

# Samuel Graham

## 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.

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	Perspective on thermal conductance across heterogeneously integrated interfaces for wide and ultrawide bandgap electronics. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 030501	3.4	2
188	Stable salt hydrate-based thermal energy storage materials. <i>Composites Part B: Engineering</i> , <b>2022</b> , 233, 109621	10	1
187	Thermally-Aware Layout Design of $\Gamma$ GaN $\Gamma$ Lateral MOSFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-7	2.9	3
186	$\Gamma$ Gallium oxide power electronics. <i>APL Materials</i> , <b>2022</b> , 10, 029201	5.7	33
185	Impact of oxygen concentration at the HfOx/Ti interface on the behavior of HfOx filamentary memristors. <i>Journal of Materials Science</i> , <b>2022</b> , 57, 9299-9311	4.3	0
184	Effect of expanded graphite on the thermal conductivity of sodium sulfate decahydrate (Na <sub>2</sub> SO <sub>4</sub> ·10H <sub>2</sub> O) phase change composites. <i>Journal of Energy Storage</i> , <b>2022</b> , 52, 104949	7.8	
183	Gate resistance thermometry: An electrical thermal characterization technique <b>2022</b> , 201-221		
182	Fundamental understanding of thermal transport across solid interfaces <b>2022</b> , 69-82		
181	Room-temperature bonded thermally conductive semiconductor interfaces <b>2022</b> , 359-377		
180	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
179	Experimental observation of localized interfacial phonon modes. <i>Nature Communications</i> , <b>2021</b> , 12, 6901	17.4	7
178	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
177	High In-Plane Thermal Conductivity of Aluminum Nitride Thin Films. <i>ACS Nano</i> , <b>2021</b> , 15, 9588-9599	16.7	11
176	Thermal resistance at a twist boundary and a semicoherent heterointerface. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	2
175	Steady-state methods for measuring in-plane thermal conductivity of thin films for heat spreading applications. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 044907	1.7	2
174	Polycrystalline diamond growth on $\Gamma$ Ga <sub>2</sub> O <sub>3</sub> for thermal management. <i>Applied Physics Express</i> , <b>2021</b> , 14, 055502	2.4	7
173	Self-Heating and Quality Factor: Thermal Challenges in Aluminum Scandium Nitride Bulk Acoustic Wave Resonators <b>2021</b> ,		3

172	Thermal Transport across Metal/EGaO Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 29083-29096	3.5	9
171	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
170	Understanding supercooling mechanism in sodium sulfate decahydrate phase-change material. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 245109	2.5	3
169	Stability of plasma-enhanced atomic layer deposited barrier films in biological solutions. <i>Engineering Reports</i> , <b>2021</b> , 3, e12303	1.2	
168	Thermal management strategies for gallium oxide vertical trench-fin MOSFETs. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 085301	2.5	10
167	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
166	Thermal Management of EGaO Current Aperture Vertical Electron Transistors. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2021</b> , 11, 1171-1176	1.7	1
165	Diamond-Incorporated Flip-Chip Integration for Thermal Management of 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
164	Thermoreflectance Imaging of (Ultra)wide Band-Gap Devices with MoS Enhancement Coatings. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 42195-42204	9.5	1
163	Thermal transport in defective and disordered materials. <i>Applied Physics Reviews</i> , <b>2021</b> , 8, 031311	17.3	13
162	Quasi-ballistic thermal conduction in 6HSiC. <i>Materials Today Physics</i> , <b>2021</b> , 20, 100462	8	2
161	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
160	Thermal science and engineering of EGa <sub>2</sub> O <sub>3</sub> materials and devices. <i>Semiconductors and Semimetals</i> , <b>2021</b> , 77-99	0.6	4
159	Skin-like low-noise elastomeric organic photodiodes.. <i>Science Advances</i> , <b>2021</b> , 7, eabj6565	14.3	4
158	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
157	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
156	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
155	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

154	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
153	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
152	Interfacial Thermal Conductance across Room-Temperature-Bonded GaN/Diamond Interfaces for GaN-on-Diamond Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 8376-8384	9.5	51
151	Experimental observation of high intrinsic thermal conductivity of AlN. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	20
150	Guidelines for Reduced-Order Thermal Modeling of Multifinger GaN HEMTs. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2020</b> , 142,	2	5
149	Thermal conductance across harmonic-matched epitaxial Al-sapphire heterointerfaces. <i>Communications Physics</i> , <b>2020</b> , 3,	5.4	21
148	Heteroepitaxial growth of EGa2O3 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
147	Thermal Conductivity of EGa2O3 Thin Films Grown by Molecular Beam Epitaxy <b>2020</b> ,		1
146	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
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	Thermal boundary conductance across epitaxial metal/sapphire interfaces. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	9
143	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
142	Experimental and computational analysis of thermal environment in the operation of HfO2 memristors. <i>AIP Advances</i> , <b>2020</b> , 10, 035127	1.5	6
141	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
140	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
139	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
138	Atomic layer deposited Al2O3 capping layer effect on environmentally assisted cracking in SiNx barrier films. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 045301	2.5	6
137	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

136	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
135	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
134	Scalable Modeling of Transient Self-Heating of 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
133	Thermal conductance across $\text{Ga}_2\text{O}_3$ -diamond van der Waals heterogeneous interfaces. <i>APL Materials</i> , <b>2019</b> , 7, 031118	5.7	63
132	Liquid-Cooled Aluminum Silicon Carbide Heat Sinks for Reliable Power Electronics Packages. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2019</b> , 141,	2	3
131	High Thermal Boundary Conductance across Bonded Heterogeneous GaN-SiC Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 33428-33434	9.5	41
130	Kinetics of environmentally assisted cracking in SiNx barrier films. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 051901	3.4	0
129	Review of stability and thermal conductivity enhancements for salt hydrates. <i>Journal of Energy Storage</i> , <b>2019</b> , 24, 100794	7.8	55
128	Structure and Interface Analysis of Diamond on an AlGaN/GaN HEMT Utilizing an in Situ SiNx Interlayer Grown by MOCVD. <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 1387-1399	4	16
127	Moisture Barrier, Mechanical, and Thermal Properties of PDMS-PIB Blends for Solar Photovoltaic (PV) Module Encapsulant <b>2019</b> ,		1
126	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
125	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
124	The Impact of Temperature on GaN/Si HEMTs Under RF Operation Using Gate Resistance Thermometry. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 330-336	2.9	3
123	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
122	Development of ALD Coatings for Harsh Environment Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 7498-7509	9.5	13
121	Thermal characterization of gallium nitride p-i-n diodes. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 073503	3.4	30
120	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
119	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

118	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
117	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
116	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
115	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
114	Influence of Polymer Substrate Damage on the Time Dependent Cracking of SiN Barrier Films. <i>Scientific Reports</i> , <b>2018</b> , 8, 4560	4.9	6
113	Thermal rectification in thin films driven by gradient grain microstructure. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 095114	2.5	7
112	Improving the Transient Thermal Characterization of GaN HEMTs <b>2018</b> ,		7
111	Design and Surface Modification of PET Substrates Using UV/Ozone Treatment for Roll-to-Roll Processed Solar Photovoltaic (PV) Module Packaging <b>2018</b> ,		4
110	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
109	Ultrawide-Bandgap Semiconductors: Research Opportunities and Challenges. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1600501	6.4	520
108	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
107	Thin Film Encapsulation <b>2018</b> , 1-51		0
106	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
105	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
104	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
103	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
102	Solution-based electrical doping of semiconducting polymer films over a limited depth. <i>Nature Materials</i> , <b>2017</b> , 16, 474-480	27	95
101	Near-isothermal-isobaric compressed gas energy storage. <i>Journal of Energy Storage</i> , <b>2017</b> , 12, 276-287	7.8	16

100	Investigation of the Heterogeneous Thermal Conductivity in Bulk CVD Diamond for Use in Electronics Thermal Management <b>2017</b> ,		2
99	Optimization of Graphite Composite Latent Heat Storage Systems <b>2017</b> ,		1
98	Thermal characterization of GaN vertical p-i-n diodes <b>2017</b> ,		2
97	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
96	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
95	Experimental considerations of CVD diamond film measurements using time domain thermoreflectance <b>2017</b> ,		4
94	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
93	Cooling of power electronics by integrating sintered Cu particle wick onto a direct-bond copper substrate <b>2017</b> ,		2
92	Rethinking phonons: The issue of disorder. <i>Npj Computational Materials</i> , <b>2017</b> , 3,	10.9	49
91	Thermal conductivity measurements on suspended diamond membranes using picosecond and femtosecond time-domain thermoreflectance <b>2017</b> ,		8
90	Characterization of the Thermal Conductivity of CVD Diamond for GaN-on-Diamond Devices <b>2016</b> ,		14
89	Thermal analysis of near-isothermal compressed gas energy storage system. <i>Applied Energy</i> , <b>2016</b> , 179, 948-960	10.7	67
88	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
87	. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 2742-2748	2.9	5
86	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
85	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
84	Hybridization-Induced Carrier Localization at the C60 /ZnO Interface. <i>Advanced Materials</i> , <b>2016</b> , 28, 3960-5	2.5	11
83	The thermal effects of substrate removal on GaN HEMTs using Raman Thermometry <b>2016</b> ,		8

82	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
81	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
80	Thermal charging study of compressed expanded natural graphite/phase change material composites. <i>Carbon</i> , <b>2016</b> , 109, 495-504	10.4	29
79	Thermal raman and IR measurement of heterogeneous integration stacks <b>2016</b> ,		2
78	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
77	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
76	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
75	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
74	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
73	The Impact of Nongray Thermal Transport on the Temperature of AlGaN/GaN HFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 2437-2444	2.9	6
72	Transient stress characterization of AlGaN/GaN HEMTs due to electrical and thermal effects. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 2634-2639	1.2	28
71	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
70	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
69	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
68	Thermal simulation of heterogeneous GaN/ InP/silicon 3DIC stacks <b>2015</b> ,		2
67	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
66	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
65	The Impact of Noncontinuum Thermal Transport on the Temperature of AlGaN/GaN HFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 2041-2048	2.9	14



64	Reduced Graphene Oxide Thin Films as Ultrabarriers for Organic Electronics. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1300986	21.8	49
63	Tailoring Electron-Transfer Barriers for Zinc Oxide/C60 Fullerene Interfaces. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 7381-7389	15.6	47
62	Analysis and characterization of thermal transport in GaN HEMTs on Diamond substrates <b>2014</b> ,		21
61	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
60	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
59	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
58	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
57	Highly Uniform Trilayer Molybdenum Disulfide for Wafer-Scale Device Fabrication. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 6389-6400	15.6	89
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	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
54	Electrical and structural dependence of operating temperature of AlGaIn/GaN HEMTs. <i>Microelectronics Reliability</i> , <b>2013</b> , 53, 872-877	1.2	46
53	A Comparative Study of Thermal Metrology Techniques for Ultraviolet Light Emitting Diodes. <i>Journal of Heat Transfer</i> , <b>2013</b> , 135,	1.8	2
52	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
51	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
50	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
49	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
48	Buckling-driven delamination of carbon nanotube forests. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 223103	3.4	20
47	The Impact of Bias Conditions on Self-Heating in AlGaIn/GaN HEMTs. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 159-162	2.9	55

46	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
45	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
44	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
43	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
42	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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22	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
21	Specific contact resistance at metal/carbon nanotube interfaces. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 012109	3.4	53
20	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
19	Micro-Raman thermometry in the presence of complex stresses in GaN devices. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 124501	2.5	50
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14	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
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5	Multidimensional Flash Diffusivity Measurements of Orthotropic Materials. <i>International Journal of Thermophysics</i> , <b>1999</b> , 20, 691-707	2.1	9
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