Patrick E Hopkins

List of Publications by Year
in descending order

249 papers	11,304 citations	24978 57 h-index	42291 92 g-index
254 all docs	254 docs citations	254 times ranked	9105 citing authors

#	Article	IF	Citations
1	Quasi-harmonic theory for phonon thermal boundary conductance at high temperatures. Journal of Applied Physics, 2022, 131, 015101.	1.1	3
2	Emergent interface vibrational structure of oxide superlattices. Nature, 2022, 601, 556-561.	13.7	40
3	Detection of sub-micrometer thermomechanical and thermochemical failure mechanisms in titanium with a laser-based thermoreflectance technique. Journal of Applied Physics, 2022, 131, 055104.	1.1	1
4	Highly Negative Poissonâ€™s Ratio in Thermally Conductive Covalent Organic Frameworks. ACS Nano, 2022, 16, 2843-2851.	7.3	17
5	Simultaneously enhanced electrical conductivity and suppressed thermal conductivity for ALD ZnO films via purge-time controlled defects. Applied Physics Letters, 2022, 120, .	1.5	2
6	Hybridization from Guestâ€“Host Interactions Reduces the Thermal Conductivity of Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2022, 144, 3603-3613.	6.6	23
7	Observation of solid-state bidirectional thermal conductivity switching in antiferroelectric lead zirconate (PbZrO3). Nature Communications, 2022, 13, 1573.	5.8	25
8	Supramolecular Interactions Lead to Remarkably High Thermal Conductivities in Interpenetrated Two-Dimensional Porous Crystals. Nano Letters, 2022, 22, 3071-3076.	4.5	6
9	Atomic coordination dictates vibrational characteristics and thermal conductivity in amorphous carbon. Npj Computational Materials, 2022, 8, .	3.5	10
10	Pore-Confined Polymers Enhance the Thermal Conductivity of Polymer Nanocomposites. ACS Macro Letters, 2022, 11, 116-120.	2.3	3
11	A New Polystyreneâ€“Poly(vinylpyridinium) Ionic Copolymer Dopant for nâ€Type Allâ€Polymer Thermoelectrics with High and Stable Conductivity Relative to the Seebeck Coefficient giving High Power Factor. Advanced Materials, 2022, 34, e2201062.	11.1	13
12	Plasma-induced surface cooling. Nature Communications, 2022, 13, 2623.	5.8	6
13	Vacancy-Induced Temperature-Dependent Thermal and Magnetic Properties of Holmium-Substituted Bismuth Ferrite Nanoparticle Compacts. ACS Applied Materials & Interfaces, 2022, 14, 25886-25897.	4.0	4
14	Orientation-Controlled Anisotropy in Single Crystals of Quasi-1D BaTiS₃. Chemistry of Materials, 2022, 34, 5680-5689.	3.2	6
15	Electronâ€“phonon relaxation at the Au/WSe₂ interface is significantly accelerated by a Ti adhesion layer: time-domain <i>ab initio</i> analysis. Nanoscale, 2022, 14, 10514-10523.	2.8	7
16	Upper limits to thermal conductance across gallium nitride interfaces: Predictions and measurements. , 2022, , 83-102.		0
17	Evolution of microstructure and thermal conductivity of multifunctional environmental barrier coating systems. Materials Today Physics, 2021, 17, 100304.	2.9	16
18	Long-lived modulation of plasmonic absorption by ballistic thermal injection. Nature Nanotechnology, 2021, 16, 47-51.	15.6	40

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19	Probing thermal conductivity of subsurface, amorphous layers in irradiated diamond. Journal of Applied Physics, 2021, 129, .	1.1	6
20	Interface controlled thermal resistancesÂof ultra-thin chalcogenide-based phase change memory devices. Nature Communications, 2021, 12, 774.	5.8	59
21	Applications and Impacts of Nanoscale Thermal Transport in Electronics Packaging. Journal of Electronic Packaging, Transactions of the ASME, 2021, 143, .	1.2	38
22	Compositional and phase dependence of elastic modulus of crystalline and amorphous Hf1-<i>x</i>Zr<i>x</i>O2 thin films. Applied Physics Letters, 2021, 118, .	1.5	19
23	Hydrogen effects on the thermal conductivity of delocalized vibrational modes in amorphous silicon nitride <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mi>a</mml:mi><mml:mtext>â [illegible] </mml:mtext><m 5, .	0.9	8
24	Mid-wave to near-IR optoelectronic properties and epsilon-near-zero behavior in indium-doped cadmium oxide. Physical Review Materials, 2021, 5, .	0.9	12
25	Thickness-Independent Vibrational Thermal Conductance across Confined Solid-Solution Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 12541-12549.	4.0	3
26	Thermally conductive ultra-low-k dielectric layers based on two-dimensional covalent organic frameworks. Nature Materials, 2021, 20, 1142-1148.	13.3	158
27	High In-Plane Thermal Conductivity of Aluminum Nitride Thin Films. ACS Nano, 2021, 15, 9588-9599.	7.3	58
28	Thermal Conductivity Enhancement in Ion-Irradiated Hydrogenated Amorphous Carbon Films. Nano Letters, 2021, 21, 3935-3940.	4.5	11
29	Band alignment and defects influence the electronâ€“phonon heat transport mechanisms across metal interfaces. Applied Physics Letters, 2021, 118, .	1.5	8
30	Simultaneous thickness and thermal conductivity measurements of thinned silicon from 100â€‰nm to 17â€‰<i>Î¼</i>m. Applied Physics Letters, 2021, 118, .	1.5	5
31	Temperature dependent electronâ€“phonon coupling of Au resolved via lattice dynamics measured with sub-picosecond infrared pulses. Journal of Applied Physics, 2021, 129, .	1.1	8
32	Tuning network topology and vibrational mode localization to achieve ultralow thermal conductivity in amorphous chalcogenides. Nature Communications, 2021, 12, 2817.	5.8	29
33	Organic-component dependent thermal conductivity reduction in ALD/MLD grown ZnO:organic superlattice thin films. Applied Physics Letters, 2021, 118, 211903.	1.5	10
34	Thermal conductivity measurements of sub-surface buried substrates by steady-state thermoreflectance. Review of Scientific Instruments, 2021, 92, 064906.	0.6	17
35	Heat Transfer Mechanisms and Tunable Thermal Conductivity Anisotropy in Two-Dimensional Covalent Organic Frameworks with Adsorbed Gases. Nano Letters, 2021, 21, 6188-6193.	4.5	35
36	High thermal conductivity and thermal boundary conductance of homoepitaxially grown gallium nitride (GaN) thin films. Physical Review Materials, 2021, 5, .	0.9	10

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37	Reductions in the thermal conductivity of irradiated silicon governed by displacement damage. Physical Review B, 2021, 104, .	1.1	2
38	Suppressed electronic contribution in thermal conductivity of Ge2Sb2Se4Te. Nature Communications, 2021, 12, 7187.	5.8	23
39	Orders of magnitude reduction in the thermal conductivity of polycrystalline diamond through carbon, nitrogen, and oxygen ion implantation. Carbon, 2020, 157, 97-105.	5.4	27
40	A Review of Experimental and Computational Advances in Thermal Boundary Conductance and Nanoscale Thermal Transport across Solid Interfaces. Advanced Functional Materials, 2020, 30, 1903857.	7.8	166
41	Local thermal conductivity measurements to determine the fraction of Î±-cristobalite in thermally grown oxides for aerospace applications. Scripta Materialia, 2020, 177, 214-217.	2.6	18
42	Thermal conductance across harmonic-matched epitaxial Al-sapphire heterointerfaces. Communications Physics, 2020, 3, .	2.0	41
43	Interface and layer periodicity effects on the thermal conductivity of copper-based nanomultilayers with tungsten, tantalum, and tantalum nitride diffusion barriers. Journal of Applied Physics, 2020, 128, .	1.1	11
44	Experimental Control and Statistical Analysis of Thermal Conductivity in ZnOâ€“Benzene Multilayer Thin Films. Journal of Physical Chemistry C, 2020, 124, 24731-24739.	1.5	9
45	Spontaneous chemical functionalization via coordination of Au single atoms on monolayer MoS ₂. Science Advances, 2020, 6, .	4.7	56
46	Chain-Length Dependence of Thermal Conductivity in 2D Alkylammonium Lead Iodide Single Crystals. ACS Applied Materials & Interfaces, 2020, 12, 53705-53711.	4.0	10
47	Observation of reduced thermal conductivity in a metal-organic framework due to the presence of adsorbates. Nature Communications, 2020, 11, 4010.	5.8	97
48	Thermal conductivity of (Ge2Sb2Te5)1âˆ’xCx phase change films. Journal of Applied Physics, 2020, 128, 155106.	1.1	4
49	Heat diffusion imaging: In-plane thermal conductivity measurement of thin films in a broad temperature range. Review of Scientific Instruments, 2020, 91, 113701.	0.6	7
50	Thermal boundary conductance across epitaxial metal/sapphire interfaces. Physical Review B, 2020, 102, .	1.1	26
51	Tailoring thermal properties of multi-component rare earth monosilicates. Acta Materialia, 2020, 195, 698-707.	3.8	73
52	Structural Stabilization and Piezoelectric Enhancement in Epitaxial (Ti_{1âˆ’}<i>_x</i>Mg<i>_x</i>)_{0.25}Al_{0.75}N(0001) Layers. Advanced Functional Materials, 2020, 30, 2001915.	7.8	11
53	Bulk-like Intrinsic Phonon Thermal Conductivity of Micrometer-Thick AlN Films. ACS Applied Materials & Interfaces, 2020, 12, 29443-29450.	4.0	22
54	Electron and phonon thermal conductivity in high entropy carbides with variable carbon content. Acta Materialia, 2020, 196, 231-239.	3.8	52

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55	Ultralow Thermal Conductivity of Two-Dimensional Metal Halide Perovskites. Nano Letters, 2020, 20, 3331-3337.	4.5	64
56	Thermal properties of carbon nitride toward use as an electrode in phase change memory devices. Applied Physics Letters, 2020, 116, 043502.	1.5	14
57	Anisotropic thermal conductivity tensor of Î²-Y2Si2O7 for orientational control of heat flow on micrometer scales. Acta Materialia, 2020, 189, 299-305.	3.8	12
58	Understanding Molecular Layer Deposition Growth Mechanisms in Polyurea via Picosecond Acoustics Analysis. Chemistry of Materials, 2020, 32, 1553-1563.	3.2	17
59	Control of Charge Carrier Dynamics in Plasmonic Au Films by TiO_{<i>x</i>} Substrate Stoichiometry. Journal of Physical Chemistry Letters, 2020, 11, 1419-1427.	2.1	21
60	Achieving a better heat conductor. Nature Materials, 2020, 19, 482-484.	13.3	10
61	Thermoelectric Performance Enhancement of Naturally Occurring Bi and Chitosan Composite Films Using Energy Efficient Method. Electronics (Switzerland), 2020, 9, 532.	1.8	6
62	High mobility and high thermoelectric power factor in epitaxial ScN thin films deposited with plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2020, 116, .	1.5	26
63	Dual-phase high-entropy ultra-high temperature ceramics. Journal of the European Ceramic Society, 2020, 40, 5037-5050.	2.8	91
64	Experimental observation of high intrinsic thermal conductivity of AlN. Physical Review Materials, 2020, 4, .	0.9	60
65	Molecular tail chemistry controls thermal transport in fullerene films. Physical Review Materials, 2020, 4, .	0.9	11
66	Effect of light atoms on thermal transport across solidâ€“solid interfaces. Physical Chemistry Chemical Physics, 2019, 21, 17029-17035.	1.3	17
67	Thermal Conductivity and Phonon Scattering Processes of ALD Grown PbTeâ€“PbSe Thermoelectric Thin Films. Advanced Functional Materials, 2019, 29, 1904073.	7.8	23
68	Thermionic transport across gold-graphene-WSe ₂ van der Waals heterostructures. Science Advances, 2019, 5, eaax7827.	4.7	21
69	Enhanced Figure of Merit in Bismuth-Antimony Fine-Grained Alloys at Cryogenic Temperatures. Scientific Reports, 2019, 9, 14892.	1.6	17
70	Electronâ€“Phonon Relaxation at Au/Ti Interfaces Is Robust to Alloying: Ab Initio Nonadiabatic Molecular Dynamics. Journal of Physical Chemistry C, 2019, 123, 22842-22850.	1.5	9
71	Tuning Electrical, Optical, and Thermal Properties through Cation Disorder in Cu₂ZnSnS₄. Chemistry of Materials, 2019, 31, 8402-8412.	3.2	11
72	Resonant phonon modes in fullerene functionalized graphene lead to large tunability of thermal conductivity without impacting the mechanical properties. Journal of Applied Physics, 2019, 125, .	1.1	13

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73	Thin Ti adhesion layer breaks bottleneck to hot hole relaxation in Au films. Journal of Chemical Physics, 2019, 150, 184701.	1.2	14
74	Direct Laser Writing from Aqueous Precursors for Nano to Microscale Topographical Control, Integration, and Synthesis of Nanocrystalline Mixed Metal Oxides. ACS Applied Nano Materials, 2019, 2, 2581-2586.	2.4	17
75	First-principles determination of the ultrahigh electrical and thermal conductivity in free-electron metals via pressure tuning the electron-phonon coupling factor. Physical Review B, 2019, 99, .	1.1	20
76	A steady-state thermoreflectance method to measure thermal conductivity. Review of Scientific Instruments, 2019, 90, 024905.	0.6	74
77	A high-entropy silicide: (Mo0.2Nb0.2Ta0.2Ti0.2W0.2)Si2. Journal of Materiomics, 2019, 5, 337-343.	2.8	159
78	Influence of mass and charge disorder on the phonon thermal conductivity of entropy stabilized oxides determined by molecular dynamics simulations. Journal of Applied Physics, 2019, 125, .	1.1	48
79	Uncertainty in linewidth quantification of overlapping Raman bands. Review of Scientific Instruments, 2019, 90, 013111.	0.6	7
80	Thermal conductance of aluminum oxy-fluoride passivation layers. Applied Physics Letters, 2019, 115, .	1.5	1
81	Spatially resolved thermoreflectance techniques for thermal conductivity measurements from the nanoscale to the mesoscale. Journal of Applied Physics, 2019, 126, .	1.1	30
82	Size Effects on the Cross-Plane Thermal Conductivity of Transparent Conducting Indium Tin Oxide and Fluorine Tin Oxide Thin Films. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 51-57.	1.4	13
83	Phase stability and mechanical properties of novel high entropy transition metal carbides. Acta Materialia, 2019, 166, 271-280.	3.8	422
84	Nanoscale Wetting and Energy Transmission at Solid/Liquid Interfaces. Langmuir, 2019, 35, 2106-2114.	1.6	20
85	Thermal Characterization of Quasi-Vertical GaAs Schottky Diodes Integrated on Silicon. IEEE Transactions on Electron Devices, 2019, 66, 349-356.	1.6	8
86	Charge confinement and thermal transport processes in modulation-doped epitaxial crystals lacking lattice interfaces. Physical Review Materials, 2019, 3, .	0.9	2
87	Titanium contacts to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> with interfacial oxide: Interface chemistry and thermal transport. Physical Review Materials, 2019, 3, .	0.9	13
88	Titanium contacts to graphene: process-induced variability in electronic and thermal transport. Nanotechnology, 2018, 29, 145201.	1.3	23
89	Interplay between total thickness and period thickness in the phonon thermal conductivity of superlattices from the nanoscale to the microscale: Coherent versus incoherent phonon transport. Physical Review B, 2018, 97, .	1.1	48
90	On the Steady-State Temperature Rise During Laser Heating of Multilayer Thin Films in Optical Pumpâ€“Probe Techniques. Journal of Heat Transfer, 2018, 140, .	1.2	46

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91	High-entropy fluorite oxides. Journal of the European Ceramic Society, 2018, 38, 3578-3584.	2.8	399
92	Thermal Conductivity Reduction at Inorganicâ€“Organic Interfaces: From Regular Superlattices to Irregular Gradient Layer Sequences. Advanced Materials Interfaces, 2018, 5, 1701692.	1.9	26
93	Density and size effects on the thermal conductivity of atomic layer deposited TiO2 and Al2O3 thin films. Thin Solid Films, 2018, 650, 71-77.	0.8	36
94	Substrate thermal conductivity controls the ability to manufacture microstructures via laser-induced direct write. Applied Physics Letters, 2018, 112, 051906.	1.5	4
95	Reduced dependence of thermal conductivity on temperature and pressure of multi-atom component crystalline solid solutions. Journal of Applied Physics, 2018, 123, .	1.1	19
96	Large tunability in the mechanical and thermal properties of carbon nanotube-fullerene hierarchical monoliths. Nanoscale, 2018, 10, 22166-22172.	2.8	7
97	Thermal Boundary Conductance Across Heteroepitaxial ZnO/GaN Interfaces: Assessment of the Phonon Gas Model. Nano Letters, 2018, 18, 7469-7477.	4.5	53
98	Thermal resistance and heat capacity in hafnium zirconium oxide (Hf1â€“xZrxO2) dielectrics and ferroelectric thin films. Applied Physics Letters, 2018, 113, .	1.5	18
99	Hot Electron Thermoreflectance Coefficient of Gold during Electronâ€“Phonon Nonequilibrium. ACS Photonics, 2018, 5, 4880-4887.	3.2	20
100	Experimental Evidence of Suppression of Subterahertz Phonons and Thermal Conductivity in GaAs/AlAs Superlattices Due to Extrinsic Scattering Processes. Journal of Physical Chemistry C, 2018, 122, 29577-29585.	1.5	5
101	Reduction and Increase in Thermal Conductivity of Si Irradiated with Ga⁺ via Focused Ion Beam. ACS Applied Materials & Interfaces, 2018, 10, 37679-37684.	4.0	5
102	Chargeâ€Induced Disorder Controls the Thermal Conductivity of Entropyâ€Stabilized Oxides. Advanced Materials, 2018, 30, e1805004.	11.1	302
103	Interfacial Defect Vibrations Enhance Thermal Transport in Amorphous Multilayers with Ultrahigh Thermal Boundary Conductance. Advanced Materials, 2018, 30, e1804097.	11.1	55
104	The influence of titanium adhesion layer oxygen stoichiometry on thermal boundary conductance at gold contacts. Applied Physics Letters, 2018, 112, 171602.	1.5	23
105	Thermal conductivity and thermal boundary resistance of atomic layer deposited high-<i>k</i> dielectric aluminum oxide, hafnium oxide, and titanium oxide thin films on silicon. APL Materials, 2018, 6, .	2.2	82
106	Elastic mismatch induced reduction of the thermal conductivity of silicon with aluminum nano-inclusions. Applied Physics Letters, 2018, 112, .	1.5	1
107	Plasma-surface interactions in atmospheric pressure plasmas: <i>In situ</i> measurements of electron heating in materials. Journal of Applied Physics, 2018, 124, .	1.1	11
108	Giant reduction and tunability of the thermal conductivity of carbon nanotubes through low-frequency resonant modes. Physical Review B, 2018, 98, .	1.1	14

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109	Voltage-Controlled Bistable Thermal Conductivity in Suspended Ferroelectric Thin-Film Membranes. ACS Applied Materials & Interfaces, 2018, 10, 25493-25501.	4.0	39
110	Tunable thermal transport and reversible thermal conductivity switching in topologically networked bio-inspired materials. Nature Nanotechnology, 2018, 13, 959-964.	15.6	81
111	Localization of vibrational modes leads to reduced thermal conductivity of amorphous heterostructures. Physical Review Materials, 2018, 2, .	0.9	22
112	Phonon scattering effects from point and extended defects on thermal conductivity studied via ion irradiation of crystals with self-impurities. Physical Review Materials, 2018, 2, .	0.9	22
113	Impact of intrinsic point defect concentration on thermal transport in titanium dioxide. Acta Materialia, 2017, 127, 491-497.	3.8	15
114	Ultrafast laser-probing spectroscopy for studying molecular structure of protein aggregates. Analyst, The, 2017, 142, 1434-1441.	1.7	7
115	Upper limit to the thermal penetration depth during modulated heating of multilayer thin films with pulsed and continuous wave lasers: A numerical study. Journal of Applied Physics, 2017, 121, 175107.	1.1	55
116	Spectral Contributions to the Thermal Conductivity of C₆₀ and the Fullerene Derivative PCBM. Journal of Physical Chemistry Letters, 2017, 8, 2153-2157.	2.1	23
117	Phonon scattering mechanisms dictating the thermal conductivity of lead zirconate titanate (PbZr1âˆ’<i>x</i>Ti<i>x</i>O3) thin films across the compositional phase diagram. Journal of Applied Physics, 2017, 121, .	1.1	13
118	On the minimum limit to thermal conductivity of multi-atom component crystalline solid solutions based on impurity mass scattering. Scripta Materialia, 2017, 138, 134-138.	2.6	46
119	Strongly reduced thermal conductivity in hybrid ZnO/nanocellulose thin films. Journal of Materials Science, 2017, 52, 6093-6099.	1.7	19
120	Carbonâ€Enriched Amorphous Hydrogenated Boron Carbide Films for Veryâ€Lowâ€<i>k</i> Interlayer Dielectrics. Advanced Electronic Materials, 2017, 3, 1700116.	2.6	12
121	Hafnium nitride films for thermoreflectance transducers at high temperatures: Potential based on heating from laser absorption. Applied Physics Letters, 2017, 111, .	1.5	14
122	Role of interfacial mode coupling of optical phonons on thermal boundary conductance. Scientific Reports, 2017, 7, 11011.	1.6	13
123	Energy confinement and thermal boundary conductance effects on short-pulsed thermal ablation thresholds in thin films. Physical Review B, 2017, 96, .	1.1	9
124	High Conductivity and Electronâ€Transfer Validation in an nâ€Type Fluorideâ€Anionâ€Doped Polymer for Thermoelectrics in Air. Advanced Materials, 2017, 29, 1606928.	11.1	144
125	Temperature Dependence of Electronâ€“Phonon Interactions in Gold Films Rationalized by Time-Domain Ab Initio Analysis. Journal of Physical Chemistry C, 2017, 121, 17488-17497.	1.5	21
126	Modification of the Poly(bisdodecylquaterthiophene) Structure for High and Predominantly Nonionic Conductivity with Matched Dopants. Journal of the American Chemical Society, 2017, 139, 11149-11157.	6.6	81

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127	Thermal Analysis of High-Power Flip-Chip-Bonded Photodiodes. Journal of Lightwave Technology, 2017, 35, 4242-4246.	2.7	16
128	Ballistic transport of long wavelength phonons and thermal conductivity accumulation in nanograined silicon-germanium alloys. Applied Physics Letters, 2017, 111, .	1.5	14
129	Reviewâ€"Investigation and Review of the Thermal, Mechanical, Electrical, Optical, and Structural Properties of Atomic Layer Deposited High-<i>k</i>Dielectrics: Beryllium Oxide, Aluminum Oxide, Hafnium Oxide, and Aluminum Nitride. ECS Journal of Solid State Science and Technology, 2017, 6, N189-N208.	0.9	81
130	Strong Influence of Ti Adhesion Layer on Electronâ€"Phonon Relaxation in Thin Gold Films: Ab Initio Nonadiabatic Molecular Dynamics. ACS Applied Materials & Interfaces, 2017, 9, 43343-43351.	4.0	25
131	Localized thin film damage sourced and monitored via pump-probe modulated thermoreflectance. Review of Scientific Instruments, 2017, 88, 054903.	0.6	4
132	Pronounced low-frequency vibrational thermal transport in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>60</mml:mn></mml:msub></mml:math> fullerite realized through pressure-dependent molecular dynamics simulations. Physical Review B, 2017, 96, .	1.1	15
133	Thermal investigation of high-power photodiodes. , 2017, , .		0
134	Conquering the Lowâ€<i>k</i> Death Curve: Insulating Boron Carbide Dielectrics with Superior Mechanical Properties. Advanced Electronic Materials, 2016, 2, 1600073.	2.6	19
135	Influence of chemical ordering on the thermal conductivity and electronic relaxation in FePt thin films in heat assisted magnetic recording applications. Scientific Reports, 2016, 6, 32077.	1.6	16
136	Breaking network connectivity leads to ultralow thermal conductivities in fully dense amorphous solids. Applied Physics Letters, 2016, 109, .	1.5	16
137	Observing Misfit Dislocation Interactions Across Thin Film Oxide Heterostructures. Microscopy and Microanalysis, 2016, 22, 1506-1507.	0.2	0
138	Effect of crystalline/amorphous interfaces on thermal transport across confined thin films and superlattices. Journal of Applied Physics, 2016, 119, .	1.1	42
139	Analytical model for thermal boundary conductance and equilibrium thermal accommodation coefficient at solid/gas interfaces. Journal of Chemical Physics, 2016, 144, 084705.	1.2	20
140	Size dictated thermal conductivity of GaN. Journal of Applied Physics, 2016, 120, .	1.1	77
141	Thermal conductivity measurements of non-metals via combined time- and frequency-domain thermoreflectance without a metal film transducer. Review of Scientific Instruments, 2016, 87, 094902.	0.6	41
142	Interplay between mass-impurity and vacancy phonon scattering effects on the thermal conductivity of doped cadmium oxide. Applied Physics Letters, 2016, 108, 021901.	1.5	19
143	Tunable thermal conductivity via domain structure engineering in ferroelectric thin films: A phase-field simulation. Acta Materialia, 2016, 111, 220-231.	3.8	40
144	Crystalline coherence length effects on the thermal conductivity of MgO thin films. Journal of Materials Science, 2016, 51, 10408-10417.	1.7	14

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145	Using Laser-Induced Thermal Voxels to Pattern Diverse Materials at the Solidâ€“Liquid Interface. ACS Applied Materials & Interfaces, 2016, 8, 21134-21139.	4.0	25
146	Metalâ€“organic frameworks for thermoelectric energy-conversion applications. MRS Bulletin, 2016, 41, 877-882.	1.7	26
147	Reduction in thermal conductivity and tunable heat capacity of inorganic/organic hybrid superlattices. Physical Review B, 2016, 93, .	1.1	29
148	Heat-transport mechanisms in molecular building blocks of inorganic/organic hybrid superlattices. Physical Review B, 2016, 93, .	1.1	40
149	Size effects on the thermal conductivity of amorphous silicon thin films. Physical Review B, 2016, 93, .	1.1	95
150	Implications of Interfacial Bond Strength on the Spectral Contributions to Thermal Boundary Conductance across Solid, Liquid, and Gas Interfaces: A Molecular Dynamics Study. Journal of Physical Chemistry C, 2016, 120, 24847-24856.	1.5	41
151	Goniometry Versus Profilometry Studies of Contact Angle for PEDOT:PSS Deposited Onto Silicon and Fused Silica Substrates. MRS Advances, 2016, 1, 471-475.	0.5	0
152	Thermal conductivity measurements via time-domain thermoreflectance for the characterization of radiation induced damage. Journal of Materials Research, 2015, 30, 1403-1412.	1.2	47
153	Role of crystal structure and junction morphology on interface thermal conductance. Physical Review B, 2015, 92, .	1.1	27
154	Transient thermal and nonthermal electron and phonon relaxation after short-pulsed laser heating of metals. Journal of Applied Physics, 2015, 118, .	1.1	28
155	Kapitza resistance and the thermal conductivity of amorphous superlattices. Journal of Applied Physics, 2015, 118, .	1.1	50
156	Dysprosium-doped cadmium oxide as a gateway material for mid-infrared plasmonics. Nature Materials, 2015, 14, 414-420.	13.3	216
157	Thermal boundary conductance accumulation and interfacial phonon transmission: Measurements and theory. Physical Review B, 2015, 91, .	1.1	74
158	Room-Temperature Voltage Tunable Phonon Thermal Conductivity via Reconfigurable Interfaces in Ferroelectric Thin Films. Nano Letters, 2015, 15, 1791-1795.	4.5	116
159	Modifying Surface Energy of Graphene via Plasma-Based Chemical Functionalization to Tune Thermal and Electrical Transport at Metal Interfaces. Nano Letters, 2015, 15, 4876-4882.	4.5	68
160	Experimental evidence of excited electron number density and temperature effects on electron-phonon coupling in gold films. Journal of Applied Physics, 2015, 117, .	1.1	41
161	Thin Film Thermoelectric Metalâ€“Organic Framework with High Seebeck Coefficient and Low Thermal Conductivity. Advanced Materials, 2015, 27, 3453-3459.	11.1	227
162	Ultra-low thermal conductivity in TiO2:C superlattices. Journal of Materials Chemistry A, 2015, 3, 11527-11532.	5.2	33

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163	Thermal flux limited electron Kapitza conductance in copper-niobium multilayers. Applied Physics Letters, 2015, 106, .	1.5	21
164	Mechanisms of nonequilibrium electron-phonon coupling and thermal conductance at interfaces. Journal of Applied Physics, 2015, 117, .	1.1	71
165	Size effects in the thermal conductivity of gallium oxide (<i>Î²</i>-Ga2O3) films grown via open-atmosphere annealing of gallium nitride. Journal of Applied Physics, 2015, 117, .	1.1	43
166	Thermal Conductance across Phosphonic Acid Molecules and Interfaces: Ballistic versus Diffusive Vibrational Transport in Molecular Monolayers. Journal of Physical Chemistry C, 2015, 119, 20931-20939.	1.5	24
167	Hydrogenated nanocrystalline silicon thin films with promising thermoelectric properties. Applied Physics A: Materials Science and Processing, 2015, 120, 1497-1502.	1.1	11
168	Glassâ€Like Thermal Conductivity of (010)â€Textured Lanthanumâ€Doped Strontium Niobate Synthesized with Wet Chemical Deposition. Journal of the American Ceramic Society, 2015, 98, 624-628.	1.9	4
169	Influence of Postdeposition Cooling Atmosphere on Thermoelectric Properties of 2% Al-Doped ZnO Thin Films Grown by Pulsed Laser Deposition. Journal of Electronic Materials, 2015, 44, 1547-1553.	1.0	12
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