, **2017**, 9, 44911-44921	9.5	77

174	Wetting Transition of Condensed Droplets on Nanostructured Superhydrophobic Surfaces: Coordination of Surface Properties and Condensing Conditions. *ACS Applied Materials & Interfaces*, **2017**, 9, 13770-13777	9.5	75
173	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	10.7	75
172	Flexible hybrid semiconductors with low thermal conductivity: the role of organic diamines. *Angewandte Chemie - International Edition*, **2009**, 48, 7871-4	16.4	71
171	Stable high areal capacity lithium-ion battery anodes based on three-dimensional Ni□Sn nanowire networks. *Journal of Power Sources*, **2012**, 211, 46-51	8.9	70
170	Micromembrane-enhanced capillary evaporation. *International Journal of Heat and Mass Transfer*, **2013**, 64, 1101-1108	4.9	69
169	Time-domain thermoreflectance (TDTR) measurements of anisotropic thermal conductivity using a variable spot size approach. *Review of Scientific Instruments*, **2017**, 88, 074901	1.7	67
168	On the thermal conductivity of particulate nanocomposites. *Applied Physics Letters*, **2011**, 98, 233111	3.4	67
167	High-performance wearable thermoelectric generator with self-healing, recycling, and Lego-like reconfiguring capabilities. *Science Advances*, **2021**, 7,	14.3	67
166	Bottom-up Design of Three-Dimensional Carbon-Honeycomb with Superb Specific Strength and High Thermal Conductivity. *Nano Letters*, **2017**, 17, 179-185	11.5	65
165	Temperature Dependence of Anisotropic Thermal-Conductivity Tensor of Bulk Black Phosphorus. *Advanced Materials*, **2017**, 29, 1603297	24	65
164	Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus. *Advanced Electronic Materials*, **2016**, 2, 1600040	6.4	64
163	Bubble dynamics and nucleate pool boiling heat transfer on microporous copper surfaces. *International Journal of Heat and Mass Transfer*, **2015**, 89, 1297-1315	4.9	63
162	Optimal bandwidth for high efficiency thermoelectrics. *Physical Review Letters*, **2011**, 107, 226601	7.4	63
161	. *Journal of Microelectromechanical Systems*, **2011**, 20, 410-417	2.5	63
160	Personal thermal management using portable thermoelectrics for potential building energy saving. *Applied Energy*, **2018**, 218, 282-291	10.7	58
159	Selection of polymers with functional groups for daytime radiative cooling. *Materials Today Physics*, **2019**, 10, 100127	8	58
158	Scalable thermochromic smart windows with passive radiative cooling regulation.. *Science*, **2021**, 374, 1501-1504	33.3	58
157	Capillary-driven liquid film boiling heat transfer on hybrid mesh wicking structures. *Nano Energy*, **2018**, 51, 373-382	17.1	55

156	A kW-scale, 24-hour continuously operational, radiative sky cooling system: Experimental demonstration and predictive modeling. *Energy Conversion and Management*, **2019**, 186, 586-596	10.6	54
155	Thermoelectric Properties of Molecular Nanowires. *Journal of Physical Chemistry C*, **2011**, 115, 24418-24428	4.8	54
154	Anisotropic Tuning of Graphite Thermal Conductivity by Lithium Intercalation. *Journal of Physical Chemistry Letters*, **2016**, 7, 4744-4750	6.4	50
153	Anisotropic thermal conductivity of 4H and 6H silicon carbide measured using time-domain thermoreflectance. *Materials Today Physics*, **2017**, 3, 70-75	8	50
152	Flat flexible polymer heat pipes. *Journal of Micromechanics and Microengineering*, **2013**, 23, 015001	2	50
151	Thermal conductivity modeling of compacted nanowire composites. *Journal of Applied Physics*, **2007**, 101, 054320	2.5	50
150	A Clear, Strong, and Thermally Insulated Transparent Wood for Energy Efficient Windows. *Advanced Functional Materials*, **2020**, 30, 1907511	15.6	50
149	Dielectric Mismatch Mediates Carrier Mobility in Organic-Intercalated Layered TiS2. *Nano Letters*, **2015**, 15, 6302-8	11.5	49
148	Nanomechanics of graphene. *National Science Review*, **2019**, 6, 324-348	10.8	49
147	Three-dimensional anisotropic thermal conductivity tensor of single crystalline □Ga2O3. *Applied Physics Letters*, **2018**, 113, 232105	3.4	49
146	High-frequency surface acoustic wave propagation in nanostructures characterized by coherent extreme ultraviolet beams. *Applied Physics Letters*, **2009**, 94, 093103	3.4	48
145	Hydrophobic nanostructured wood membrane for thermally efficient distillation. *Science Advances*, **2019**, 5, eaaw3203	14.3	47
144	Effect of interface scattering on phonon thermal conductivity percolation in random nanowire composites. *Applied Physics Letters*, **2007**, 90, 263105	3.4	46
143	From 1D chain to 3D network: a new family of inorganic-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, 17401-7	16.4	45
142	On the influence of junction structures on the mechanical and thermal properties of carbon honeycombs. *Carbon*, **2017**, 119, 278-286	10.4	44
141	Stable planar single-layer hexagonal silicene under tensile strain and its anomalous Poisson□s ratio. *Applied Physics Letters*, **2014**, 104, 081902	3.4	44
140	Thermal Conductivity during Phase Transitions. *Advanced Materials*, **2019**, 31, e1806518	24	43
139	Electroplating to visualize defects in Al2O3 thin films grown using atomic layer deposition. *Thin Solid Films*, **2009**, 517, 3269-3272	2.2	42

138	A three-dimensional carbon nano-network for high performance lithium ion batteries. *Nano Energy*, **2015**, 11, 500-509	17.1	41
137	Flexible transparent aerogels as window retrofitting films and optical elements with tunable birefringence. *Nano Energy*, **2018**, 48, 266-274	17.1	40
136	The effect of the electron-phonon coupling on the effective thermal conductivity of metal-nonmetal multilayers. *Journal of Applied Physics*, **2011**, 109, 094310	2.5	40
135	Anisotropic thermal transport in bulk hexagonal boron nitride. *Physical Review Materials*, **2018**, 2,	3.2	39
134	PHONON TRANSPORT AND THERMAL CONDUCTIVITY IN TWO-DIMENSIONAL MATERIALS. *Annual Review of Heat Transfer*, **2016**, 19, 1-65	2.7	39
133	Investigation of the defect density in ultra-thin Al2O3 films grown using atomic layer deposition. *Surface and Coatings Technology*, **2011**, 205, 3334-3339	4.4	38
132	Modified pulse operation of thermoelectric coolers for building cooling applications. *Energy Conversion and Management*, **2017**, 140, 145-156	10.6	37
131	Performance evaluation of a metamaterial-based new cool roof using improved Roof Thermal Transfer Value model. *Applied Energy*, **2019**, 248, 589-599	10.7	37
130	Binder-free three-dimensional silicon/carbon nanowire networks for high performance lithium-ion battery anodes. *Nano Energy*, **2013**, 2, 943-950	17.1	37
129	Generation and control of ultrashort-wavelength two-dimensional surface acoustic waves at nanoscale interfaces. *Physical Review B*, **2012**, 85,	3.3	37
128	Roof-integrated radiative air-cooling system to achieve cooler attic for building energy saving. *Energy and Buildings*, **2019**, 203, 109453	7	35
127	Thermal performance of a flat polymer heat pipe heat spreader under high acceleration. *Journal of Micromechanics and Microengineering*, **2012**, 22, 045018	2	35
126	Enhancing Ni3Sn nanowire lithium-ion anode performance by tailoring active/inactive material interfaces. *Journal of Power Sources*, **2011**, 196, 10207-10212	8.9	35
125	Multistage thermoelectric microcoolers. *Journal of Applied Physics*, **2004**, 95, 8226-8232	2.5	35
124	High temperature thermal management with boron nitride nanosheets. *Nanoscale*, **2017**, 10, 167-173	7.7	35
123	Development of a single-phase thermosiphon for cold collection and storage of radiative cooling. *Applied Energy*, **2017**, 205, 1260-1269	10.7	34
122	Topology optimization of multi-component flows using a multi-relaxation time lattice Boltzmann method. *Computers and Fluids*, **2012**, 67, 104-114	2.8	34
121	Capillary evaporation on micromembrane-enhanced microchannel wicks with atomic layer deposited silica. *Applied Physics Letters*, **2013**, 103, 151602	3.4	34

120	Thermal conductivity model for nanofiber networks. *Journal of Applied Physics*, **2018**, 123, 085103	2.5	33
119	Radiative sky cooling-assisted thermoelectric cooling system for building applications. *Energy*, **2020**, 190, 116322	7.9	33
118	Sustaining enhanced condensation on hierarchical mesh-covered surfaces. *National Science Review*, **2018**, 5, 878-887	10.8	33
117	Size effect on the thermal conductivity of ultrathin polystyrene films. *Applied Physics Letters*, **2014**, 104, 153110	3.4	32
116	Optimized Silicon Electrode Architecture, Interface, and Microgeometry for Next-Generation Lithium-Ion Batteries. *Advanced Materials*, **2016**, 28, 188-93	24	32
115	Thermal resistance matching for thermoelectric cooling systems. *Energy Conversion and Management*, **2018**, 169, 186-193	10.6	32
114	Thermal transport across carbon nanotubes connected by molecular linkers. *Carbon*, **2012**, 50, 1063-1070	10.4	31
113	Thermochromic smart windows with highly regulated radiative cooling and solar transmission. *Nano Energy*, **2021**, 89, 106440	17.1	30
112	Thin Flexible Thermal Ground Planes: Fabrication and Scaling Characterization. *Journal of Microelectromechanical Systems*, **2015**, 24, 2040-2048	2.5	29
111	An Energy-Efficient, Wood-Derived Structural Material Enabled by Pore Structure Engineering towards Building Efficiency. *Small Methods*, **2020**, 4, 1900747	12.8	28
110	Wafer-scale fabrication of silicon nanowire arrays with controllable dimensions. *Applied Surface Science*, **2012**, 258, 8649-8655	6.7	27
109	Fluorescent tags to visualize defects in Al2O3 thin films grown using atomic layer deposition. *Thin Solid Films*, **2009**, 517, 6794-6797	2.2	27
108	A crowding factor model for the thermal conductivity of particulate composites at non-dilute limit. *Journal of Applied Physics*, **2013**, 114, 064306	2.5	25
107	Microfabricated ultra-thin all-polymer thermal ground planes. *Science Bulletin*, **2015**, 60, 701-706	10.6	25
106	A constitutive equation for nano-to-macro-scale heat conduction based on the Boltzmann transport equation. *Journal of Applied Physics*, **2011**, 109, 084319	2.5	25
105	Thermoelectric Transport in Nanocomposites. *Materials*, **2017**, 10,	3.5	24
104	Thermoelectric air conditioning undergarment for personal thermal management and HVAC energy saving. *Energy and Buildings*, **2020**, 226, 110374	7	24
103	Diffused Lattice Vibration and Ultralow Thermal Conductivity in the Binary Ln-Nb-O Oxide System. *Advanced Materials*, **2019**, 31, e1808222	24	23

102	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, 075103	2.5	23
101	Thermal conductivity modeling using machine learning potentials: application to crystalline and amorphous silicon. *Materials Today Physics*, **2019**, 10, 100140	8	23
100	A low band gap iron sulfide hybrid semiconductor with unique 2D [Fe(16)S(20)](8-) layer and reduced thermal conductivity. *Chemical Communications*, **2010**, 46, 1649-51	5.8	23
99	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	4.9	22
98	ZT > 0.1 Electron-Carrying Polymer Thermoelectric Composites with In Situ SnCl Microstructure Growth. *Advanced Science*, **2015**, 2, 1500015	13.6	22
97	Temperature effect on the phonon dispersion stability of zirconium by machine learning driven atomistic simulations. *Physical Review B*, **2018**, 98,	3.3	22
96	Thermal conductivity modeling of hybrid organic-inorganic crystals and superlattices. *Nano Energy*, **2017**, 41, 394-407	17.1	21
95	Anisotropic thermal transport in van der Waals layered alloys WSe2(1-x)Te2x. *Applied Physics Letters*, **2018**, 112, 241901	3.4	21
94	A model for the effective thermal conductivity of metal-nonmetal particulate composites. *Journal of Applied Physics*, **2012**, 111, 044319	2.5	21
93	In-situ inspection of cracking in atomic-layer-deposited barrier films on surface and in buried structures. *Thin Solid Films*, **2011**, 520, 251-257	2.2	20
92	Multiscale Thermal Analysis for Nanometer-Scale Integrated Circuits. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2009**, 28, 860-873	2.5	20
91	Falling-droplet-enhanced filmwise condensation in the presence of non-condensable gas. *International Journal of Heat and Mass Transfer*, **2019**, 140, 173-186	4.9	19
90	Interfacial thermal conductance across metal-insulator/semiconductor interfaces due to surface states. *Physical Review B*, **2016**, 93,	3.3	19
89	Super-stretchable borophene. *Europhysics Letters*, **2016**, 116, 36001	1.6	19
88	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	19
87	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	1.7	19
86	Biphilic nanoporous surfaces enabled exceptional drag reduction and capillary evaporation enhancement. *Applied Physics Letters*, **2014**, 105, 191611	3.4	18
85	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	4.1	18

84	Size-dependent phonon transmission across dissimilar material interfaces. *Journal of Physics Condensed Matter*, **2012**, 24, 155302	1.8	17
83	Quantum and classical thermoelectric transport in quantum dot nanocomposites. *Journal of Applied Physics*, **2011**, 110, 084317	2.5	17
82	Dynamically adaptive window design with thermo-responsive hydrogel for energy efficiency. *Applied Energy*, **2021**, 287, 116573	10.7	17
81	Energy saving analysis of a transparent radiative cooling film for buildings with roof glazing. *Energy and Built Environment*, **2021**, 2, 214-222	6.3	17
80	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	5.8	16
79	Ballistic thermoelectric transport in structured nanowires. *New Journal of Physics*, **2014**, 16, 065018	2.9	16
78	Hierarchical polymer patterns driven by capillary instabilities at mobile and corrugated polymer□polymer interfaces. *Soft Matter*, **2010**, 6, 4900	3.6	16
77	Thermoelectric transport in strongly correlated quantum dot nanocomposites. *Physical Review B*, **2010**, 82,	3.3	16
76	Phonon transport in single-layer Mo1□WxS2 alloy embedded with WS2 nanodomains. *Physical Review B*, **2016**, 94,	3.3	15
75	Thermoelectric Transport Across Nanoscale Polymer□Semiconductor□Polymer Junctions. *Journal of Physical Chemistry C*, **2013**, 117, 24716-24725	3.8	15
74	Phonon transmission across Mg2Si/Mg2Si1□Snx interfaces: A first-principles-based atomistic Green□s function study. *Physical Review B*, **2015**, 91,	3.3	15
73	Equilibrium molecular dynamics simulations for the thermal conductivity of Si/Ge nanocomposites. *Journal of Applied Physics*, **2013**, 113, 104306	2.5	15
72	Optically-switchable thermally-insulating VO2-aerogel hybrid film for window retrofits. *Applied Energy*, **2020**, 278, 115663	10.7	15
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70	Rare earth chalcogenide Ce3Te4 as high efficiency high temperature thermoelectric material. *Applied Physics Letters*, **2011**, 98, 222110	3.4	14
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68	Anisotropic Thermal Transport in Organic□Inorganic Hybrid Crystal □ZnTe(en)0.5. *Journal of Physical Chemistry C*, **2015**, 119, 28300-28308	3.8	13
67	Curvature effect on the phonon thermal conductivity of dielectric nanowires. *Journal of Applied Physics*, **2009**, 105, 104313	2.5	13

66	Thermal conductivity model for nanoporous thin films. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 97, 277-281	3	13
65	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	5	12
64	Increasing greenhouse production by spectral-shifting and unidirectional light-extracting photonics. *Nature Food*, **2021**, 2, 434-441	14.4	12
63	Reduced-scale hot box method for thermal characterization of window insulation materials. *Applied Thermal Engineering*, **2019**, 160, 114026	5.8	11
62	Optimal thermoelectric figure of merit in Bi2Te3/Sb2Te3 quantum dot nanocomposites. *Physical Review B*, **2012**, 85,	3.3	11
61	Machine learning for predicting thermal transport properties of solids. *Materials Science and Engineering Reports*, **2021**, 146, 100642	30.9	11
60	Hybrid radiation modeling for multi-phase solar-thermal reactor systems operated at high-temperature. *Solar Energy*, **2016**, 140, 130-140	6.8	10
59	Flexible Thermal Ground Planes Fabricated With Printed Circuit Board Technology. *Journal of Electronic Packaging, Transactions of the ASME*, **2017**, 139,	2	9
58	Effect of a metallic coating on the thermal conductivity of carbon nanofiber□dielectric matrix composites. *Composites Science and Technology*, **2015**, 109, 18-24	8.6	9
57	Radiative sky cooling potential maps of China based on atmospheric spectral emissivity. *Solar Energy*, **2021**, 218, 195-210	6.8	9
56	Capillary rupture of suspended polymer concentric rings. *Soft Matter*, **2015**, 11, 7264-9	3.6	8
55	Utilization of size-tunable hollow silica nanospheres for building thermal insulation applications. *Journal of Building Engineering*, **2020**, 31, 101336	5.2	8
54	Effect of the Electron□Phonon Coupling on the Effective Thermal Conductivity of Metallic Bilayers. *International Journal of Thermophysics*, **2013**, 34, 1817-1827	2.1	8
53	Inhomogeneous thermal conductivity enhances thermoelectric cooling. *AIP Advances*, **2014**, 4, 124501	1.5	8
52	Layered Hybrid Selenoantimonates with Reduced Thermal Conductivity. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2012**, 638, 2604-2609	1.3	7
51	Remarkable thermal conductivity reduction in metal-semiconductor nanocomposites. *Applied Physics Letters*, **2013**, 103, 083115	3.4	6
50	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	1.2	6
49	Using atomic layer deposited tungsten to increase thermal conductivity of a packed bed. *Applied Physics Letters*, **2015**, 106, 153102	3.4	5

48	Effective Thermal Conductivity of Metal Dielectric Composites at the Non-dilute Limit. *International Journal of Thermophysics*, **2012**, 33, 2118-2124	2.1	5
47	NANOCOMPOSITES AS HIGH EFFICIENCY THERMOELECTRIC MATERIALS. *Annual Review of Nano Research*, **2009**, 441-486		5
46	Thermal Conductivity of Particulate Nanocomposites. *Lecture Notes in Nanoscale Science and Technology*, **2014**, 93-139	0.3	5
45	Iridescent Daytime Radiative Cooling with No Absorption Peaks in the Visible Range.. *Small*, **2022**, e2202400	11	5
44	Atomic Layer Deposited Coatings on Nanowires for High Temperature Water Corrosion Protection. *ACS Applied Materials & Interfaces*, **2016**, 8, 32616-32623	9.5	4
43	Black Phosphorus: Revealing the Origins of 3D Anisotropic Thermal Conductivities of Black Phosphorus (Adv. Electron. Mater. 5/2016). *Advanced Electronic Materials*, **2016**, 2,	6.4	4
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41	Atomic layer deposition enabled interconnect technology for vertical nanowire arrays. *Sensors and Actuators A: Physical*, **2011**, 165, 107-114	3.9	4
40	On-Demand Solar and Thermal Radiation Management Based on Switchable Interwoven Surfaces. *ACS Energy Letters*, **2022**, 7, 1758-1763	20.1	4
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