

David G Cahill

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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 | Perspective on thermal conductance across heterogeneously integrated interfaces for wide and ultrawide bandgap electronics. <i>Applied Physics Letters</i> , 2022 , 120, 030501 | 3.4 | 2 |
| 162 | Battery absorbs heat during charging uncovered by ultra-sensitive thermometry. <i>Journal of Power Sources</i> , 2022 , 518, 230762 | 8.9 | 1 |
| 161 | Role of Thin Film Adhesion on Capillary Peeling. <i>Nano Letters</i> , 2021 , 21, 9983-9989 | 11.5 | 2 |
| 160 | Ultralow Thermal Conductivity in Nanoporous Crystalline Fe ₃ O ₄ . <i>Journal of Physical Chemistry C</i> , 2021 , 125, 6897-6908 | 3.8 | 3 |
| 159 | Thermal conductivity of the n = 18 and 10 members of the (SrTiO ₃) _n SrO Ruddlesden-Popper superlattices. <i>Applied Physics Letters</i> , 2021 , 118, 091904 | 3.4 | 4 |
| 158 | Elastic constants of cubic boron phosphide and boron arsenide. <i>Physical Review Materials</i> , 2021 , 5, | 3.2 | 3 |
| 157 | In situ defect quantification and phase identification during flash sintering using Raman spectroscopy. <i>Journal of the American Ceramic Society</i> , 2021 , 104, 3873-3882 | 3.8 | 0 |
| 156 | Thermal conductivity mapping of oxidized SiC/SiC composites by time-domain thermoreflectance with heterodyne detection. <i>Journal of the American Ceramic Society</i> , 2021 , 104, 4773-4781 | 3.8 | 1 |
| 155 | Temperature Dependence of the Anisotropic Magnetoresistance of the Metallic Antiferromagnet Fe ₂ As. <i>Physical Review Applied</i> , 2021 , 15, | 4.3 | 1 |
| 154 | Good Solid-State Electrolytes Have Low, Glass-Like Thermal Conductivity. <i>Small</i> , 2021 , 17, e2101693 | 11 | 8 |
| 153 | Thermal Visualization of Buried Interfaces Enabled by Ratio Signal and Steady-State Heating of Time-Domain Thermoreflectance. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 31843-31851 | 9.5 | 9 |
| 152 | Highly efficient transverse thermoelectric devices with Re ₄ Si ₇ crystals. <i>Energy and Environmental Science</i> , 2021 , 14, 4009-4017 | 35.4 | 6 |
| 151 | Effect of isotope disorder on the Raman spectra of cubic boron arsenide. <i>Physical Review Materials</i> , 2021 , 5, | 3.2 | 2 |
| 150 | Anisotropic thermal conductivity of layered indium selenide. <i>Applied Physics Letters</i> , 2021 , 118, 073101 | 3.4 | 1 |
| 149 | Effect of Aromatic/Aliphatic Structure and Cross-Linking Density on the Thermal Conductivity of Epoxy Resins. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 1555-1562 | 4.3 | 5 |
| 148 | Effect of Linker Length and Temperature on the Thermal Conductivity of Ethylene Dynamic Networks.. <i>ACS Macro Letters</i> , 2021 , 10, 1088-1093 | 6.6 | 5 |
| 147 | Pushing low thermal conductivity to the limit. <i>Science</i> , 2021 , 373, 963-964 | 33.3 | 0 |

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| 146 | High Thermal Conductivity Semicrystalline Epoxy Resins with Anthraquinone-Based Hardeners. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 4430-4435 | 4.3 | 5 |
| 145 | Extremely anisotropic van der Waals thermal conductors. <i>Nature</i> , 2021 , 597, 660-665 | 50.4 | 20 |
| 144 | Nonequilibrium heat transport in Pt and Ru probed by an ultrathin Co thermometer. <i>Physical Review B</i> , 2020 , 101, | 3.3 | 10 |
| 143 | Thermal Conductivity of Oxide Tunnel Barriers in Magnetic Tunnel Junctions Measured by Ultrafast Thermoreflectance and Magneto-Optic Kerr Effect Thermometry. <i>Physical Review Applied</i> , 2020 , 13, | 4.3 | 5 |
| 142 | Properties of bulk scandium nitride crystals grown by physical vapor transport. <i>Applied Physics Letters</i> , 2020 , 116, 132103 | 3.4 | 6 |
| 141 | Condensation Induced Blistering as a Measurement Technique for the Adhesion Energy of Nanoscale Polymer Films. <i>Nano Letters</i> , 2020 , 20, 3918-3924 | 11.5 | 22 |
| 140 | Ultrahigh thermal conductivity in isotope-enriched cubic boron nitride. <i>Science</i> , 2020 , 367, 555-559 | 33.3 | 90 |
| 139 | Magnetocrystalline anisotropy of the easy-plane metallic antiferromagnet Fe ₂ As. <i>Physical Review B</i> , 2020 , 102, | 3.3 | 2 |
| 138 | Microscale, bendable thermoreflectance sensor for local measurements of the thermal effusivity of biological fluids and tissues. <i>Review of Scientific Instruments</i> , 2020 , 91, 044903 | 1.7 | 1 |
| 137 | High Contrast Thermal Conductivity Change in NiMnIn Heusler Alloys near Room Temperature. <i>Advanced Engineering Materials</i> , 2019 , 21, 1801342 | 3.5 | 12 |
| 136 | Thermal transport in layer-by-layer assembled polycrystalline graphene films. <i>Npj 2D Materials and Applications</i> , 2019 , 3, | 8.8 | 21 |
| 135 | Light-triggered thermal conductivity switching in azobenzene polymers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 5973-5978 | 11.5 | 56 |
| 134 | Synthesis, Characterization, and Ultralow Thermal Conductivity of a Lattice-Mismatched SnSe ₂ (MoSe ₂) _{1.32} Heterostructure. <i>Chemistry of Materials</i> , 2019 , 31, 5699-5705 | 9.6 | 10 |
| 133 | Anomalous spin-orbit torques in magnetic single-layer films. <i>Nature Nanotechnology</i> , 2019 , 14, 819-824 | 28.7 | 72 |
| 132 | Thermal conductivity of GaN, GaN ₇₁ , and SiC from 150 K to 850 K. <i>Physical Review Materials</i> , 2019 , 3, | 3.2 | 43 |
| 131 | Ultralow shear modulus of incommensurate [SnSe] _n [MoSe ₂] _n layers synthesized by the method of modulated elemental reactants. <i>Physical Review Materials</i> , 2019 , 3, | 3.2 | 4 |
| 130 | Magneto-optic response of the metallic antiferromagnet Fe ₂ As to ultrafast temperature excursions. <i>Physical Review Materials</i> , 2019 , 3, | 3.2 | 4 |
| 129 | Ultralow thermal conductivity of turbostratically disordered MoSe ultra-thin films and implications for heterostructures. <i>Nanotechnology</i> , 2019 , 30, 285401 | 3.4 | 16 |

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|-----|---|------|-----|
| 128 | Thermal transport through the magnetic martensitic transition in Mn_xMGe ($M=Co,Ni$). <i>Physical Review Materials</i> , 2018 , 2, | 3.2 | 3 |
| 127 | Thermal-conductivity measurement by time-domain thermoreflectance. <i>MRS Bulletin</i> , 2018 , 43, 782-789 | 3.2 | 8 |
| 126 | Measurement of water vapor diffusion in nanoscale polymer films by frequency-domain probe beam deflection. <i>Review of Scientific Instruments</i> , 2018 , 89, 104904 | 1.7 | 5 |
| 125 | High Thermal Conductivity in Isotopically Enriched Cubic Boron Phosphide. <i>Advanced Functional Materials</i> , 2018 , 28, 1805116 | 15.6 | 51 |
| 124 | Density, Elastic Constants, and Thermal Conductivity of Interfacially Polymerized Polyamide Films for Reverse Osmosis Membranes. <i>ACS Applied Nano Materials</i> , 2018 , 1, 5008-5018 | 5.6 | 10 |
| 123 | High thermal conductivity in cubic boron arsenide crystals. <i>Science</i> , 2018 , 361, 579-581 | 33.3 | 220 |
| 122 | Direct Synthesis of Large-Scale WTe_2 Thin Films with Low Thermal Conductivity. <i>Advanced Functional Materials</i> , 2017 , 27, 1605928 | 15.6 | 64 |
| 121 | Picosecond Spin Seebeck Effect. <i>Physical Review Letters</i> , 2017 , 118, 057201 | 7.4 | 53 |
| 120 | High and low thermal conductivity of amorphous macromolecules. <i>Physical Review B</i> , 2017 , 95, | 3.3 | 61 |
| 119 | Optical-helicity-driven magnetization dynamics in metallic ferromagnets. <i>Nature Communications</i> , 2017 , 8, 15085 | 17.4 | 42 |
| 118 | Flexible and Stretchable $3\bar{1}1$ Sensors for Thermal Characterization of Human Skin. <i>Advanced Functional Materials</i> , 2017 , 27, 1701282 | 15.6 | 71 |
| 117 | Solution-Processed $CuSe$ Nanocrystal Films with Bulk-Like Thermoelectric Performance. <i>Scientific Reports</i> , 2017 , 7, 2765 | 4.9 | 17 |
| 116 | Spin diffusion induced by pulsed-laser heating and the role of spin heat accumulation. <i>Physical Review B</i> , 2017 , 95, | 3.3 | 14 |
| 115 | Plasmonic Sensing of Ultrafast Evaporation and Condensation. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2017 , 21, 70-80 | 3.7 | 3 |
| 114 | 3D Anisotropic Thermal Conductivity of Exfoliated Rhenium Disulfide. <i>Advanced Materials</i> , 2017 , 29, 1700650 | 14.5 | 53 |
| 113 | Coexistence of Low Damping and Strong Magnetoelastic Coupling in Epitaxial Spinel Ferrite Thin Films. <i>Advanced Materials</i> , 2017 , 29, 1701130 | 24 | 56 |
| 112 | Sensors: Flexible and Stretchable $3\bar{1}1$ Sensors for Thermal Characterization of Human Skin (Adv. Funct. Mater. 26/2017). <i>Advanced Functional Materials</i> , 2017 , 27, | 15.6 | 4 |
| 111 | Thermal conductance of interfaces with amorphous SiO_2 measured by time-resolved magneto-optic Kerr-effect thermometry. <i>Physical Review B</i> , 2017 , 95, | 3.3 | 36 |

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|-----|---|------|-----|
| 110 | Phonon and electron contributions to the thermal conductivity of VN _x epitaxial layers. <i>Physical Review Materials</i> , 2017 , 1, | 3.2 | 28 |
| 109 | Role of Remote Interfacial Phonon (RIP) Scattering in Heat Transport Across Graphene/SiO Interfaces. <i>Nano Letters</i> , 2016 , 16, 6014-6020 | 11.5 | 27 |
| 108 | Tuning thermal conductivity in molybdenum disulfide by electrochemical intercalation. <i>Nature Communications</i> , 2016 , 7, 13211 | 17.4 | 101 |
| 107 | Anisotropic Thermal Transport in Thermoelectric Composites of Conjugated Polyelectrolytes/Single-Walled Carbon Nanotubes. <i>Macromolecules</i> , 2016 , 49, 4957-4963 | 5.5 | 26 |
| 106 | Thermal Conductivity, Heat Capacity, and Elastic Constants of Water-Soluble Polymers and Polymer Blends. <i>Macromolecules</i> , 2016 , 49, 972-978 | 5.5 | 156 |
| 105 | Plasmonic Sensing of Heat Transport at Solid-Liquid Interfaces. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 2814-2821 | 3.8 | 28 |
| 104 | Thermal Conductivity of Graphite Thin Films Grown by Low Temperature Chemical Vapor Deposition on Ni (111). <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600234 | 4.6 | 24 |
| 103 | High Power Density Pyroelectric Energy Conversion in Nanometer-Thick BaTiO ₃ Films. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2016 , 20, 137-146 | 3.7 | 12 |
| 102 | Thermal Conductivity in the Radial Direction of Deformed Polymer Fibers. <i>ACS Macro Letters</i> , 2016 , 5, 646-650 | 6.6 | 17 |
| 101 | Thermally Functional Liquid Crystal Networks by Magnetic Field Driven Molecular Orientation. <i>ACS Macro Letters</i> , 2016 , 5, 955-960 | 6.6 | 47 |
| 100 | Thermal conductance of metal-diamond interfaces at high pressure. <i>Nature Communications</i> , 2015 , 6, 6578 | 17.4 | 103 |
| 99 | Thermal conductance of strongly bonded metal-oxide interfaces. <i>Physical Review B</i> , 2015 , 91, | 3.3 | 44 |
| 98 | Spin-dependent thermal transport perpendicular to the planes of Co/Cu multilayers. <i>Physical Review B</i> , 2015 , 91, | 3.3 | 30 |
| 97 | Limits to Fourier theory in high thermal conductivity single crystals. <i>Applied Physics Letters</i> , 2015 , 107, 203112 | 3.4 | 29 |
| 96 | Anisotropic Thermal Conductivity of Exfoliated Black Phosphorus. <i>Advanced Materials</i> , 2015 , 27, 8017-2224 | | 178 |
| 95 | Evaluating Broader Impacts of Nanoscale Thermal Transport Research. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2015 , 19, 127-165 | 3.7 | 60 |
| 94 | Thermal spin-transfer torque driven by the spin-dependent Seebeck effect in metallic spin-valves. <i>Nature Physics</i> , 2015 , 11, 576-581 | 16.2 | 106 |
| 93 | Thermal Conductivity and Elastic Constants of PEDOT:PSS with High Electrical Conductivity. <i>Macromolecules</i> , 2015 , 48, 585-591 | 5.5 | 209 |

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|----|---|------|------|
| 92 | Nanoscale thermal transport. II. 2003–2012. <i>Applied Physics Reviews</i> , 2014 , 1, 011305 | 17.3 | 1050 |
| 91 | High quality factor nanocrystalline diamond micromechanical resonators limited by thermoelastic damping. <i>Applied Physics Letters</i> , 2014 , 104, 151903 | 3.4 | 31 |
| 90 | Elastic constants, Poisson ratios, and the elastic anisotropy of VN(001), (011), and (111) epitaxial layers grown by reactive magnetron sputter deposition. <i>Journal of Applied Physics</i> , 2014 , 115, 214908 | 2.5 | 43 |
| 89 | Spin current generated by thermally driven ultrafast demagnetization. <i>Nature Communications</i> , 2014 , 5, 4334 | 17.4 | 113 |
| 88 | Thermal conductivity reduction of crystalline silicon by high-pressure torsion. <i>Nanoscale Research Letters</i> , 2014 , 9, 326 | 5 | 18 |
| 87 | Anisotropic failure of Fourier theory in time-domain thermoreflectance experiments. <i>Nature Communications</i> , 2014 , 5, 5075 | 17.4 | 146 |
| 86 | Micro- and Nanoscale Measurement Methods for Phase Change Heat Transfer on Planar and Structured Surfaces. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2014 , 18, 270-287 | 3.7 | 10 |
| 85 | Electrochemically tunable thermal conductivity of lithium cobalt oxide. <i>Nature Communications</i> , 2014 , 5, 4035 | 17.4 | 92 |
| 84 | Measurement of the anisotropic thermal conductivity of molybdenum disulfide by the time-resolved magneto-optic Kerr effect. <i>Journal of Applied Physics</i> , 2014 , 116, 233107 | 2.5 | 173 |
| 83 | Ultrafast demagnetization of FePt:Cu thin films and the role of magnetic heat capacity. <i>Physical Review B</i> , 2014 , 90, | 3.3 | 41 |
| 82 | Nonlocal theory for heat transport at high frequencies. <i>Physical Review B</i> , 2014 , 90, | 3.3 | 41 |
| 81 | Curvature induced phase stability of an intensely heated liquid. <i>Journal of Chemical Physics</i> , 2014 , 140, 234506 | 3.9 | 10 |
| 80 | Indirect heating of Pt by short-pulse laser irradiation of Au in a nanoscale Pt/Au bilayer. <i>Physical Review B</i> , 2014 , 89, | 3.3 | 37 |
| 79 | Pump-probe measurements of the thermal conductivity tensor for materials lacking in-plane symmetry. <i>Review of Scientific Instruments</i> , 2014 , 85, 104903 | 1.7 | 76 |
| 78 | Invited article: micron resolution spatially resolved measurement of heat capacity using dual-frequency time-domain thermoreflectance. <i>Review of Scientific Instruments</i> , 2013 , 84, 071301 | 1.7 | 60 |
| 77 | Ultralow thermal conductivity of fullerene derivatives. <i>Physical Review B</i> , 2013 , 88, | 3.3 | 82 |
| 76 | Microcrystalline diamond micromechanical resonators with quality factor limited by thermoelastic damping. <i>Applied Physics Letters</i> , 2013 , 102, 071901 | 3.4 | 21 |
| 75 | Suppression of thermal conductivity in In _x Ga _{1-x} N alloys by nanometer-scale disorder. <i>Applied Physics Letters</i> , 2013 , 102, 121906 | 3.4 | 42 |

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| 74 | Generation and detection of gigahertz surface acoustic waves using an elastomeric phase-shift mask. <i>Journal of Applied Physics</i> , 2013 , 114, 143102 | 2.5 | 16 |
| 73 | Probing anisotropic heat transport using time-domain thermoreflectance with offset laser spots. <i>Review of Scientific Instruments</i> , 2012 , 83, 104901 | 1.7 | 111 |
| 72 | Heat Transfer at Solid-Gas Interfaces by Photoacoustics at Brillouin Frequencies. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 10896-10903 | 3.8 | 6 |
| 71 | Interpreting picosecond acoustics in the case of low interface stiffness. <i>Review of Scientific Instruments</i> , 2012 , 83, 114902 | 1.7 | 50 |
| 70 | Thermoreflectance of metal transducers for optical pump-probe studies of thermal properties. <i>Optics Express</i> , 2012 , 20, 28829-38 | 3.3 | 81 |
| 69 | Thermal conductivity of silicon nanowire arrays with controlled roughness. <i>Journal of Applied Physics</i> , 2012 , 112, 114306 | 2.5 | 105 |
| 68 | Thermal conductivity as a metric for the crystalline quality of SrTiO ₃ epitaxial layers. <i>Applied Physics Letters</i> , 2011 , 98, 221904 | 3.4 | 55 |
| 67 | Influence of defects and doping on optical phonon lifetime and Raman linewidth in carbon nanotubes. <i>Physical Review B</i> , 2011 , 83, | 3.3 | 7 |
| 66 | High-throughput measurements of materials properties. <i>Jom</i> , 2011 , 63, 40-44 | 2.1 | 18 |
| 65 | Interfacial thermal conductance of transfer-printed metal films. <i>Advanced Materials</i> , 2011 , 23, 5028-33, 5027 | 2.4 | 53 |
| 64 | Microcontact Printing: Interfacial Thermal Conductance of Transfer-Printed Metal Films (Adv. Mater. 43/2011). <i>Advanced Materials</i> , 2011 , 23, 5027-5027 | 2.4 | 1 |
| 63 | Temperature dependence of surface phonon polaritons from a quartz grating. <i>Journal of Applied Physics</i> , 2011 , 110, 043517 | 2.5 | 17 |
| 62 | Thermal conductivity of compressed H ₂ O to 22 GPa: A test of the Leibfried-Schlöthmann equation. <i>Physical Review B</i> , 2011 , 83, | 3.3 | 47 |
| 61 | Percolation of thermal conductivity in amorphous fluorocarbons. <i>Physical Review B</i> , 2010 , 82, | 3.3 | 15 |
| 60 | Interfacial thermal conductance in spun-cast polymer films and polymer brushes. <i>Applied Physics Letters</i> , 2010 , 97, 011908 | 3.4 | 79 |
| 59 | Low thermal conductivity of CsBiNb ₂ O ₇ epitaxial layers. <i>Applied Physics Letters</i> , 2010 , 96, 121903 | 3.4 | 21 |
| 58 | Thermal conductivity and dynamic heat capacity across the metal-insulator transition in thin film VO ₂ . <i>Applied Physics Letters</i> , 2010 , 96, 151906 | 3.4 | 140 |
| 57 | Synthesis and Properties of Turbostratically Disordered, Ultrathin WSe ₂ Films. <i>Chemistry of Materials</i> , 2010 , 22, 2750-2756 | 9.6 | 28 |

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| 56 | Thermoreflectance of metal transducers for time-domain thermoreflectance. <i>Journal of Applied Physics</i> , 2010 , 108, 043507 | 2.5 | 64 |
| 55 | Lattice thermal conductivity of nanostructured thermoelectric materials based on PbTe. <i>Applied Physics Letters</i> , 2009 , 94, 153101 | 3.4 | 81 |
| 54 | Low thermal conductivity in Ge ₂ Sb ₂ Te ₅ BiOx for phase change memory devices. <i>Applied Physics Letters</i> , 2009 , 94, 243103 | 3.4 | 38 |
| 53 | Fast, spatially resolved thermometry of Si and GaP crystals using pump-probe two-photon absorption. <i>Journal of Applied Physics</i> , 2009 , 106, 013102 | 2.5 | 5 |
| 52 | Comparison of the 3 μ m method and time-domain thermoreflectance for measurements of the cross-plane thermal conductivity of epitaxial semiconductors. <i>Journal of Applied Physics</i> , 2009 , 105, 054303 | 2.5 | 148 |
| 51 | Lower limit to the lattice thermal conductivity of nanostructured Bi ₂ Te ₃ -based materials. <i>Journal of Applied Physics</i> , 2009 , 106, 073503 | 2.5 | 78 |
| 50 | Thermal conductivity of (Zr,W)N/ScN metal/semiconductor multilayers and superlattices. <i>Journal of Applied Physics</i> , 2009 , 105, 024909 | 2.5 | 101 |
| 49 | Spatially Resolved Measurements of Thermal Stresses by Picosecond Time-Domain Probe Beam Deflection. <i>Journal of Thermal Stresses</i> , 2009 , 33, 9-14 | 2.2 | 2 |
| 48 | Stress evolution in platinum thin films during low-energy ion irradiation. <i>Physical Review B</i> , 2008 , 77, | 3.3 | 22 |
| 47 | Fullerene thermal insulation for phase change memory. <i>Applied Physics Letters</i> , 2008 , 92, 013109 | 3.4 | 52 |
| 46 | Low thermal conductivity in nanoscale layered materials synthesized by the method of modulated elemental reactants. <i>Journal of Applied Physics</i> , 2008 , 104, 033533 | 2.5 | 72 |
| 45 | Dynamics of femtosecond laser-induced melting of silver. <i>Physical Review B</i> , 2008 , 78, | 3.3 | 53 |
| 44 | Two-tint pump-probe measurements using a femtosecond laser oscillator and sharp-edged optical filters. <i>Review of Scientific Instruments</i> , 2008 , 79, 114901 | 1.7 | 152 |
| 43 | Micron-scale measurements of the coefficient of thermal expansion by time-domain probe beam deflection. <i>Journal of Applied Physics</i> , 2008 , 104, 073509 | 2.5 | 34 |
| 42 | ULTRAFAST SHOCK WAVE COHERENT DISSOCIATION AND SPECTROSCOPY OF MATERIALS 2008 , | | 1 |
| 41 | Time resolved measurements of melting and solidification in Si using third harmonic generation of light. <i>Applied Physics Letters</i> , 2007 , 91, 011906 | 3.4 | 7 |
| 40 | Ultralow thermal conductivity in disordered, layered WSe ₂ crystals. <i>Science</i> , 2007 , 315, 351-3 | 33.3 | 646 |
| 39 | High-resolution picosecond acoustic microscopy for non-invasive characterization of buried interfaces. <i>Journal of Materials Research</i> , 2006 , 21, 1204-1208 | 2.5 | 13 |

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|----|---|-----|------|
| 38 | Patterning of metal nanowires by directed ion-induced dewetting. <i>Applied Physics Letters</i> , 2006 , 89, 053103 | 3.0 | 22 |
| 37 | Stress-induced wrinkling of sputtered SiO ₂ films on polymethylmethacrylate. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006 , 24, 324-327 | 2.9 | 11 |
| 36 | Thermal conductivity of nanoparticle suspensions. <i>Journal of Applied Physics</i> , 2006 , 99, 084308 | 2.5 | 217 |
| 35 | Thermal conductance of hydrophilic and hydrophobic interfaces. <i>Physical Review Letters</i> , 2006 , 96, 186104 | 3.4 | 321 |
| 34 | Thermal conductance of interfaces between highly dissimilar materials. <i>Physical Review B</i> , 2006 , 73, | 3.3 | 397 |
| 33 | Ablation of crystalline oxides by infrared femtosecond laser pulses. <i>Journal of Applied Physics</i> , 2006 , 100, 083519 | 2.5 | 13 |
| 32 | Laser-Induced Blistering of Thin SiO ₂ on Si. <i>Microscale Thermophysical Engineering</i> , 2005 , 9, 155-164 | | 5 |
| 31 | Evolution of surface waviness in thin films via volume and surface diffusion. <i>Journal of Applied Physics</i> , 2005 , 97, 013521 | 2.5 | 40 |
| 30 | Thermal conductance of metal-metal interfaces. <i>Physical Review B</i> , 2005 , 72, | 3.3 | 269 |
| 29 | X-ray study of strain and composition of Si _{0.85} Ge _{0.15} (111) islands grown in Volmer-Weber mode. <i>Journal of Applied Physics</i> , 2004 , 96, 3234-3238 | 2.5 | 3 |
| 28 | Thermal conductivity of isotopically pure and Ge-doped Si epitaxial layers from 300to550K. <i>Physical Review B</i> , 2004 , 70, | 3.3 | 66 |
| 27 | Strained layer instabilities on vicinal surfaces: Ge _{0.8} Si _{0.2} epitaxy on laser textured Si(001). <i>Applied Physics Letters</i> , 2004 , 85, 1238-1240 | 3.4 | 16 |
| 26 | Micron-scale apparatus for measurements of thermodiffusion in liquids. <i>Review of Scientific Instruments</i> , 2004 , 75, 2368-2372 | 1.7 | 26 |
| 25 | AuPd Metal Nanoparticles as Probes of Nanoscale Thermal Transport in Aqueous Solution. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 18870-18875 | 3.4 | 121 |
| 24 | Role of thermal boundary resistance on the heat flow in carbon-nanotube composites. <i>Journal of Applied Physics</i> , 2004 , 95, 8136-8144 | 2.5 | 424 |
| 23 | Analysis of heat flow in layered structures for time-domain thermoreflectance. <i>Review of Scientific Instruments</i> , 2004 , 75, 5119-5122 | 1.7 | 987 |
| 22 | Nanoscale thermal transport. <i>Journal of Applied Physics</i> , 2003 , 93, 793-818 | 2.5 | 2204 |
| 21 | Thermal conductance of epitaxial interfaces. <i>Physical Review B</i> , 2003 , 67, | 3.3 | 355 |

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|----|--|-----|-----|
| 20 | Morphological instabilities in thin-film growth and etching. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, S110-S116 | 2.9 | 31 |
| 19 | In situ transmission electron microscopy study of irradiation induced dewetting of ultrathin Pt films. <i>Journal of Applied Physics</i> , 2003 , 93, 165-169 | 2.5 | 26 |
| 18 | Thermometry and Thermal Transport in Micro/Nanoscale Solid-State Devices and Structures. <i>Journal of Heat Transfer</i> , 2002 , 124, 223-241 | 1.8 | 476 |
| 17 | Burrowing of Pt nanoparticles into SiO ₂ during ion-beam irradiation. <i>Journal of Applied Physics</i> , 2002 , 92, 3995-4000 | 2.5 | 39 |
| 16 | Colloidal metal particles as probes of nanoscale thermal transport in fluids. <i>Physical Review B</i> , 2002 , 66, | 3.3 | 236 |
| 15 | Thermal conductivity and sound velocities of hydrogen-silsesquioxane low-k dielectrics. <i>Physical Review B</i> , 2002 , 65, | 3.3 | 56 |
| 14 | Dewetting and nanopattern formation of thin Pt films on SiO ₂ induced by ion beam irradiation. <i>Journal of Applied Physics</i> , 2001 , 89, 7777-7783 | 2.5 | 58 |
| 13 | Characterization of nanostructured metal films by picosecond acoustics and interferometry. <i>Journal of Applied Physics</i> , 2001 , 90, 4852-4858 | 2.5 | 65 |
| 12 | Nanoscale pattern formation in Pt thin films due to ion-beam-induced dewetting. <i>Applied Physics Letters</i> , 2000 , 76, 3215-3217 | 3.4 | 75 |
| 11 | Identification of Shape Transitions in Coherent Ge/Si Islands Using Transmission Electron Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 583, 137 | | |
| 10 | Morphology and microstructure of tensile-strained SiGe(001) thin epitaxial films. <i>Journal of Applied Physics</i> , 1998 , 83, 1096-1102 | 2.5 | 13 |
| 9 | Morphology of epitaxial TiN(001) grown by magnetron sputtering. <i>Applied Physics Letters</i> , 1997 , 70, 1703-1705 | 3.4 | 73 |
| 8 | Thermal conductivity of SiGe superlattices. <i>Applied Physics Letters</i> , 1997 , 70, 2957-2959 | 3.4 | 579 |
| 7 | Heat transport in thin dielectric films. <i>Journal of Applied Physics</i> , 1997 , 81, 2590-2595 | 2.5 | 553 |
| 6 | UV spectroscopy of metal volatilization during thermal plasma processing of waste glass melts. <i>Plasma Chemistry and Plasma Processing</i> , 1996 , 16, 449-460 | 3.6 | 3 |
| 5 | Evolution of surface roughness in epitaxial Si _{0.7} Ge _{0.3} (001) as a function of growth temperature (2000°C) and Si(001) substrate miscut. <i>Journal of Applied Physics</i> , 1996 , 80, 2199-2210 | 2.5 | 38 |
| 4 | Heat transport in micron thick a-Si: H films. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1995 , 71, 677-682 | | 7 |
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