

# Samuel Graham

## List of Publications by Citations

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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.

189  
papers

6,273  
citations

38  
h-index

74  
g-index

200  
ext. papers

7,410  
ext. citations

6.1  
avg, IF

5.81  
L-index

#	Paper	IF	Citations
189	A universal method to produce low-work function electrodes for organic electronics. <i>Science</i> , <b>2012</b> , 336, 327-32	33.3	1642
188	Ultrawide-Bandgap Semiconductors: Research Opportunities and Challenges. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1600501	6.4	520
187	Stability of Doped Transparent Carbon Nanotube Electrodes. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 2548-2554	15.6	174
186	Electrical, Thermal, and Mechanical Characterization of Silicon Microcantilever Heaters. <i>Journal of Microelectromechanical Systems</i> , <b>2006</b> , 15, 1644-1655	2.5	162
185	Highly tunable molecular sieving and adsorption properties of mixed-linker zeolitic imidazolate frameworks. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 4191-7	16.4	155
184	Solution-based electrical doping of semiconducting polymer films over a limited depth. <i>Nature Materials</i> , <b>2017</b> , 16, 474-480	27	95
183	Influence of Interfacial Mixing on Thermal Boundary Conductance Across a Chromium/Silicon Interface. <i>Journal of Heat Transfer</i> , <b>2008</b> , 130,	1.8	95
182	Highly Uniform Trilayer Molybdenum Disulfide for Wafer-Scale Device Fabrication. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 6389-6400	15.6	89
181	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 592-601	35.4	88
180	A hybrid encapsulation method for organic electronics. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 163308	3.4	77
179	Thermal analysis of near-isothermal compressed gas energy storage system. <i>Applied Energy</i> , <b>2016</b> , 179, 948-960	10.7	67
178	Analysis of the residual stress distribution in AlGaIn/GaN high electron mobility transistors. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 093510	2.5	66
177	Thermal conductance across EGa <sub>2</sub> O <sub>3</sub> -diamond van der Waals heterogeneous interfaces. <i>APL Materials</i> , <b>2019</b> , 7, 031118	5.7	63
176	Low Thermal Boundary Resistance Interfaces for GaN-on-Diamond Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 24302-24309	9.5	62
175	Thermometry of AlGaIn/GaN HEMTs Using Multispectral Raman Features. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 1898-1904	2.9	60
174	Production of heavily n- and p-doped CVD graphene with solution-processed redox-active metal-organic species. <i>Materials Horizons</i> , <b>2014</b> , 1, 111-115	14.4	59
173	Thermal Boundary Resistance in GaN Films Measured by Time Domain Thermoreflectance with Robust Monte Carlo Uncertainty Estimation. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2016</b> , 20, 22-32	3.7	58

172	Review of stability and thermal conductivity enhancements for salt hydrates. <i>Journal of Energy Storage</i> , <b>2019</b> , 24, 100794	7.8	55
171	The Impact of Bias Conditions on Self-Heating in AlGa <sub>N</sub> /Ga <sub>N</sub> HEMTs. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 159-162	2.9	55
170	Evaluation of transparent carbon nanotube networks of homogeneous electronic type. <i>ACS Nano</i> , <b>2010</b> , 4, 1377-84	16.7	55
169	Specific contact resistance at metal/carbon nanotube interfaces. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 012109	3.4	53
168	Interfacial Thermal Conductance across Room-Temperature-Bonded Ga <sub>N</sub> /Diamond Interfaces for Ga <sub>N</sub> -on-Diamond Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 8376-8384	9.5	51
167	Direct Visualization of Thermal Conductivity Suppression Due to Enhanced Phonon Scattering Near Individual Grain Boundaries. <i>Nano Letters</i> , <b>2018</b> , 18, 3466-3472	11.5	51
166	Creating graphene p-n junctions using self-assembled monolayers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 4781-6	9.5	50
165	Micro-Raman thermometry in the presence of complex stresses in Ga <sub>N</sub> devices. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 124501	2.5	50
164	Thermal conduction from microcantilever heaters in partial vacuum. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 014906	2.5	50
163	Field-effect transistors based on wafer-scale, highly uniform few-layer p-type WSe <sub>2</sub> . <i>Nanoscale</i> , <b>2016</b> , 8, 2268-76	7.7	49
162	Reduced Graphene Oxide Thin Films as Ultrabarriers for Organic Electronics. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1300986	21.8	49
161	Rethinking phonons: The issue of disorder. <i>Npj Computational Materials</i> , <b>2017</b> , 3,	10.9	49
160	Tailoring Electron-Transfer Barriers for Zinc Oxide/C <sub>60</sub> Fullerene Interfaces. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 7381-7389	15.6	47
159	Electrical and structural dependence of operating temperature of AlGa <sub>N</sub> /Ga <sub>N</sub> HEMTs. <i>Microelectronics Reliability</i> , <b>2013</b> , 53, 872-877	1.2	46
158	Integration of polycrystalline Ga <sub>2</sub> O <sub>3</sub> on diamond for thermal management. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 062105	3.4	42
157	Probing Growth-Induced Anisotropic Thermal Transport in High-Quality CVD Diamond Membranes by Multifrequency and Multiple-Spot-Size Time-Domain Thermoreflectance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 4808-4815	9.5	42
156	High Thermal Boundary Conductance across Bonded Heterogeneous Ga <sub>N</sub> -SiC Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 33428-33434	9.5	41
155	Simultaneous determination of the lattice thermal conductivity and grain/grain thermal resistance in polycrystalline diamond. <i>Acta Materialia</i> , <b>2017</b> , 139, 215-225	8.4	41

154	Development of highly flexible and ultra-low permeation rate thin-film barrier structure for organic electronics. <i>Thin Solid Films</i> , <b>2013</b> , 547, 57-62	2.2	40
153	Thermal charging performance of enhanced phase change material composites for thermal battery design. <i>International Journal of Thermal Sciences</i> , <b>2018</b> , 127, 19-28	4.1	39
152	Systematic reliability study of top-gate p- and n-channel organic field-effect transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 3378-86	9.5	39
151	The impact of mechanical stress on the degradation of AlGaIn/GaN high electron mobility transistors. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 164501	2.5	37
150	Multiscale Lattice Boltzmann Modeling of Phonon Transport in Crystalline Semiconductor Materials. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , <b>2010</b> , 57, 89-109	1.3	37
149	Thermal Boundary Conductance Across Heteroepitaxial ZnO/GaN Interfaces: Assessment of the Phonon Gas Model. <i>Nano Letters</i> , <b>2018</b> , 18, 7469-7477	11.5	37
148	Engineering the mechanical properties of ultrabARRIER films grown by atomic layer deposition for the encapsulation of printed electronics. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 085501	2.5	36
147	A Numerical Study on Comparing the Active and Passive Cooling of AlGaIn/GaN HEMTs. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 4056-4061	2.9	36
146	Impact of post-growth thermal annealing and environmental exposure on the unintentional doping of CVD graphene films. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2012</b> , 30, 041213	1.3	36
145	Thermal Transport across Ion-Cut Monocrystalline EGaO Thin Films and Bonded EGaO-SiC Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 44943-44951	9.5	36
144	Improving the stability of atomic layer deposited alumina films in aqueous environments with metal oxide capping layers. <i>Journal Physics D: Applied Physics</i> , <b>2013</b> , 46, 084014	3	35
143	EGallium oxide power electronics. <i>APL Materials</i> , <b>2022</b> , 10, 029201	5.7	33
142	Invited Review Article: Error and uncertainty in Raman thermal conductivity measurements. <i>Review of Scientific Instruments</i> , <b>2015</b> , 86, 041101	1.7	32
141	Transient Thermal Characterization of AlGaIn/GaN HEMTs Under Pulsed Biasing. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 1753-1758	2.9	31
140	Facile Formation of Graphene P-N Junctions Using Self-Assembled Monolayers. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 19095-19103	3.8	31
139	Tunable Thermal Energy Transport across Diamond Membranes and Diamond-Si Interfaces by Nanoscale Graphoepitaxy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 18517-18527	9.5	30
138	Thermal characterization of gallium nitride p-i-n diodes. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 073503	3.4	30
137	Thermal charging study of compressed expanded natural graphite/phase change material composites. <i>Carbon</i> , <b>2016</b> , 109, 495-504	10.4	29

136	Transient stress characterization of AlGaIn/GaN HEMTs due to electrical and thermal effects. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 2634-2639	1.2	28
135	Thermal Metrology of Silicon Microstructures Using Raman Spectroscopy. <i>IEEE Transactions on Components and Packaging Technologies</i> , <b>2007</b> , 30, 200-208		28
134	Experimental and analytical evaluation of a hydro-pneumatic compressed-air Ground-Level Integrated Diverse Energy Storage (GLIDES) system. <i>Applied Energy</i> , <b>2018</b> , 221, 75-85	10.7	27
133	Characterization of AlGaIn/GaN HEMTs Using Gate Resistance Thermometry. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 78-83	2.9	26
132	Pool boiling characteristics and critical heat flux mechanisms of microporous surfaces and enhancement through structural modification. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 091601	3.4	25
131	Memory and Photovoltaic Elements in Organic Field Effect Transistors with Donor/Acceptor Planar-Hetero Junction Interfaces. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 9390-9397	3.8	25
130	Assessment of stress contributions in GaN high electron mobility transistors of differing substrates using Raman spectroscopy. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 114509	2.5	25
129	Modeling and analysis for thermal management in gallium oxide field-effect transistors. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 154502	2.5	25
128	A Review of Carbon Nanotube Ensembles as Flexible Electronics and Advanced Packaging Materials. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2011</b> , 133,	2	23
127	Solution-Processed Doping of Trilayer WSe <sub>2</sub> with Redox-Active Molecules. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7296-7304	9.6	22
126	Analysis and characterization of thermal transport in GaN HEMTs on Diamond substrates <b>2014</b> ,		21
125	MEMS-Based Nanomechanics: Influence of MEMS Design on Test Temperature. <i>Experimental Mechanics</i> , <b>2012</b> , 52, 607-617	2.6	21
124	Thermal conductance across harmonic-matched epitaxial Al-sapphire heterointerfaces. <i>Communications Physics</i> , <b>2020</b> , 3,	5.4	21
123	Photochemical Doping and Tuning of the Work Function and Dirac Point in Graphene Using Photoacid and Photobase Generators. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 5147-5156	15.6	20
122	Buckling-driven delamination of carbon nanotube forests. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 223103	3.4	20
121	GaN HEMT thermal behavior and implications for reliability testing and analysis. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 2026-2029		20
120	Raman Thermometry of Polysilicon Microelectro-mechanical Systems in the Presence of an Evolving Stress. <i>Journal of Heat Transfer</i> , <b>2007</b> , 129, 329-334	1.8	20
119	Heat dissipation in high-power GaN electronics on thermally resistive substrates. <i>IEEE Transactions on Electron Devices</i> , <b>2005</b> , 52, 1683-1688	2.9	20

118	Experimental observation of high intrinsic thermal conductivity of AlN. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	20
117	Signature Vibrational Bands for Defects in CVD Single-Layer Graphene by Surface-Enhanced Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 964-9	6.4	19
116	Ultraviolet micro-Raman spectroscopy stress mapping of a 75-mm GaN-on-diamond wafer. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 211901	3.4	18
115	Significantly reduced thermal conductivity in $\text{Al}_{0.1}\text{Ga}_{0.9}\text{O}_3/\text{Ga}_2\text{O}_3$ superlattices. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 092105	3.4	17
114	Near-isothermal-isobaric compressed gas energy storage. <i>Journal of Energy Storage</i> , <b>2017</b> , 12, 276-287	7.8	16
113	Structure and Interface Analysis of Diamond on an AlGaIn/GaN HEMT Utilizing an in Situ SiN <sub>x</sub> Interlayer Grown by MOCVD. <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 1387-1399	4	16
112	Compressive response of vertically aligned carbon nanotube films gleaned from in situ flat-punch indentations. <i>Journal of Materials Research</i> , <b>2013</b> , 28, 984-997	2.5	16
111	Environmentally Assisted Cracking in Silicon Nitride Barrier Films on Poly(ethylene terephthalate) Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 27169-27178	9.5	16
110	Disrupted Attosecond Charge Carrier Delocalization at a Hybrid Organic/Inorganic Semiconductor Interface. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 1935-41	6.4	15
109	Substrate dependent resistive switching in amorphous-HfO <sub>x</sub> memristors: an experimental and computational investigation. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 5092-5101	7.1	15
108	A multiscale thermal modeling approach for ballistic and diffusive heat transport in two dimensional domains. <i>International Journal of Thermal Sciences</i> , <b>2014</b> , 76, 235-244	4.1	15
107	Diffusion-driven ultralow thermal conductivity in amorphous Nb <sub>2</sub> O <sub>5</sub> thin films. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	15
106	Characterization of the Thermal Conductivity of CVD Diamond for GaN-on-Diamond Devices <b>2016</b> ,		14
105	Organic Field-Effect Transistors with a Bilayer Gate Dielectric Comprising an Oxide Nanolaminate Grown by Atomic Layer Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 29872-29876	9.5	14
104	The Impact of Noncontinuum Thermal Transport on the Temperature of AlGaIn/GaN HFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 2041-2048	2.9	14
103	The Mechanical Behavior of ALD-Polymer Hybrid Films Under Tensile Strain. <i>Advanced Engineering Materials</i> , <b>2015</b> , 17, 1057-1067	3.5	14
102	Pool boiling enhancement using vapor channels in microporous surfaces. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 143, 118532	4.9	13
101	Investigation of the stability of paraffin- $\beta$ -foliated graphite nanoplatelet composites for latent heat thermal storage systems. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 24469		13

100	Thermal Properties and Lattice Dynamics of Polycrystalline MFI Zeolite Films. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2006</b> , 10, 321-331	3.7	13
99	Effects of composition and phonon scattering mechanisms on thermal transport in MFI zeolite films. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 053523	2.5	13
98	Heteroepitaxial growth of $\text{Ga}_2\text{O}_3$ films on SiC via molecular beam epitaxy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 063406	2.9	13
97	Development of ALD Coatings for Harsh Environment Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 7498-7509	9.5	13
96	Thermal transport in defective and disordered materials. <i>Applied Physics Reviews</i> , <b>2021</b> , 8, 031311	17.3	13
95	The Effects of AlN and Copper Back Side Deposition on the Performance of Etched Back GaN/Si HEMTs. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1060-1063	4.4	12
94	Thermal Performance of GaN/Si HEMTs Using Near-Bandgap Thermoreflectance Imaging. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 822-827	2.9	12
93	Transfer-Free Selective Area Synthesis of Graphene Using Solid-State Self-Segregation of Carbon In Cu/Ni Bilayers. <i>ECS Journal of Solid State Science and Technology</i> , <b>2013</b> , 2, M17-M21	2	12
92	Bulk-like Intrinsic Phonon Thermal Conductivity of Micrometer-Thick AlN Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 29443-29450	9.5	11
91	High In-Plane Thermal Conductivity of Aluminum Nitride Thin Films. <i>ACS Nano</i> , <b>2021</b> , 15, 9588-9599	16.7	11
90	Hybridization-Induced Carrier Localization at the $\text{C}_6\text{O}$ /ZnO Interface. <i>Advanced Materials</i> , <b>2016</b> , 28, 396025	2.5	11
89	Applications and Impacts of Nanoscale Thermal Transport in Electronics Packaging. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2021</b> , 143,	2	11
88	Near room-temperature direct encapsulation of organic photovoltaics by plasma-based deposition techniques. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 024003	3	10
87	Transient Liquid Phase Bonding of AlN to AlSiC for Durable Power Electronic Packages. <i>Advanced Engineering Materials</i> , <b>2018</b> , 20, 1800039	3.5	10
86	Application of the Taylor Polycrystal Plasticity Model to Complex Deformation Experiments. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , <b>1998</b> , 120, 197-205	1.8	10
85	Experimental investigation of defect-assisted and intrinsic water vapor permeation through ultrabARRIER films. <i>Review of Scientific Instruments</i> , <b>2016</b> , 87, 033902	1.7	10
84	Thermal management strategies for gallium oxide vertical trench-fin MOSFETs. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 085301	2.5	10
83	Note: A single specimen channel crack growth technique applied to brittle thin films on polymer substrates. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 036102	1.7	9

82	Multidimensional Flash Diffusivity Measurements of Orthotropic Materials. <i>International Journal of Thermophysics</i> , <b>1999</b> , 20, 691-707	2.1	9
81	Record-Low Thermal Boundary Resistance between Diamond and GaN-on-SiC for Enabling Radiofrequency Device Cooling. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	9
80	Thermal boundary conductance across epitaxial metal/sapphire interfaces. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	9
79	Thermal Visualization of Buried Interfaces Enabled by Ratio Signal and Steady-State Heating of Time-Domain Thermoreflectance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 31843-31851	9.5	9
78	Investigation of ultra-thin titania films as hole-blocking contacts for organic photovoltaics. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 17332-17343	13	8
77	A Comparative Study on the Junction Temperature Measurements of LEDs With Raman Spectroscopy, Microinfrared (IR) Imaging, and Forward Voltage Methods. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2018</b> , 8, 1914-1922	1.7	8
76	Thermal conductivity measurements on suspended diamond membranes using picosecond and femtosecond time-domain thermoreflectance <b>2017</b> ,		8
75	Annealing Effects on Mechanical and Transport Properties of Ni and Ni-Alloy Electrodeposits. <i>Journal of Microelectromechanical Systems</i> , <b>2006</b> , 15, 1051-1059	2.5	8
74	Optical studies of MOCVD-grown GaN-based ferromagnetic semiconductor epilayers and devices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 2237-2240		8
73	A perspective on the electro-thermal co-design of ultra-wide bandgap lateral devices. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 170501	3.4	8
72	Monitoring the Joule heating profile of GaN/SiC high electron mobility transistors via cross-sectional thermal imaging. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 075705	2.5	8
71	The thermal effects of substrate removal on GaN HEMTs using Raman Thermometry <b>2016</b> ,		8
70	Diamond Seed Size and the Impact on Chemical Vapor Deposition Diamond Thin Film Properties. <i>ECS Journal of Solid State Science and Technology</i> , <b>2020</b> , 9, 053002	2	7
69	Impact of the thermal environment on the analog temporal response of HfOx-based neuromorphic devices. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 063504	3.4	7
68	Thermal rectification in thin films driven by gradient grain microstructure. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 095114	2.5	7
67	Improving the Transient Thermal Characterization of GaN HEMTs <b>2018</b> ,		7
66	Temperature- and Doping-Dependent Anisotropic Stationary Electron Velocity in Wurtzite GaN. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 1522-1524	4.4	7
65	The Thermal Response of Gallium Nitride HFET Devices Grown on Silicon and SiC Substrates. <i>ECS Transactions</i> , <b>2011</b> , 41, 13-30	1	7



64	Experimental observation of localized interfacial phonon modes. <i>Nature Communications</i> , <b>2021</b> , 12, 6901-6917.4	7
63	Polycrystalline diamond growth on $\text{AlGa}_2\text{O}_3$ for thermal management. <i>Applied Physics Express</i> , <b>2021</b> , 14, 055502	2.4 7
62	Atomic layer deposited $\text{Al}_2\text{O}_3$ capping layer effect on environmentally assisted cracking in $\text{SiN}_x$ barrier films. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 045301	2.5 6
61	Optimizing Crack Onset Strain for Silicon Nitride/Fluoropolymer Nanolaminate Barrier Films. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 2525-2532	5.6 6
60	The Impact of Nongray Thermal Transport on the Temperature of $\text{AlGaN}/\text{GaN}$ HFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 2437-2444	2.9 6
59	Influence of Polymer Substrate Damage on the Time Dependent Cracking of $\text{SiN}$ Barrier Films. <i>Scientific Reports</i> , <b>2018</b> , 8, 4560	4.9 6
58	Measuring the Thermal Resistance in Light Emitting Diodes Using a Transient Thermal Analysis Technique. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 2548-2555	2.9 6
57	Formation of Air Stable Graphene p-n Junctions Using an Amine-Containing Polymer Coating. <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, 1400378	4.6 6
56	Comparison of the cohesive and delamination fatigue properties of atomic-layer-deposited alumina and titania ultrathin protective coatings deposited at 200 °C. <i>Science and Technology of Advanced Materials</i> , <b>2014</b> , 15, 015003	7.1 6
55	Effects of nonframework metal cations and phonon scattering mechanisms on the thermal transport properties of polycrystalline zeolite LTA films. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 063518	2.5 6
54	Thermal Transport across Metal/ $\text{AlGaO}$ Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 29083-29096	3.3 6
53	Integration of Jet Impingement Cooling With Direct Bonded Copper Substrates for Power Electronics Thermal Management. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2019</b> , 9, 226-234	1.7 6
52	Experimental and computational analysis of thermal environment in the operation of $\text{HfO}_2$ memristors. <i>AIP Advances</i> , <b>2020</b> , 10, 035127	1.5 6
51	Diamond-Incorporated Flip-Chip Integration for Thermal Management of $\text{GaN}$ and Ultra-Wide Bandgap RF Power Amplifiers. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2021</b> , 11, 1177-1186	1.7 6
50	Scalable Modeling of Transient Self-Heating of $\text{GaN}$ High-Electron-Mobility Transistors Based on Experimental Measurements. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2139-2145	2.9 5
49	. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 2742-2748	2.9 5
48	29.3: Invited Paper: The Mechanical Reliability of Flexible ALD Barrier Films. <i>Digest of Technical Papers SID International Symposium</i> , <b>2013</b> , 44, 361-364	0.5 5
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44	Experimental considerations of CVD diamond film measurements using time domain thermoreflectance <b>2017</b> ,		4
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38	Traveling dipole domains in AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures and the direct generation of millimeter-wave oscillations. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2285-2287		3
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35	Understanding supercooling mechanism in sodium sulfate decahydrate phase-change material. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 245109	2.5	3
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32	Investigation of the Heterogeneous Thermal Conductivity in Bulk CVD Diamond for Use in Electronics Thermal Management <b>2017</b> ,		2
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29	Cooling of power electronics by integrating sintered Cu particle wick onto a direct-bond copper substrate <b>2017</b> ,		2

28	Thermal simulation of heterogeneous GaN/ InP/silicon 3DIC stacks <b>2015</b> ,		2
27	Thermal metrology techniques for UV LED light sources <b>2012</b> ,		2
26	Pseudomorphic growth of InAs on misoriented GaAs for extending quantum cascade laser wavelength. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2013</b> , 31, 06F109	2.9	2
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19	Phonon heat conduction in Al <sub>1-x</sub> Sc <sub>x</sub> N thin films. <i>Materials Today Physics</i> , <b>2021</b> , 21, 100498	8	2
18	Optimization of Graphite Composite Latent Heat Storage Systems <b>2017</b> ,		1
17	Moisture Barrier, Mechanical, and Thermal Properties of PDMS-PIB Blends for Solar Photovoltaic (PV) Module Encapsulant <b>2019</b> ,		1
16	Thermophysical Properties of Ni Films for LIGA Microsystems. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 782, 1		1
15	Stable salt hydrate-based thermal energy storage materials. <i>Composites Part B: Engineering</i> , <b>2022</b> , 233, 109621	10	1
14	Simultaneous Evaluation of Heat Capacity and In-plane Thermal Conductivity of Nanocrystalline Diamond Thin Films. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 1-13	3.7	1
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12	UltrabARRIER Films for Packaging Flexible Electronics: Examining the Role of Thin-Film Technology. <i>IEEE Nanotechnology Magazine</i> , <b>2019</b> , 13, 30-36	1.7	1
11	Impact of interface materials on side permeation in indirect encapsulation of organic electronics. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 033203	2.9	1

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