David G Cahill

List of Publications by Citations

163 papers	15,045 citations	56 h-index	122 g-index
170 ext. papers	16,896 ext. citations	6.7 avg, IF	6.76 L-index

#	Paper	IF	Citations
163	Nanoscale thermal transport. *Journal of Applied Physics*, **2003**, 93, 793-818	2.5	2204
162	Nanoscale thermal transport. II. 2003–2012. *Applied Physics Reviews*, **2014**, 1, 011305	17.3	1050
161	Analysis of heat flow in layered structures for time-domain thermoreflectance. *Review of Scientific Instruments*, **2004**, 75, 5119-5122	1.7	987
160	Ultralow thermal conductivity in disordered, layered WSe2 crystals. *Science*, **2007**, 315, 351-3	33.3	646
159	Thermal conductivity of Si/Ge superlattices. *Applied Physics Letters*, **1997**, 70, 2957-2959	3.4	579
158	Heat transport in thin dielectric films. *Journal of Applied Physics*, **1997**, 81, 2590-2595	2.5	553
157	Thermometry and Thermal Transport in Micro/Nanoscale Solid-State Devices and Structures. *Journal of Heat Transfer*, **2002**, 124, 223-241	1.8	476
156	Role of thermal boundary resistance on the heat flow in carbon-nanotube composites. *Journal of Applied Physics*, **2004**, 95, 8136-8144	2.5	424
155	Thermal conductance of interfaces between highly dissimilar materials. *Physical Review B*, **2006**, 73,	3.3	397
154	Thermal conductance of epitaxial interfaces. *Physical Review B*, **2003**, 67,	3.3	355
153	Thermal conductance of hydrophilic and hydrophobic interfaces. *Physical Review Letters*, **2006**, 96, 186101	7.4	321
152	Thermal conductance of metal-metal interfaces. *Physical Review B*, **2005**, 72,	3.3	269
151	Colloidal metal particles as probes of nanoscale thermal transport in fluids. *Physical Review B*, **2002**, 66,	3.3	236
150	High thermal conductivity in cubic boron arsenide crystals. *Science*, **2018**, 361, 579-581	33.3	220
149	Thermal conductivity of nanoparticle suspensions. *Journal of Applied Physics*, **2006**, 99, 084308	2.5	217
148	Thermal Conductivity and Elastic Constants of PEDOT:PSS with High Electrical Conductivity. *Macromolecules*, **2015**, 48, 585-591	5.5	209
147	Thermal conductivity of sputtered oxide films. *Physical Review B*, **1995**, 52, 253-257	3.3	201

146	Anisotropic Thermal Conductivity of Exfoliated Black Phosphorus. *Advanced Materials*, **2015**, 27, 8017-8024	19.4	178
145	Measurement of the anisotropic thermal conductivity of molybdenum disulfide by the time-resolved magneto-optic Kerr effect. *Journal of Applied Physics*, **2014**, 116, 233107	2.5	173
144	Thermal Conductivity, Heat Capacity, and Elastic Constants of Water-Soluble Polymers and Polymer Blends. *Macromolecules*, **2016**, 49, 972-978	5.5	156
143	Two-tint pump-probe measurements using a femtosecond laser oscillator and sharp-edged optical filters. *Review of Scientific Instruments*, **2008**, 79, 114901	1.7	152
142	Comparison of the 3ω method and time-domain thermoreflectance for measurements of the cross-plane thermal conductivity of epitaxial semiconductors. *Journal of Applied Physics*, **2009**, 105, 054303	2.5	148
141	Anisotropic failure of Fourier theory in time-domain thermoreflectance experiments. *Nature Communications*, **2014**, 5, 5075	17.4	146
140	Thermal conductivity and dynamic heat capacity across the metal-insulator transition in thin film VO2. *Applied Physics Letters*, **2010**, 96, 151906	3.4	140
139	AuPd Metal Nanoparticles as Probes of Nanoscale Thermal Transport in Aqueous Solution. *Journal of Physical Chemistry B*, **2004**, 108, 18870-18875	3.4	121
138	Spin current generated by thermally driven ultrafast demagnetization. *Nature Communications*, **2014**, 5, 4334	17.4	113
137	Probing anisotropic heat transport using time-domain thermoreflectance with offset laser spots. *Review of Scientific Instruments*, **2012**, 83, 104901	1.7	111
136	Thermal spin-transfer torque driven by the spin-dependent Seebeck effect in metallic spin-valves. *Nature Physics*, **2015**, 11, 576-581	16.2	106
135	Thermal conductivity of silicon nanowire arrays with controlled roughness. *Journal of Applied Physics*, **2012**, 112, 114306	2.5	105
134	Thermal conductance of metal-diamond interfaces at high pressure. *Nature Communications*, **2015**, 6, 6578	17.4	103
133	Tuning thermal conductivity in molybdenum disulfide by electrochemical intercalation. *Nature Communications*, **2016**, 7, 13211	17.4	101
132	Thermal conductivity of (Zr,W)N/ScN metal/semiconductor multilayers and superlattices. *Journal of Applied Physics*, **2009**, 105, 024909	2.5	101
131	Electrochemically tunable thermal conductivity of lithium cobalt oxide. *Nature Communications*, **2014**, 5, 4035	17.4	92
130	Ultrahigh thermal conductivity in isotope-enriched cubic boron nitride. *Science*, **2020**, 367, 555-559	33.3	90
129	Ultralow thermal conductivity of fullerene derivatives. *Physical Review B*, **2013**, 88,	3.3	82

128	Lattice thermal conductivity of nanostructured thermoelectric materials based on PbTe. *Applied Physics Letters*, **2009**, 94, 153101	3.4	81
127	Thermoreflectance of metal transducers for optical pump-probe studies of thermal properties. *Optics Express*, **2012**, 20, 28829-38	3.3	81
126	Interfacial thermal conductance in spun-cast polymer films and polymer brushes. *Applied Physics Letters*, **2010**, 97, 011908	3.4	79
125	Lower limit to the lattice thermal conductivity of nanostructured Bi2Te3-based materials. *Journal of Applied Physics*, **2009**, 106, 073503	2.5	78
124	Pump-probe measurements of the thermal conductivity tensor for materials lacking in-plane symmetry. *Review of Scientific Instruments*, **2014**, 85, 104903	1.7	76
123	Nanoscale pattern formation in Pt thin films due to ion-beam-induced dewetting. *Applied Physics Letters*, **2000**, 76, 3215-3217	3.4	75
122	Morphology of epitaxial TiN(001) grown by magnetron sputtering. *Applied Physics Letters*, **1997**, 70, 1703-1705	3.4	73
121	Anomalous spin-orbit torques in magnetic single-layer films. *Nature Nanotechnology*, **2019**, 14, 819-824	28.7	72
120	Low thermal conductivity in nanoscale layered materials synthesized by the method of modulated elemental reactants. *Journal of Applied Physics*, **2008**, 104, 033533	2.5	72
119	Flexible and Stretchable 3ω Sensors for Thermal Characterization of Human Skin. *Advanced Functional Materials*, **2017**, 27, 1701282	15.6	71
118	Thermal conductivity of isotopically pure and Ge-doped Si epitaxial layers from 300to550K. *Physical Review B*, **2004**, 70,	3.3	66
117	Characterization of nanostructured metal films by picosecond acoustics and interferometry. *Journal of Applied Physics*, **2001**, 90, 4852-4858	2.5	65
116	Direct Synthesis of Large-Scale WTe2 Thin Films with Low Thermal Conductivity. *Advanced Functional Materials*, **2017**, 27, 1605928	15.6	64
115	Thermoreflectance of metal transducers for time-domain thermoreflectance. *Journal of Applied Physics*, **2010**, 108, 043507	2.5	64
114	High and low thermal conductivity of amorphous macromolecules. *Physical Review B*, **2017**, 95,	3.3	61
113	Invited article: micron resolution spatially resolved measurement of heat capacity using dual-frequency time-domain thermoreflectance. *Review of Scientific Instruments*, **2013**, 84, 071301	1.7	60
112	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. *Nanoscale and Microscale Thermophysical Engineering*, **2015**, 19, 127-165	3.7	60
111	Dewetting and nanopattern formation of thin Pt films on SiO2 induced by ion beam irradiation. *Journal of Applied Physics*, **2001**, 89, 7777-7783	2.5	58

110	Light-triggered thermal conductivity switching in azobenzene polymers. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 5973-5978	11.5	56
109	Coexistence of Low Damping and Strong Magnetoelastic Coupling in Epitaxial Spinel Ferrite Thin Films. *Advanced Materials*, **2017**, 29, 1701130	24	56
108	Thermal conductivity and sound velocities of hydrogen-silsesquioxane low-k dielectrics. *Physical Review B*, **2002**, 65,	3.3	56
107	Thermal conductivity as a metric for the crystalline quality of SrTiO3 epitaxial layers. *Applied Physics Letters*, **2011**, 98, 221904	3.4	55
106	Picosecond Spin Seebeck Effect. *Physical Review Letters*, **2017**, 118, 057201	7.4	53
105	3D Anisotropic Thermal Conductivity of Exfoliated Rhenium Disulfide. *Advanced Materials*, **2017**, 29, 1700650	24	53
104	Interfacial thermal conductance of transfer-printed metal films. *Advanced Materials*, **2011**, 23, 5028-33, 5027	24	53
103	Dynamics of femtosecond laser-induced melting of silver. *Physical Review B*, **2008**, 78,	3.3	53
102	Fullerene thermal insulation for phase change memory. *Applied Physics Letters*, **2008**, 92, 013109	3.4	52
101	High Thermal Conductivity in Isotopically Enriched Cubic Boron Phosphide. *Advanced Functional Materials*, **2018**, 28, 1805116	15.6	51
100	Interpreting picosecond acoustics in the case of low interface stiffness. *Review of Scientific Instruments*, **2012**, 83, 114902	1.7	50
99	Thermal conductivity of compressed H2O to 22 GPa: A test of the Leibfried-Schl□mann equation. *Physical Review B*, **2011**, 83,	3.3	47
98	Thermally Functional Liquid Crystal Networks by Magnetic Field Driven Molecular Orientation. *ACS Macro Letters*, **2016**, 5, 955-960	6.6	47
97	Thermal conductance of strongly bonded metal-oxide interfaces. *Physical Review B*, **2015**, 91,	3.3	44
96	Elastic constants, Poisson ratios, and the elastic anisotropy of VN(001), (011), and (111) epitaxial layers grown by reactive magnetron sputter deposition. *Journal of Applied Physics*, **2014**, 115, 214908	2.5	43
95	Thermal conductivity of GaN, GaN71, and SiC from 150 K to 850 K. *Physical Review Materials*, **2019**, 3,	3.2	43
94	Optical-helicity-driven magnetization dynamics in metallic ferromagnets. *Nature Communications*, **2017**, 8, 15085	17.4	42
93	Suppression of thermal conductivity in InxGa1□N alloys by nanometer-scale disorder. *Applied Physics Letters*, **2013**, 102, 121906	3.4	42

92	Ultrafast demagnetization of FePt:Cu thin films and the role of magnetic heat capacity. *Physical Review B*, **2014**, 90,	3.3	41
91	Nonlocal theory for heat transport at high frequencies. *Physical Review B*, **2014**, 90,	3.3	41
90	Evolution of surface waviness in thin films via volume and surface diffusion. *Journal of Applied Physics*, **2005**, 97, 013521	2.5	40
89	Burrowing of Pt nanoparticles into SiO2 during ion-beam irradiation. *Journal of Applied Physics*, **2002**, 92, 3995-4000	2.5	39
88	Low thermal conductivity in Ge2Sb2Te5□SiOx for phase change memory devices. *Applied Physics Letters*, **2009**, 94, 243103	3.4	38
87	Evolution of surface roughness in epitaxial Si0.7Ge0.3(001) as a function of growth temperature (200□600 □C) and Si(001) substrate miscut. *Journal of Applied Physics*, **1996**, 80, 2199-2210	2.5	38
86	Indirect heating of Pt by short-pulse laser irradiation of Au in a nanoscale Pt/Au bilayer. *Physical Review B*, **2014**, 89,	3.3	37
85	Thermal conductance of interfaces with amorphous SiO2 measured by time-resolved magneto-optic Kerr-effect thermometry. *Physical Review B*, **2017**, 95,	3.3	36
84	Micron-scale measurements of the coefficient of thermal expansion by time-domain probe beam deflection. *Journal of Applied Physics*, **2008**, 104, 073509	2.5	34
83	High quality factor nanocrystalline diamond micromechanical resonators limited by thermoelastic damping. *Applied Physics Letters*, **2014**, 104, 151903	3.4	31
82	Morphological instabilities in thin-film growth and etching. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, S110-S116	2.9	31
81	Spin-dependent thermal transport perpendicular to the planes of Co/Cu multilayers. *Physical Review B*, **2015**, 91,	3.3	30
80	Limits to Fourier theory in high thermal conductivity single crystals. *Applied Physics Letters*, **2015**, 107, 203112	3.4	29
79	Plasmonic Sensing of Heat Transport at Solid□iquid Interfaces. *Journal of Physical Chemistry C*, **2016**, 120, 2814-2821	3.8	28
78	Synthesis and Properties of Turbostratically Disordered, Ultrathin WSe2 Films. *Chemistry of Materials*, **2010**, 22, 2750-2756	9.6	28
77	Phonon and electron contributions to the thermal conductivity of VNx epitaxial layers. *Physical Review Materials*, **2017**, 1,	3.2	28
76	Role of Remote Interfacial Phonon (RIP) Scattering in Heat Transport Across Graphene/SiO Interfaces. *Nano Letters*, **2016**, 16, 6014-6020	11.5	27
75	Anisotropic Thermal Transport in Thermoelectric Composites of Conjugated Polyelectrolytes/Single-Walled Carbon Nanotubes. *Macromolecules*, **2016**, 49, 4957-4963	5.5	26

74	Micron-scale apparatus for measurements of thermodiffusion in liquids. *Review of Scientific Instruments*, **2004**, 75, 2368-2372	1.7	26
73	In situ transmission electron microscopy study of irradiation induced dewetting of ultrathin Pt films. *Journal of Applied Physics*, **2003**, 93, 165-169	2.5	26
72	Thermal Conductivity of Graphite Thin Films Grown by Low Temperature Chemical Vapor Deposition on Ni (111). *Advanced Materials Interfaces*, **2016**, 3, 1600234	4.6	24
71	Condensation Induced Blistering as a Measurement Technique for the Adhesion Energy of Nanoscale Polymer Films. *Nano Letters*, **2020**, 20, 3918-3924	11.5	22
70	Stress evolution in platinum thin films during low-energy ion irradiation. *Physical Review B*, **2008**, 77,	3.3	22
69	Patterning of metal nanowires by directed ion-induced dewetting. *Applied Physics Letters*, **2006**, 89, 053103	3.4	22
68	Thermal transport in layer-by-layer assembled polycrystalline graphene films. *Npj 2D Materials and Applications*, **2019**, 3,	8.8	21
67	Microcrystalline diamond micromechanical resonators with quality factor limited by thermoelastic damping. *Applied Physics Letters*, **2013**, 102, 071901	3.4	21
66	Low thermal conductivity of CsBiNb2O7 epitaxial layers. *Applied Physics Letters*, **2010**, 96, 121903	3.4	21
65	Extremely anisotropic van der Waals thermal conductors. *Nature*, **2021**, 597, 660-665	50.4	20
64	Thermal conductivity reduction of crystalline silicon by high-pressure torsion. *Nanoscale Research Letters*, **2014**, 9, 326	5	18
63	High-throughput measurements of materials properties. *Jom*, **2011**, 63, 40-44	2.1	18
62	Solution-Processed CuSe Nanocrystal Films with Bulk-Like Thermoelectric Performance. *Scientific Reports*, **2017**, 7, 2765	4.9	17
61	Temperature dependence of surface phonon polaritons from a quartz grating. *Journal of Applied Physics*, **2011**, 110, 043517	2.5	17
60	Thermal Conductivity in the Radial Direction of Deformed Polymer Fibers. *ACS Macro Letters*, **2016**, 5, 646-650	6.6	17
59	Generation and detection of gigahertz surface acoustic waves using an elastomeric phase-shift mask. *Journal of Applied Physics*, **2013**, 114, 143102	2.5	16
58	Strained layer instabilities on vicinal surfaces: Ge0.8Si0.2 epitaxy on laser textured Si(001). *Applied Physics Letters*, **2004**, 85, 1238-1240	3.4	16
57	Ultralow thermal conductivity of turbostratically disordered MoSe ultra-thin films and implications for heterostructures. *Nanotechnology*, **2019**, 30, 285401	3.4	16

56	Percolation of thermal conductivity in amorphous fluorocarbons. *Physical Review B*, **2010**, 82,	3.3	15
55	Spin diffusion induced by pulsed-laser heating and the role of spin heat accumulation. *Physical Review B*, **2017**, 95,	3.3	14
54	High-resolution picosecond acoustic microscopy for non-invasive characterization of buried interfaces. *Journal of Materials Research*, **2006**, 21, 1204-1208	2.5	13
53	Ablation of crystalline oxides by infrared femtosecond laser pulses. *Journal of Applied Physics*, **2006** , 100, 083519	2.5	13
52	Morphology and microstructure of tensile-strained SiGe(001) thin epitaxial films. *Journal of Applied Physics*, **1998**, 83, 1096-1102	2.5	13
51	High Contrast Thermal Conductivity Change in NiMnIn Heusler Alloys near Room Temperature. *Advanced Engineering Materials*, **2019**, 21, 1801342	3.5	12
50	High Power Density Pyroelectric Energy Conversion in Nanometer-Thick BaTiO3 Films. *Nanoscale and Microscale Thermophysical Engineering*, **2016**, 20, 137-146	3.7	12
49	Stress-induced wrinkling of sputtered SiO2 films on polymethylmethacrylate. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2006**, 24, 324-327	2.9	11
48	Nonequilibrium heat transport in Pt and Ru probed by an ultrathin Co thermometer. *Physical Review B*, **2020**, 101,	3.3	10
47	Synthesis, Characterization, and Ultralow Thermal Conductivity of a Lattice-Mismatched SnSe2(MoSe2)1.32 Heterostructure. *Chemistry of Materials*, **2019**, 31, 5699-5705	9.6	10
46	Micro- and Nanoscale Measurement Methods for Phase Change Heat Transfer on Planar and Structured Surfaces. *Nanoscale and Microscale Thermophysical Engineering*, **2014**, 18, 270-287	3.7	10
45	Curvature induced phase stability of an intensely heated liquid. *Journal of Chemical Physics*, **2014**, 140, 234506	3.9	10
44	Surface roughness and pattern formation during homoepitaxial growth of Ge(001) at low temperatures. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1995**, 13, 1816		10
43	Density, Elastic Constants, and Thermal Conductivity of Interfacially Polymerized Polyamide Films for Reverse Osmosis Membranes. *ACS Applied Nano Materials*, **2018**, 1, 5008-5018	5.6	10
42	Thermal Visualization of Buried Interfaces Enabled by Ratio Signal and Steady-State Heating of Time-Domain Thermoreflectance. *ACS Applied Materials & Interfaces*, **2021**, 13, 31843-31851	9.5	9
41	Good Solid-State Electrolytes Have Low, Glass-Like Thermal Conductivity. *Small*, **2021**, 17, e2101693	11	8
40	Thermal-conductivity measurement by time-domain thermoreflectance. *MRS Bulletin*, **2018**, 43, 782-789	3.2	8
39	Influence of defects and doping on optical phonon lifetime and Raman linewidth in carbon nanotubes. *Physical Review B*, **2011**, 83,	3.3	7

38	Time resolved measurements of melting and solidification in Si using third harmonic generation of light. *Applied Physics Letters*, **2007**, 91, 011906	3.4	7
37	Heat transport in micron thick a-Si: H films. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1995**, 71, 677-682		7
36	Properties of bulk scandium nitride crystals grown by physical vapor transport. *Applied Physics Letters*, **2020**, 116, 132103	3.4	6
35	Heat Transfer at Solid□Gas Interfaces by Photoacoustics at Brillouin Frequencies. *Journal of Physical Chemistry C*, **2012**, 116, 10896-10903	3.8	6
34	Highly efficient transverse thermoelectric devices with Re4Si7 crystals. *Energy and Environmental Science*, **2021**, 14, 4009-4017	35.4	6
33	Thermal Conductivity of Oxide Tunnel Barriers in Magnetic Tunnel Junctions Measured by Ultrafast Thermoreflectance and Magneto-Optic Kerr Effect Thermometry. *Physical Review Applied*, **2020**, 13,	4.3	5
32	Fast, spatially resolved thermometry of Si and GaP crystals using pump-probe two-photon absorption. *Journal of Applied Physics*, **2009**, 106, 013102	2.5	5
31	Laser-Induced Blistering of Thin SiO2 on Si. *Microscale Thermophysical Engineering*, **2005**, 9, 155-164		5
30	Effect of Aromatic/Aliphatic Structure and Cross-Linking Density on the Thermal Conductivity of Epoxy Resins. *ACS Applied Polymer Materials*, **2021**, 3, 1555-1562	4.3	5
29	Measurement of water vapor diffusion in nanoscale polymer films by frequency-domain probe beam deflection. *Review of Scientific Instruments*, **2018**, 89, 104904	1.7	5
28	Effect of Linker Length and Temperature on the Thermal Conductivity of Ethylene Dynamic Networks.. *ACS Macro Letters*, **2021**, 10, 1088-1093	6.6	5
27	High Thermal Conductivity Semicrystalline Epoxy Resins with Anthraquinone-Based Hardeners. *ACS Applied Polymer Materials*, **2021**, 3, 4430-4435	4.3	5
26	Sensors: Flexible and Stretchable 3□Sensors for Thermal Characterization of Human Skin (Adv. Funct. Mater. 26/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	4
25	Ultralow shear modulus of incommensurate [SnSe]n[MoSe2]n layers synthesized by the method of modulated elemental reactants. *Physical Review Materials*, **2019**, 3,	3.2	4
24	Magneto-optic response of the metallic antiferromagnet Fe2As to ultrafast temperature excursions. *Physical Review Materials*, **2019**, 3,	3.2	4
23	Thermal conductivity of the n = 1□ and 10 members of the (SrTiO3)nSrO Ruddlesden□Popper superlattices. *Applied Physics Letters*, **2021**, 118, 091904	3.4	4
22	Plasmonic Sensing of Ultrafast Evaporation and Condensation. *Nanoscale and Microscale Thermophysical Engineering*, **2017**, 21, 70-80	3.7	3
21	X-ray study of strain and composition of Si□Ge0.85Si0.15(111) islands grown in Volmer-Weber mode. *Journal of Applied Physics*, **2004**, 96, 3234-3238	2.5	3

20	UV spectroscopy of metal volatilization during thermal plasma processing of waste glass melts. *Plasma Chemistry and Plasma Processing*, **1996**, 16, 449-460	3.6	3
19	Thermal transport through the magnetic martensitic transition in MnxMGe(M=Co,Ni). *Physical Review Materials*, **2018**, 2,	3.2	3
18	Ultralow Thermal Conductivity in Nanoporous Crystalline Fe3O4. *Journal of Physical Chemistry C*, **2021**, 125, 6897-6908	3.8	3
17	Elastic constants of cubic boron phosphide and boron arsenide. *Physical Review Materials*, **2021**, 5,	3.2	3
16	Spatially Resolved Measurements of Thermal Stresses by Picosecond Time-Domain Probe Beam Deflection. *Journal of Thermal Stresses*, **2009**, 33, 9-14	2.2	2
15	Perspective on thermal conductance across heterogeneously integrated interfaces for wide and ultrawide bandgap electronics. *Applied Physics Letters*, **2022**, 120, 030501	3.4	2
14	Role of Thin Film Adhesion on Capillary Peeling. *Nano Letters*, **2021**, 21, 9983-9989	11.5	2
13	Magnetocrystalline anisotropy of the easy-plane metallic antiferromagnet Fe2As. *Physical Review B* , **2020**, 102,	3.3	2
12	Effect of isotope disorder on the Raman spectra of cubic boron arsenide. *Physical Review Materials*, **2021**, 5,	3.2	2
11	Microcontact Printing: Interfacial Thermal Conductance of Transfer-Printed Metal Films (Adv. Mater. 43/2011). *Advanced Materials*, **2011**, 23, 5027-5027	24	1
10	ULTRAFAST SHOCK WAVE COHERENT DISSOCIATION AND SPECTROSCOPY OF MATERIALS **2008**,		1
9	Coarsening and Slope Selection During Crystal Growth and Etching of Ge(001). *Materials Research Society Symposia Proceedings*, **1995**, 399, 221		1
8	Battery absorbs heat during charging uncovered by ultra-sensitive thermometry. *Journal of Power Sources*, **2022**, 518, 230762	8.9	1
7	Thermal conductivity mapping of oxidized SiC/SiC composites by time-domain thermoreflectance with heterodyne detection. *Journal of the American Ceramic Society*, **2021**, 104, 4773-4781	3.8	1
6	Temperature Dependence of the Anisotropic Magnetoresistance of the Metallic Antiferromagnet Fe2As. *Physical Review Applied*, **2021**, 15,	4.3	1
5	Microscale, bendable thermoreflectance sensor for local measurements of the thermal effusivity of biological fluids and tissues. *Review of Scientific Instruments*, **2020**, 91, 044903	1.7	1
4	Anisotropic thermal conductivity of layered indium selenide. *Applied Physics Letters*, **2021**, 118, 073101	3.4	1
3	In situ defect quantification and phase identification during flash sintering using Raman spectroscopy. *Journal of the American Ceramic Society*, **2021**, 104, 3873-3882	3.8	0

2	Pushing low thermal conductivity to the limit. *Science*, **2021**, 373, 963-964	33.3	0
1	Identification of Shape Transitions in Coherent Ge/Si Islands Using Transmission Electron Microscopy. *Materials Research Society Symposia Proceedings*, **1999**, 583, 137		