

Gang Chen

List of Publications by Year in descending order

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625
papers

77,143
citations

293

139
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547

264
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631
all docs

631
docs citations

631
times ranked

36849
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Thermoelectric Performance of Nanostructured Bismuth Antimony Telluride Bulk Alloys. Science, 2008, 320, 634-638.	6.0	4,843
2	New Directions for Low-Dimensional Thermoelectric Materials. Advanced Materials, 2007, 19, 1043-1053.	11.1	3,468
3	Bulk nanostructured thermoelectric materials: current research and future prospects. Energy and Environmental Science, 2009, 2, 466.	15.6	1,698
4	Solar steam generation by heat localization. Nature Communications, 2014, 5, 4449.	5.8	1,623
5	Solar-driven interfacial evaporation. Nature Energy, 2018, 3, 1031-1041.	19.8	1,347
6	Nanoscale thermal transport. II. 2003â€“2012. Applied Physics Reviews, 2014, 1, 011305.	5.5	1,277
7	Analysis of Optical Absorption in Silicon Nanowire Arrays for Photovoltaic Applications. Nano Letters, 2007, 7, 3249-3252.	4.5	1,129
8	Perspectives on thermoelectrics: from fundamentals to device applications. Energy and Environmental Science, 2012, 5, 5147-5162.	15.6	1,080
9	Enhanced Thermoelectric Figure-of-Merit in Nanostructured p-type Silicon Germanium Bulk Alloys. Nano Letters, 2008, 8, 4670-4674.	4.5	1,014
10	High-performance flat-panel solar thermoelectric generators with high thermal concentration. Nature Materials, 2011, 10, 532-538.	13.3	987
11	Thermal conductivity and ballistic-phonon transport in the cross-plane direction of superlattices. Physical Review B, 1998, 57, 14958-14973.	1.1	967
12	Recent developments in thermoelectric materials. International Materials Reviews, 2003, 48, 45-66.	9.4	905
13	A benchmark study on the thermal conductivity of nanofluids. Journal of Applied Physics, 2009, 106, .	1.1	897
14	Steam generation under one sun enabled by a floating structure with thermal concentration. Nature Energy, 2016, 1, .	19.8	870
15	Enhancement of Thermoelectric Figure-of-Merit by a Bulk Nanostructuring Approach. Advanced Functional Materials, 2010, 20, 357-376.	7.8	795
16	Polyethylene nanofibres with very high thermal conductivities. Nature Nanotechnology, 2010, 5, 251-255.	15.6	718
17	Surface Phonon Polaritons Mediated Energy Transfer between Nanoscale Gaps. Nano Letters, 2009, 9, 2909-2913.	4.5	696
18	A salt-rejecting floating solar still for low-cost desalination. Energy and Environmental Science, 2018, 11, 1510-1519.	15.6	645

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19	High thermoelectric performance by resonant dopant indium in nanostructured SnTe. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13261-13266.	3.3	632
20	Recent advances in thermoelectric nanocomposites. Nano Energy, 2012, 1, 42-56.	8.2	624
21	Enhanced thermoelectric figure of merit in nanostructured n-type silicon germanium bulk alloy. Applied Physics Letters, 2008, 93, .	1.5	623
22	Heat transport in silicon from first-principles calculations. Physical Review B, 2011, 84, .	1.1	618
23	Experimental Studies on Anisotropic Thermoelectric Properties and Structures of n-Type $\text{Bi}_{2-x}\text{Te}_{2.7-x}\text{Se}_{0.3}$. Nano Letters, 2010, 10, 3373-3378.	4.5	608
24	Size effects on the hydrogen storage properties of nanostructured metal hydrides: A review. International Journal of Energy Research, 2007, 31, 637-663.	2.2	546
25	Thermoelectric Property Studies on Cu-doped n-type $\text{Cu}_x\text{Bi}_2\text{Te}_{2.7}\text{Se}_{0.3}$ Nanocomposites. Advanced Energy Materials, 2011, 1, 577-587.	10.2	535
26	Nanostructured Bulk Silicon as an Effective Thermoelectric Material. Advanced Functional Materials, 2009, 19, 2445-2452.	7.8	521
27	Enhanced Thermoelectric Figure-of-Merit in p-Type Nanostructured Bismuth Antimony Tellurium Alloys Made from Elemental Chunks. Nano Letters, 2008, 8, 2580-2584.	4.5	515
28	Pulse accumulation, radial heat conduction, and anisotropic thermal conductivity in pump-probe transient thermoreflectance. Review of Scientific Instruments, 2008, 79, 114902.	0.6	496
29	Coherent Phonon Heat Conduction in Superlattices. Science, 2012, 338, 936-939.	6.0	489
30	Resonant bonding leads to low lattice thermal conductivity. Nature Communications, 2014, 5, 3525.	5.8	484
31	Ballistic-Diffusive Heat-Conduction Equations. Physical Review Letters, 2001, 86, 2297-2300.	2.9	470
32	Phonon conduction in PbSe , PbTe , and $\text{PbTe}_{1-x}\text{Se}_x$ from first-principles calculations. Physical Review B, 2012, 85, .	1.1	463
33	Power Factor Enhancement by Modulation Doping in Bulk Nanocomposites. Nano Letters, 2011, 11, 2225-2230.	4.5	461
34	Enhancement of Thermoelectric Properties by Modulation-Doping in Silicon Germanium Alloy Nanocomposites. Nano Letters, 2012, 12, 2077-2082.	4.5	461
35	High thermoelectric cooling performance of n-type Mg_3Bi_2 -based materials. Science, 2019, 365, 495-498.	6.0	457
36	Thermal Conductivity Spectroscopy Technique to Measure Phonon Mean Free Paths. Physical Review Letters, 2011, 107, 095901.	2.9	438

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37	Concentrating Solar Power. Chemical Reviews, 2015, 115, 12797-12838.	23.0	438
38	Molecular dynamics simulation of thermal conductivity of silicon nanowires. Applied Physics Letters, 1999, 75, 2056-2058.	1.5	423
39	Relationship between thermoelectric figure of merit and energy conversion efficiency. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8205-8210.	3.3	415
40	Data reduction in 3D method for thin-film thermal conductivity determination. Review of Scientific Instruments, 2001, 72, 2139-2147.	0.6	412
41	Response of the Zonal Mean Atmospheric Circulation to El Niño versus Global Warming. Journal of Climate, 2008, 21, 5835-5851.	1.2	393
42	A review of cermet-based spectrally selective solar absorbers. Energy and Environmental Science, 2014, 7, 1615.	15.6	386
43	Advances in thermoelectrics. Advances in Physics, 2018, 67, 69-147.	35.9	383
44	Giant thermopower of ionic gelatin near room temperature. Science, 2020, 368, 1091-1098.	6.0	382
45	Optical Absorption Enhancement in Silicon Nanohole Arrays for Solar Photovoltaics. Nano Letters, 2010, 10, 1012-1015.	4.5	373
46	Enhancement of thermoelectric figure-of-merit by resonant states of aluminium doping in lead selenide. Energy and Environmental Science, 2012, 5, 5246-5251.	15.6	372
47	Theoretical phonon thermal conductivity of Si/Ge superlattice nanowires. Journal of Applied Physics, 2004, 95, 682-693.	1.1	369
48	Enhanced thermal conductivity and viscosity of copper nanoparticles in ethylene glycol nanofluid. Journal of Applied Physics, 2008, 103, .	1.1	367
49	Size and Interface Effects on Thermal Conductivity of Superlattices and Periodic Thin-Film Structures. Journal of Heat Transfer, 1997, 119, 220-229.	1.2	362
50	Enhanced Thermoelectric Figure of Merit of p-Type Half-Heuslers. Nano Letters, 2011, 11, 556-560.	4.5	362
51	Thermoelectric cooling materials. Nature Materials, 2021, 20, 454-461.	13.3	360
52	Surface modes for near field thermophotovoltaics. Applied Physics Letters, 2003, 82, 3544-3546.	1.5	352
53	Volumetric solar heating of nanofluids for direct vapor generation. Nano Energy, 2015, 17, 290-301.	8.2	350
54	Nanoscale design to enable the revolution in renewable energy. Energy and Environmental Science, 2009, 2, 559.	15.6	348

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55	Superplastic carbon nanotubes. <i>Nature</i> , 2006, 439, 281-281.	13.7	347
56	Nonlocal and Nonequilibrium Heat Conduction in the Vicinity of Nanoparticles. <i>Journal of Heat Transfer</i> , 1996, 118, 539-545.	1.2	342
57	High Thermal Conductivity of Single Polyethylene Chains Using Molecular Dynamics Simulations. <i>Physical Review Letters</i> , 2008, 101, 235502.	2.9	337
58	Heavy Doping and Band Engineering by Potassium to Improve the Thermoelectric Figure of Merit in p-Type PbTe, PbSe, and PbTe _{1-x} Se _x . <i>Journal of the American Chemical Society</i> , 2012, 134, 10031-10038.	6.6	337
59	Direct Measurement of Room-Temperature Nondiffusive Thermal Transport Over Micron Distances in a Silicon Membrane. <i>Physical Review Letters</i> , 2013, 110, 025901.	2.9	330
60	Tuning the carrier scattering mechanism to effectively improve the thermoelectric properties. <i>Energy and Environmental Science</i> , 2017, 10, 799-807.	15.6	326
61	Molecular-dynamics simulation of thermal conductivity of silicon crystals. <i>Physical Review B</i> , 2000, 61, 2651-2656.	1.1	325
62	An electrochemical system for efficiently harvesting low-grade heat energy. <i>Nature Communications</i> , 2014, 5, 3942.	5.8	324
63	Efficient Light Trapping in Inverted Nanopyramid Thin Crystalline Silicon Membranes for Solar Cell Applications. <i>Nano Letters</i> , 2012, 12, 2792-2796.	4.5	322
64	Spectral Phonon Transport Properties of Silicon Based on Molecular Dynamics Simulations and Lattice Dynamics. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008, 5, 141-152.	0.4	308
65	Plasmonic materials for energy: From physics to applications. <i>Materials Today</i> , 2013, 16, 375-386.	8.3	304
66	Unusual high thermal conductivity in boron arsenide bulk crystals. <i>Science</i> , 2018, 361, 582-585.	6.0	300
67	Studies on Thermoelectric Properties of n-Type Polycrystalline SnSe _{1-x} S _x by Iodine Doping. <i>Advanced Energy Materials</i> , 2015, 5, 1500360.	10.2	287
68	Enhancement in Thermoelectric Figure of Merit of an n-Type Half-Heusler Compound by the Nanocomposite Approach. <i>Advanced Energy Materials</i> , 2011, 1, 643-647.	10.2	286
69	Thermal conductivity modeling of periodic two-dimensional nanocomposites. <i>Physical Review B</i> , 2004, 69, .	1.1	281
70	Recent progress and future challenges on thermoelectric Zintl materials. <i>Materials Today Physics</i> , 2017, 1, 74-95.	2.9	275
71	Thermoelectric properties of copper selenide with ordered selenium layer and disordered copper layer. <i>Nano Energy</i> , 2012, 1, 472-478.	8.2	271
72	Spectral mapping of thermal conductivity through nanoscale ballistic transport. <i>Nature Nanotechnology</i> , 2015, 10, 701-706.	15.6	271

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73	Near-field thermal radiation between two closely spaced glass plates exceeding Planck's blackbody radiation law. Applied Physics Letters, 2008, 92, .	1.5	270
74	Concentrating solar thermoelectric generators with a peak efficiency of 7.4%. Nature Energy, 2016, 1, .	19.8	269
75	Manipulation of ionized impurity scattering for achieving high thermoelectric performance in n-type Mg ₃ Sb ₂ -based materials. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10548-10553.	3.3	267
76	Routes for high-performance thermoelectric materials. Materials Today, 2018, 21, 974-988.	8.3	265
77	High thermoelectric performance of MgAgSb-based materials. Nano Energy, 2014, 7, 97-103.	8.2	264
78	Increased Phonon Scattering by Nanograins and Point Defects in Nanostructured Silicon with a Low Concentration of Germanium. Physical Review Letters, 2009, 102, 196803.	2.9	263
79	Evidence for a spinon Fermi surface in a triangular-lattice quantum-spin-liquid candidate. Nature, 2016, 540, 559-562.	13.7	259
80	Modeling the Thermal Conductivity and Phonon Transport in Nanoparticle Composites Using Monte Carlo Simulation. Journal of Heat Transfer, 2008, 130, .	1.2	258
81	Toward the Lambertian Limit of Light Trapping in Thin Nanostructured Silicon Solar Cells. Nano Letters, 2010, 10, 4692-4696.	4.5	255
82	Hydrodynamic phonon transport in suspended graphene. Nature Communications, 2015, 6, 6290.	5.8	254
83	Phonon-engineered extreme thermal conductivity materials. Nature Materials, 2021, 20, 1188-1202.	13.3	254
84	Infrared-Transparent Visible-Opaque Fabrics for Wearable Personal Thermal Management. ACS Photonics, 2015, 2, 769-778.	3.2	252
85	Studies on the Bi ₂ Te ₃ –Bi ₂ Se ₃ –Bi ₂ S ₃ system for mid-temperature thermoelectric energy conversion. Energy and Environmental Science, 2013, 6, 552-560.	15.6	250
86	Stronger phonon scattering by larger differences in atomic mass and size in p-type half-Heuslers Hf _{1-x} Ti _x CoSb _{0.8} Sn _{0.2} . Energy and Environmental Science, 2012, 5, 7543.	15.6	244
87	Discovery of ZrCoBi based half Heuslers with high thermoelectric conversion efficiency. Nature Communications, 2018, 9, 2497.	5.8	243
88	Structure Study of Bulk Nanograined Thermoelectric Bismuth Antimony Telluride. Nano Letters, 2009, 9, 1419-1422.	4.5	236
89	Thermal conductivity of symmetrically strained Si/Ge superlattices. Superlattices and Microstructures, 2000, 28, 199-206.	1.4	235
90	Enhancing phonon transmission across a Si/Ge interface by atomic roughness: First-principles study with the Green's function method. Physical Review B, 2012, 86, .	1.1	232

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91	Aspects of Thin-Film Superlattice Thermoelectric Materials, Devices, and Applications. MRS Bulletin, 2006, 31, 211-217.	1.7	229
92	Significant Reduction of Lattice Thermal Conductivity by the Electron-Phonon Interaction in Silicon with High Carrier Concentrations: A First-Principles Study. Physical Review Letters, 2015, 114, 115901.	2.9	229
93	Discovery of TaFeSb-based half-Heuslers with high thermoelectric performance. Nature Communications, 2019, 10, 270.	5.8	227
94	Ballistic-Diffusive Equations for Transient Heat Conduction From Nano to Macroscales. Journal of Heat Transfer, 2002, 124, 320-328.	1.2	226
95	1%, 2%, and 3% methods for measurements of thermal properties. Review of Scientific Instruments, 2005, 76, 124902.	0.6	223
96	Modified effective medium formulation for the thermal conductivity of nanocomposites. Applied Physics Letters, 2007, 91, .	1.5	223
97	Experimental Investigation of Heat Conduction Mechanisms in Nanofluids. Clue on Clustering. Nano Letters, 2009, 9, 4128-4132.	4.5	221
98	Near-field radiative heat transfer between a sphere and a substrate. Physical Review B, 2008, 78, .	1.1	219
99	Nanoscale heat transfer " from computation to experiment. Physical Chemistry Chemical Physics, 2013, 15, 3389.	1.3	218
100	Thermal conductivity of periodic microporous silicon films. Applied Physics Letters, 2004, 84, 687-689.	1.5	214
101	Atomic-Scale Imaging of Wall-by-Wall Breakdown and Concurrent Transport Measurements in Multiwall Carbon Nanotubes. Physical Review Letters, 2005, 94, 236802.	2.9	214
102	Achieving high power factor and output power density in p-type half-Heuslers Nb _{1-x} Ti _x FeSb. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13576-13581.	3.3	213
103	Heat Transfer in Nanostructures for Solid-State Energy Conversion. Journal of Heat Transfer, 2002, 124, 242-252.	1.2	211
104	Thermal conductivity of simple and tubular nanowire composites in the longitudinal direction. Physical Review B, 2005, 72, .	1.1	210
105	Charging-free electrochemical system for harvesting low-grade thermal energy. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17011-17016.	3.3	206
106	Nanostructured polymer films with metal-like thermal conductivity. Nature Communications, 2019, 10, 1771.	5.8	197
107	Effect of Hf Concentration on Thermoelectric Properties of Nanostructured N-type Half-Heusler Materials Hf _x Zr _{1-x} NiSn _{0.99} Sb _{0.01} . Advanced Energy Materials, 2013, 3, 1210-1214.	10.2	195
108	Contactless steam generation and superheating under one sun illumination. Nature Communications, 2018, 9, 5086.	5.8	195

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109	Thermal conductivity and heat transfer in superlattices. Applied Physics Letters, 1997, 71, 2761-2763.	1.5	194
110	Deep defect level engineering: a strategy of optimizing the carrier concentration for high thermoelectric performance. Energy and Environmental Science, 2018, 11, 933-940.	15.6	188
111	Thermal conductivity of half-Heusler compounds from first-principles calculations. Physical Review B, 2011, 84, .	1.1	187
112	Frequency-dependent Monte Carlo simulations of phonon transport in two-dimensional porous silicon with aligned pores. Journal of Applied Physics, 2009, 106, .	1.1	184
113	Thermal Radiation from Photonic Crystals: A Direct Calculation. Physical Review Letters, 2004, 93, 213905.	2.9	181
114	Effects of nanoscale porosity on thermoelectric properties of SiGe. Journal of Applied Physics, 2010, 107, .	1.1	181
115	Modeling study of thermoelectric SiGe nanocomposites. Physical Review B, 2009, 80, .	1.1	178
116	Thermal Diffusivity Measurement of GaAs/AlGaAs Thin-Film Structures. Journal of Heat Transfer, 1994, 116, 325-331.	1.2	177
117	Ultrahigh thermal conductivity in isotope-enriched cubic boron nitride. Science, 2020, 367, 555-559.	6.0	177
118	Reversible temperature regulation of electrical and thermal conductivity using liquid–solid phase transitions. Nature Communications, 2011, 2, 289.	5.8	175
119	<i>Ab initio</i> study of electron-phonon interaction in phosphorene. Physical Review B, 2015, 91, .	1.1	175
120	Thermal conductance and phonon transmissivity of metal–graphite interfaces. Journal of Applied Physics, 2010, 107, .	1.1	174
121	Partially coherent phonon heat conduction in superlattices. Physical Review B, 2003, 67, .	1.1	173
122	Thermal near-field radiative transfer between two spheres. Physical Review B, 2008, 77, .	1.1	172
123	A Janus evaporator with low tortuosity for long-term solar desalination. Journal of Materials Chemistry A, 2019, 7, 15333-15340.	5.2	170
124	Phase speed spectra and the recent poleward shift of Southern Hemisphere surface westerlies. Geophysical Research Letters, 2007, 34, .	1.5	169
125	Phonon heat conduction in nanostructures. International Journal of Thermal Sciences, 2000, 39, 471-480.	2.6	168
126	Thermal emission control with one-dimensional metallodielectric photonic crystals. Physical Review B, 2004, 70, .	1.1	165

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127	Molecular engineered conjugated polymer with high thermal conductivity. Science Advances, 2018, 4, eaar3031.	4.7	165
128	Thermal Conductivity Modeling of Core-Shell and Tubular Nanowires. Nano Letters, 2005, 5, 1111-1115.	4.5	160
129	Observation of second sound in graphite at temperatures above 100 K. Science, 2019, 364, 375-379.	6.0	160
130	A Microporous and Naturally Nanostructured Thermoelectric Metal-Organic Framework with Ultralow Thermal Conductivity. Joule, 2017, 1, 168-177.	11.7	159
131	15.7% Efficient 10 μ m-Thick Crystalline Silicon Solar Cells Using Periodic Nanostructures. Advanced Materials, 2015, 27, 2182-2188.	11.1	156
132	High thermoelectric conversion efficiency of MgAgSb-based material with hot-pressed contacts. Energy and Environmental Science, 2015, 8, 1299-1308.	15.6	154
133	Tailoring high-temperature radiation and the resurrection of the incandescent source. Nature Nanotechnology, 2016, 11, 320-324.	15.6	153
134	Simulation of Nanoscale Multidimensional Transient Heat Conduction Problems Using Ballistic-Diffusive Equations and Phonon Boltzmann Equation. Journal of Heat Transfer, 2005, 127, 298-306.	1.2	151
135	Membrane-Free Battery for Harvesting Low-Grade Thermal Energy. Nano Letters, 2014, 14, 6578-6583.	4.5	149
136	An optical pump-probe technique for measuring the thermal conductivity of liquids. Review of Scientific Instruments, 2008, 79, 064902.	0.6	147
137	Thermoelectric Property Study of Nanostructured p-Type Half-Heuslers (Hf, Zr). Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 342	10.2	145
138	First-principles simulation of electron mean-free-path spectra and thermoelectric properties in silicon. Europhysics Letters, 2015, 109, 57006.	0.7	144
139	Enhanced Thermal Stability of W ₂ NiAl ₃ Cermet-Based Spectrally Selective Solar Absorbers with Tungsten Infrared Reflectors. Advanced Energy Materials, 2015, 5, 1401042.	10.2	144
140	Temperature dependence of thermophysical properties of GaAs/AlAs periodic structure. Applied Physics Letters, 1995, 67, 3554-3556.	1.5	143
141	Challenges in Microscale Conductive and Radiative Heat Transfer. Journal of Heat Transfer, 1994, 116, 799-807.	1.2	140
142	Photovoltaic-thermoelectric hybrid systems: A general optimization methodology. Applied Physics Letters, 2008, 92, .	1.5	140
143	Measurements of anisotropic thermoelectric properties in superlattices. Applied Physics Letters, 2002, 81, 3588-3590.	1.5	137
144	On the importance of optical phonons to thermal conductivity in nanostructures. Applied Physics Letters, 2011, 99, .	1.5	137

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145	Understanding of the contact of nanostructured thermoelectric n-type Bi ₂ Te _{2.7} Se _{0.3} legs for power generation applications. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13093.	5.2	133
146	Supercooling of Peltier cooler using a current pulse. <i>Journal of Applied Physics</i> , 2002, 92, 1564-1569.	1.1	132
147	Heat conduction mechanisms in nanofluids and suspensions. <i>Nano Today</i> , 2012, 7, 124-136.	6.2	132
148	<l>A Special Issue on<l> Nanoscale Heat Transfer. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008, 5, 1-2.	0.4	130
149	Modeling and optimization of solar thermoelectric generators for terrestrial applications. <i>Solar Energy</i> , 2012, 86, 1338-1350.	2.9	129
150	Thermal interface conductance in Si/Ge superlattices by equilibrium molecular dynamics. <i>Physical Review B</i> , 2012, 85, .	1.1	128
151	Minimum thermal conductivity in superlattices: A first-principles formalism. <i>Physical Review B</i> , 2013, 87, .	1.1	126
152	First-principles mode-by-mode analysis for electron-phonon scattering channels and mean free path spectra in GaAs. <i>Physical Review B</i> , 2017, 95, .	1.1	125
153	Phase Speed Spectra and the Latitude of Surface Westerlies: Interannual Variability and Global Warming Trend. <i>Journal of Climate</i> , 2008, 21, 5942-5959.	1.2	124
154	Anomalous heat conduction in polyethylene chains: Theory and molecular dynamics simulations. <i>Physical Review B</i> , 2009, 79, .	1.1	124
155	Losses in plasmonics: from mitigating energy dissipation to embracing loss-enabled functionalities. <i>Advances in Optics and Photonics</i> , 2017, 9, 775.	12.1	122
156	Transient cooling of thermoelectric coolers and its applications for microdevices. <i>Energy Conversion and Management</i> , 2005, 46, 1407-1421.	4.4	119
157	Formation of crystallized titania nanotubes and their transformation into nanowires. <i>Nanotechnology</i> , 2005, 16, 1935-1940.	1.3	119
158	Heat Transfer in Thermoelectric Materials and Devices. <i>Journal of Heat Transfer</i> , 2013, 135, .	1.2	119
159	Thin-film â€˜Thermal Wellâ€™™ Emitters and Absorbers for High-Efficiency Thermophotovoltaics. <i>Scientific Reports</i> , 2015, 5, 10661.	1.6	119
160	Simultaneous measurements of Seebeck coefficient and thermal conductivity across superlattice. <i>Applied Physics Letters</i> , 2002, 80, 1758-1760.	1.5	117
161	Microscopic mechanism of low thermal conductivity in lead telluride. <i>Physical Review B</i> , 2012, 85, .	1.1	115
162	Computation of thermal conductivity of Si/Ge superlattices by molecular dynamics techniques. <i>Microelectronics Journal</i> , 2000, 31, 815-819.	1.1	113

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163	Real-Time Observation of Tubule Formation from Amorphous Carbon Nanowires under High-Bias Joule Heating. Nano Letters, 2006, 6, 1699-1705.	4.5	112
164	Theoretical efficiency of solar thermoelectric energy generators. Journal of Applied Physics, 2011, 109, .	1.1	112
165	Particularities of Heat Conduction in Nanostructures. Journal of Nanoparticle Research, 2000, 2, 199-204.	0.8	111
166	Reconstructing phonon mean-free-path contributions to thermal conductivity using nanoscale membranes. Physical Review B, 2015, 91, .	1.1	111
167	Nano-microstructural control of phonon engineering for thermoelectric energy harvesting. MRS Bulletin, 2018, 43, 181-186.	1.7	111
168	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. Nature Communications, 2018, 9, 1721.	5.8	111
169	Quasiballistic heat transfer studied using the frequency-dependent Boltzmann transport equation. Physical Review B, 2011, 84, .	1.1	109
170	Thermal Percolation in Stable Graphite Suspensions. Nano Letters, 2012, 12, 188-192.	4.5	108
171	Phonon localization in heat conduction. Science Advances, 2018, 4, eaat9460.	4.7	108
172	Semiconductor glass with superior flexibility and high room temperature thermoelectric performance. Science Advances, 2020, 6, eaaz8423.	4.7	108
173	Measuring Phonon Mean Free Path Distributions by Probing Quasiballistic Phonon Transport in Grating Nanostructures. Scientific Reports, 2015, 5, 17131.	1.6	107
174	Study of the Thermoelectric Properties of Lead Selenide Doped with Boron, Gallium, Indium, or Thallium. Journal of the American Chemical Society, 2012, 134, 17731-17738.	6.6	105
175	Solubility study of Yb in n -type skutterudites $\text{Yb}_x\text{Co}_4\text{Sb}_{13}$. Physical Review B, 2009, 80, .	1.1	104
176	Thermal conductivities of quantum well structures. Journal of Thermophysics and Heat Transfer, 1993, 7, 311-318.	0.9	103
177	Goos-Hänchen shifts at the interfaces between left- and right-handed media. Optics Letters, 2004, 29, 872.	1.7	103
178	Non-Fourier phonon heat conduction at the microscale and nanoscale. Nature Reviews Physics, 2021, 3, 555-569.	11.9	103
179	A high-performance spectrally-selective solar absorber based on a yttria-stabilized zirconia cermet with high-temperature stability. Energy and Environmental Science, 2015, 8, 3040-3048.	15.6	102
180	Impact of nanostructuring on the enthalpy of formation of metal hydrides. International Journal of Hydrogen Energy, 2008, 33, 4122-4131.	3.8	101

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181	1D-to-3D transition of phonon heat conduction in polyethylene using molecular dynamics simulations. <i>Physical Review B</i> , 2010, 82, .	1.1	101
182	Phonon Heat Conduction in Thin Films: Impacts of Thermal Boundary Resistance and Internal Heat Generation. <i>Journal of Heat Transfer</i> , 2001, 123, 340-347.	1.2	100
183	Nanoscale thermal radiation between two gold surfaces. <i>Applied Physics Letters</i> , 2012, 100, 233114.	1.5	100
184	Gallium arsenide thermal conductivity and optical phonon relaxation times from first-principles calculations. <i>Europhysics Letters</i> , 2013, 101, 16001.	0.7	100
185	Very low temperature membrane-free desalination by directional solvent extraction. <i>Energy and Environmental Science</i> , 2011, 4, 1672.	15.6	98
186	Diffusion of nickel and tin in p-type (Bi,Sb) ₂ Te ₃ and n-type Bi ₂ (Te,Se) ₃ thermoelectric materials. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	97
187	Harnessing Heat Beyond 200 Å°C from Unconcentrated Sunlight with Nonevacuated Transparent Aerogels. <i>ACS Nano</i> , 2019, 13, 7508-7516.	7.3	97
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