

# Samuel Graham

## List of Publications by Year in descending order

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197  
papers

8,781  
citations

53660

45  
h-index

49773

87  
g-index

200  
all docs

200  
docs citations

200  
times ranked

10913  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Universal Method to Produce Low-Work Function Electrodes for Organic Electronics. <i>Science</i> , 2012, 336, 327-332.	6.0	1,878
2	Ultrawide-Bandgap Semiconductors: Research Opportunities and Challenges. <i>Advanced Electronic Materials</i> , 2018, 4, 1600501.	2.6	839
3	Highly Tunable Molecular Sieving and Adsorption Properties of Mixed-Linker Zeolitic Imidazolate Frameworks. <i>Journal of the American Chemical Society</i> , 2015, 137, 4191-4197.	6.6	192
4	Electrical, Thermal, and Mechanical Characterization of Silicon Microcantilever Heaters. <i>Journal of Microelectromechanical Systems</i> , 2006, 15, 1644-1655.	1.7	187
5	$\hat{I}^2$ -Gallium oxide power electronics. <i>APL Materials</i> , 2022, 10, .	2.2	184
6	Stability of Doped Transparent Carbon Nanotube Electrodes. <i>Advanced Functional Materials</i> , 2008, 18, 2548-2554.	7.8	183
7	Solution-based electrical doping of semiconducting polymer films over a limited depth. <i>Nature Materials</i> , 2017, 16, 474-480.	13.3	121
8	Influence of Interfacial Mixing on Thermal Boundary Conductance Across a Chromium/Silicon Interface. <i>Journal of Heat Transfer</i> , 2008, 130, .	1.2	116
9	Interfacial Thermal Conductance across Room-Temperature-Bonded GaN/Diamond Interfaces for GaN-on-Diamond Devices. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 8376-8384.	4.0	109
10	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. <i>Energy and Environmental Science</i> , 2015, 8, 592-601.	15.6	103
11	Highly Uniform Trilayer Molybdenum Disulfide for Wafer-Scale Device Fabrication. <i>Advanced Functional Materials</i> , 2014, 24, 6389-6400.	7.8	99
12	Low Thermal Boundary Resistance Interfaces for GaN-on-Diamond Devices. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 24302-24309.	4.0	98
13	Thermal analysis of near-isothermal compressed gas energy storage system. <i>Applied Energy</i> , 2016, 179, 948-960.	5.1	97
14	Review of stability and thermal conductivity enhancements for salt hydrates. <i>Journal of Energy Storage</i> , 2019, 24, 100794.	3.9	91
15	Thermal conductance across $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> -diamond van der Waals heterogeneous interfaces. <i>APL Materials</i> , 2019, 7, .	2.2	87
16	Analysis of the residual stress distribution in AlGaIn/GaN high electron mobility transistors. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	84
17	A hybrid encapsulation method for organic electronics. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	83
18	High Thermal Boundary Conductance across Bonded Heterogeneous GaN-SiC Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 33428-33434.	4.0	82

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19	Thermometry of AlGaIn/GaN HEMTs Using Multispectral Raman Features. IEEE Transactions on Electron Devices, 2013, 60, 1898-1904.	1.6	74
20	Direct Visualization of Thermal Conductivity Suppression Due to Enhanced Phonon Scattering Near Individual Grain Boundaries. Nano Letters, 2018, 18, 3466-3472.	4.5	74
21	Thermal Boundary Resistance in GaN Films Measured by Time Domain Thermoreflectance with Robust Monte Carlo Uncertainty Estimation. Nanoscale and Microscale Thermophysical Engineering, 2016, 20, 22-32.	1.4	69
22	Integration of polycrystalline Ga <sub>2</sub> O <sub>3</sub> on diamond for thermal management. Applied Physics Letters, 2020, 116, .	1.5	68
23	Production of heavily n- and p-doped CVD graphene with solution-processed redox-active metal-organic species. Materials Horizons, 2014, 1, 111-115.	6.4	67
24	Micro-Raman thermometry in the presence of complex stresses in GaN devices. Journal of Applied Physics, 2008, 103, .	1.1	66
25	Rethinking phonons: The issue of disorder. Npj Computational Materials, 2017, 3, .	3.5	66
26	Thermal Transport across Ion-Cut Monocrystalline $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ Thin Films and Bonded $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ -SiC Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 44943-44951.	4.0	66
27	The Impact of Bias Conditions on Self-Heating in AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2013, 60, 159-162.	1.6	64
28	Thermal charging performance of enhanced phase change material composites for thermal battery design. International Journal of Thermal Sciences, 2018, 127, 19-28.	2.6	63
29	Specific contact resistance at metal/carbon nanotube interfaces. Applied Physics Letters, 2009, 94, .	1.5	60
30	Simultaneous determination of the lattice thermal conductivity and grain/grain thermal resistance in polycrystalline diamond. Acta Materialia, 2017, 139, 215-225.	3.8	60
31	Experimental observation of high intrinsic thermal conductivity of AlN. Physical Review Materials, 2020, 4, .	0.9	60
32	Evaluation of Transparent Carbon Nanotube Networks of Homogeneous Electronic Type. ACS Nano, 2010, 4, 1377-1384.	7.3	59
33	Reduced Graphene Oxide Thin Films as Ultrabarrriers for Organic Electronics. Advanced Energy Materials, 2014, 4, 1300986.	10.2	59
34	Thermal conduction from microcantilever heaters in partial vacuum. Journal of Applied Physics, 2007, 101, 014906.	1.1	58
35	The impact of mechanical stress on the degradation of AlGaIn/GaN high electron mobility transistors. Journal of Applied Physics, 2013, 114, .	1.1	58
36	Field-effect transistors based on wafer-scale, highly uniform few-layer p-type WSe <sub>2</sub> . Nanoscale, 2016, 8, 2268-2276.	2.8	58

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37	High In-Plane Thermal Conductivity of Aluminum Nitride Thin Films. ACS Nano, 2021, 15, 9588-9599.	7.3	58
38	Creating Graphene p-n Junctions Using Self-Assembled Monolayers. ACS Applied Materials & Interfaces, 2012, 4, 4781-4786.	4.0	56
39	Tailoring Electron Transfer Barriers for Zinc Oxide/C <sub>60</sub> Fullerene Interfaces. Advanced Functional Materials, 2014, 24, 7381-7389.	7.8	54
40	Experimental and analytical evaluation of a hydro-pneumatic compressed-air Ground-Level Integrated Diverse Energy Storage (GLIDES) system. Applied Energy, 2018, 221, 75-85.	5.1	54
41	Thermal Boundary Conductance Across Heteroepitaxial ZnO/GaN Interfaces: Assessment of the Phonon Gas Model. Nano Letters, 2018, 18, 7469-7477.	4.5	53
42	Electrical and structural dependence of operating temperature of AlGaIn/GaN HEMTs. Microelectronics Reliability, 2013, 53, 872-877.	0.9	52
43	Probing Growth-Induced Anisotropic Thermal Transport in High-Quality CVD Diamond Membranes by Multifrequency and Multiple-Spot-Size Time-Domain Thermoreflectance. ACS Applied Materials & Interfaces, 2018, 10, 4808-4815.	4.0	52
44	Tunable Thermal Energy Transport across Diamond Membranes and Diamond-Si Interfaces by Nanoscale Graphoepitaxy. ACS Applied Materials & Interfaces, 2019, 11, 18517-18527.	4.0	49
45	A Numerical Study on Comparing the Active and Passive Cooling of AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 4056-4061.	1.6	48
46	Experimental observation of localized interfacial phonon modes. Nature Communications, 2021, 12, 6901.	5.8	46
47	Development of highly flexible and ultra-low permeation rate thin-film barrier structure for organic electronics. Thin Solid Films, 2013, 547, 57-62.	0.8	45
48	Systematic Reliability Study of Top-Gate p- and n-Channel Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2014, 6, 3378-3386.	4.0	45
49	Thermal transport in defective and disordered materials. Applied Physics Reviews, 2021, 8, .	5.5	45
50	Multiscale Lattice Boltzmann Modeling of Phonon Transport in Crystalline Semiconductor Materials. Numerical Heat Transfer, Part B: Fundamentals, 2010, 57, 89-109.	0.6	43
51	Impact of post-growth thermal annealing and environmental exposure on the unintentional doping of CVD graphene films. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, .	0.6	43
52	Engineering the mechanical properties of ultrabARRIER films grown by atomic layer deposition for the encapsulation of printed electronics. Journal of Applied Physics, 2015, 118, .	1.1	42
53	Thermal characterization of gallium nitride p-i-n diodes. Applied Physics Letters, 2018, 112, .	1.5	42
54	Record-Low Thermal Boundary Resistance between Diamond and GaN-on-SiC for Enabling Radiofrequency Device Cooling. ACS Applied Materials & Interfaces, 2021, 13, 60553-60560.	4.0	42

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55	Invited Review Article: Error and uncertainty in Raman thermal conductivity measurements. Review of Scientific Instruments, 2015, 86, 041101.	0.6	41
56	Thermal conductance across harmonic-matched epitaxial Al-sapphire heterointerfaces. Communications Physics, 2020, 3, .	2.0	41
57	Modeling and analysis for thermal management in gallium oxide field-effect transistors. Journal of Applied Physics, 2020, 127, .	1.1	41
58	Improving the stability of atomic layer deposited alumina films in aqueous environments with metal oxide capping layers. Journal Physics D: Applied Physics, 2013, 46, 084014.	1.3	40
59	Thermal charging study of compressed expanded natural graphite/phase change material composites. Carbon, 2016, 109, 495-504.	5.4	40
60	Characterization of AlGaIn/GaN HEMTs Using Gate Resistance Thermometry. IEEE Transactions on Electron Devices, 2017, 64, 78-83.	1.6	39
61	Pool boiling characteristics and critical heat flux mechanisms of microporous surfaces and enhancement through structural modification. Applied Physics Letters, 2017, 111, .	1.5	38
62	Applications and Impacts of Nanoscale Thermal Transport in Electronics Packaging. Journal of Electronic Packaging, Transactions of the ASME, 2021, 143, .	1.2	38
63	Transient Thermal Characterization of AlGaIn/GaN HEMTs Under Pulsed Biasing. IEEE Transactions on Electron Devices, 2018, 65, 1753-1758.	1.6	37
64	Near-isothermal-isobaric compressed gas energy storage. Journal of Energy Storage, 2017, 12, 276-287.	3.9	35
65	Thermal Metrology of Silicon Microstructures Using Raman Spectroscopy. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 200-208.	1.4	34
66	Facile Formation of Graphene P-n Junctions Using Self-Assembled Monolayers. Journal of Physical Chemistry C, 2012, 116, 19095-19103.	1.5	34
67	Structure and Interface Analysis of Diamond on an AlGaIn/GaN HEMT Utilizing an in Situ SiN Interlayer Grown by MOCVD. ACS Applied Electronic Materials, 2019, 1, 1387-1399.	2.0	34
68	Heat Dissipation in High-Power GaN Electronics on Thermally Resistive Substrates. IEEE Transactions on Electron Devices, 2005, 52, 1683-1688.	1.6	33
69	Heteroepitaxial growth of $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> films on SiC via molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	33
70	Transient stress characterization of AlGaIn/GaN HEMTs due to electrical and thermal effects. Microelectronics Reliability, 2015, 55, 2634-2639.	0.9	32
71	Assessment of stress contributions in GaN high electron mobility transistors of differing substrates using Raman spectroscopy. Journal of Applied Physics, 2009, 106, .	1.1	30
72	Skin-like low-noise elastomeric organic photodiodes. Science Advances, 2021, 7, eabj6565.	4.7	30

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73	Polycrystalline diamond growth on $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> for thermal management. Applied Physics Express, 2021, 14, 055502.	1.1	29
74	A perspective on the electro-thermal co-design of ultra-wide bandgap lateral devices. Applied Physics Letters, 2021, 119, .	1.5	28
75	Raman Thermometry of Polysilicon Microelectro-mechanical Systems in the Presence of an Evolving Stress. Journal of Heat Transfer, 2007, 129, 329-334.	1.2	27
76	GaN HEMT thermal behavior and implications for reliability testing and analysis. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2026-2029.	0.8	27
77	A Review of Carbon Nanotube Ensembles as Flexible Electronics and Advanced Packaging Materials. Journal of Electronic Packaging, Transactions of the ASME, 2011, 133, .	1.2	27
78	Memory and Photovoltaic Elements in Organic Field Effect Transistors with Donor/Acceptor Planar-Hetero Junction Interfaces. Journal of Physical Chemistry C, 2012, 116, 9390-9397.	1.5	27
79	Considering the Role of Ion Transport in Diffusion-Dominated Thermal Conductivity. Advanced Energy Materials, 2022, 12, .	10.2	27
80	Analysis and characterization of thermal transport in GaN HEMTs on Diamond substrates. , 2014, , .		26
81	Thermal boundary conductance across epitaxial metal/sapphire interfaces. Physical Review B, 2020, 102, .	1.1	26
82	Photochemical Doping and Tuning of the Work Function and Dirac Point in Graphene Using Photoacid and Photobase Generators. Advanced Functional Materials, 2014, 24, 5147-5156.	7.8	25
83	Environmentally Assisted Cracking in Silicon Nitride Barrier Films on Poly(ethylene terephthalate) Substrates. ACS Applied Materials & Interfaces, 2016, 8, 27169-27178.	4.0	25
84	Solution-Processed Doping of Trilayer WSe <sub>2</sub> with Redox-Active Molecules. Chemistry of Materials, 2017, 29, 7296-7304.	3.2	25
85	Substrate dependent resistive switching in amorphous-HfO <sub>x</sub> memristors: an experimental and computational investigation. Journal of Materials Chemistry C, 2020, 8, 5092-5101.	2.7	25
86	Ultraviolet micro-Raman spectroscopy stress mapping of a 75-mm GaN-on-diamond wafer. Applied Physics Letters, 2016, 108, .	1.5	24
87	Pool boiling enhancement using vapor channels in microporous surfaces. International Journal of Heat and Mass Transfer, 2019, 143, 118532.	2.5	24
88	Organic Field-Effect Transistors with a Bilayer Gate Dielectric Comprising an Oxide Nanolaminate Grown by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2016, 8, 29872-29876.	4.0	23
89	Thermal Performance of GaN/Si HEMTs Using Near-Bandgap Thermoreflectance Imaging. IEEE Transactions on Electron Devices, 2020, 67, 822-827.	1.6	23
90	MEMS-Based Nanomechanics: Influence of MEMS Design on Test Temperature. Experimental Mechanics, 2012, 52, 607-617.	1.1	22

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91	Buckling-driven delamination of carbon nanotube forests. Applied Physics Letters, 2013, 102, .	1.5	22
92	Compressive response of vertically aligned carbon nanotube films gleaned from in situ flat-punch indentations. Journal of Materials Research, 2013, 28, 984-997.	1.2	22
93	Signature Vibrational Bands for Defects in CVD Single-Layer Graphene by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 964-969.	2.1	22
94	Significantly reduced thermal conductivity in $(\text{Al}_{0.1}\text{Ga}_{0.9})_2\text{O}_3/\text{Ga}_2\text{O}_3$ superlattices. Applied Physics Letters, 2019, 115, .	1.5	22
95	Development of ALD Coatings for Harsh Environment Applications. ACS Applied Materials & Interfaces, 2019, 11, 7498-7509.	4.0	22
96	Bulk-like Intrinsic Phonon Thermal Conductivity of Micrometer-Thick AlN Films. ACS Applied Materials & Interfaces, 2020, 12, 29443-29450.	4.0	22
97	Diamond-Incorporated Flip-Chip Integration for Thermal Management of GaN and Ultra-Wide Bandgap RF Power Amplifiers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1177-1186.	1.4	22
98	The Impact of Noncontinuum Thermal Transport on the Temperature of AlGaIn/GaN HFETs. IEEE Transactions on Electron Devices, 2014, 61, 2041-2048.	1.6	21
99	A multiscale thermal modeling approach for ballistic and diffusive heat transport in two dimensional domains. International Journal of Thermal Sciences, 2014, 76, 235-244.	2.6	21
100	Thermal Transport across Metal/ $\text{Ga}_2\text{O}_3$ Interfaces. ACS Applied Materials & Interfaces, 2021, 13, 29083-29091.	4.0	21
101	Characterization of the Thermal Conductivity of CVD Diamond for GaN-on-Diamond Devices. , 2016, , .		20
102	The Effects of AlN and Copper Back Side Deposition on the Performance of Etched Back GaN/Si HEMTs. IEEE Electron Device Letters, 2019, 40, 1060-1063.	2.2	20
103	Thermal management strategies for gallium oxide vertical trench-fin MOSFETs. Journal of Applied Physics, 2021, 129, .	1.1	20
104	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.	4.0	19
105	Stable salt hydrate-based thermal energy storage materials. Composites Part B: Engineering, 2022, 233, 109621.	5.9	19
106	Thermal Properties and Lattice Dynamics of Polycrystalline MFI Zeolite Films. Nanoscale and Microscale Thermophysical Engineering, 2006, 10, 321-331.	1.4	18
107	Diffusion-driven ultralow thermal conductivity in amorphous $\text{N}_2\text{O}$ thin films. Physical Review Materials, 2019, 3, .	0.9	18
108	The Mechanical Behavior of ALD-Polymer Hybrid Films Under Tensile Strain. Advanced Engineering Materials, 2015, 17, 1057-1067.	1.6	16

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109	Disrupted Attosecond Charge Carrier Delocalization at a Hybrid Organic/Inorganic Semiconductor Interface. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1935-1941.	2.1	16
110	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> , 2018, 8, 1914-1922.	1.4	16
111	Transient Liquid Phase Bonding of AlN to AlSiC for Durable Power Electronic Packages. <i>Advanced Engineering Materials</i> , 2018, 20, 1800039.	1.6	16
112	Optimizing Crack Onset Strain for Silicon Nitride/Fluoropolymer Nanolaminate Barrier Films. <i>ACS Applied Nano Materials</i> , 2019, 2, 2525-2532.	2.4	16
113	Towards a better understanding of the forming and resistive switching behavior of Ti-doped HfO <sub>2</sub> RRAM. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5896-5904.	2.7	16
114	Investigation of the stability of paraffin-exfoliated graphite nanoplatelet composites for latent heat thermal storage systems. <i>Journal of Materials Chemistry</i> , 2012, 22, 24469.	6.7	15
115	Understanding supercooling mechanism in sodium sulfate decahydrate phase-change material. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	15
116	Effects of composition and phonon scattering mechanisms on thermal transport in MFI zeolite films. <i>Journal of Applied Physics</i> , 2007, 102, 053523.	1.1	14
117	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> , 2013, 2, M17-M21.	0.9	14
118	The Impact of Nongray Thermal Transport on the Temperature of AlGaIn/GaN HFETs. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 2437-2444.	1.6	14
119	Guidelines for Reduced-Order Thermal Modeling of Multifinger GaN HEMTs. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2020, 142, .	1.2	14
120	Perspective on thermal conductance across heterogeneously integrated interfaces for wide and ultrawide bandgap electronics. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	14
121	Hybridization-induced Carrier Localization at the C <sub>60</sub> /ZnO Interface. <i>Advanced Materials</i> , 2016, 28, 3960-3965.	11.1	13
122	Experimental investigation of defect-assisted and intrinsic water vapor permeation through ultrabARRIER films. <i>Review of Scientific Instruments</i> , 2016, 87, 033902.	0.6	13
123	Impact of the thermal environment on the analog temporal response of HfO <sub>x</sub> -based neuromorphic devices. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	13
124	Experimental and computational analysis of thermal environment in the operation of HfO <sub>2</sub> memristors. <i>AIP Advances</i> , 2020, 10, .	0.6	13
125	Near room-temperature direct encapsulation of organic photovoltaics by plasma-based deposition techniques. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 024003.	1.3	12
126	Note: A single specimen channel crack growth technique applied to brittle thin films on polymer substrates. <i>Review of Scientific Instruments</i> , 2017, 88, 036102.	0.6	12



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127	Investigation of ultra-thin titania films as hole-blocking contacts for organic photovoltaics. Journal of Materials Chemistry A, 2015, 3, 17332-17343.	5.2	11
128	Atomic layer deposited Al <sub>2</sub> O <sub>3</sub> capping layer effect on environmentally assisted cracking in SiN <sub>x</sub> barrier films. Journal of Applied Physics, 2019, 125, .	1.1	11
129	Integration of Jet Impingement Cooling With Direct Bonded Copper Substrates for Power Electronics Thermal Management. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 226-234.	1.4	11
130	Thermally-Aware Layout Design of InGaAs Lateral MOSFETs. IEEE Transactions on Electron Devices, 2022, 69, 1251-1257.	1.6	11
131	Application of the Taylor Polycrystal Plasticity Model to Complex Deformation Experiments. Journal of Engineering Materials and Technology, Transactions of the ASME, 1998, 120, 197-205.	0.8	10
132	Multidimensional Flash Diffusivity Measurements of Orthotropic Materials. International Journal of Thermophysics, 1999, 20, 691-707.	1.0	10
133	Measuring the Thermal Resistance in Light Emitting Diodes Using a Transient Thermal Analysis Technique. IEEE Transactions on Electron Devices, 2013, 60, 2548-2555.	1.6	10
134	Thermal conductivity measurements on suspended diamond membranes using picosecond and femtosecond time-domain thermoreflectance. , 2017, , .		10
135	Influence of Polymer Substrate Damage on the Time Dependent Cracking of SiN <sub>x</sub> Barrier Films. Scientific Reports, 2018, 8, 4560.	1.6	10
136	Monitoring the Joule heating profile of GaN/SiC high electron mobility transistors via cross-sectional thermal imaging. Journal of Applied Physics, 2020, 128, 075705.	1.1	10
137	Diamond Seed Size and the Impact on Chemical Vapor Deposition Diamond Thin Film Properties. ECS Journal of Solid State Science and Technology, 2020, 9, 053002.	0.9	10
138	Thermal Management of InGaAs Current Aperture Vertical Electron Transistors. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1171-1176.	1.4	10
139	High thermal conductivity and thermal boundary conductance of homoepitaxially grown gallium nitride (GaN) thin films. Physical Review Materials, 2021, 5, .	0.9	10
140	Annealing Effects on Mechanical and Transport Properties of Ni and Ni-Alloy Electrodeposits. Journal of Microelectromechanical Systems, 2006, 15, 1051-1059.	1.7	9
141	Optical studies of MOCVD-grown GaN-based ferromagnetic semiconductor epilayers and devices. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2237-2240.	0.8	9
142	Temperature- and Doping-Dependent Anisotropic Stationary Electron Velocity in Wurtzite GaN. IEEE Electron Device Letters, 2011, 32, 1522-1524.	2.2	9
143	The thermal effects of substrate removal on GaN HEMTs using Raman Thermometry. , 2016, , .		9
144	Liquid-Cooled Aluminum Silicon Carbide Heat Sinks for Reliable Power Electronics Packages. Journal of Electronic Packaging, Transactions of the ASME, 2019, 141, .	1.2	9

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145	Thermal rectification in thin films driven by gradient grain microstructure. Journal of Applied Physics, 2018, 123, .	1.1	8
146	Improving the Transient Thermal Characterization of GaN HEMTs. , 2018, , .		8
147	Scalable Modeling of Transient Self-Heating of GaN High-Electron-Mobility Transistors Based on Experimental Measurements. IEEE Transactions on Electron Devices, 2019, 66, 2139-2145.	1.6	8
148	Self-Heating and Quality Factor: Thermal Challenges in Aluminum Scandium Nitride Bulk Acoustic Wave Resonators. , 2021, , .		8
149	Impact of oxygen concentration at the HfOx/Ti interface on the behavior of HfOx filamentary memristors. Journal of Materials Science, 2022, 57, 9299-9311.	1.7	8
150	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. Journal of Energy Storage, 2022, 52, 104949.	3.9	8
151	Effects of nonframework metal cations and phonon scattering mechanisms on the thermal transport properties of polycrystalline zeolite LTA films. Journal of Applied Physics, 2010, 107, 063518.	1.1	7
152	The Thermal Response of Gallium Nitride HFET Devices Grown on Silicon and SiC Substrates. ECS Transactions, 2011, 41, 13-30.	0.3	7
153	Formation of Air Stable Graphene p-n Junctions Using an Amine-Containing Polymer Coating. Advanced Materials Interfaces, 2014, 1, 1400378.	1.9	7
154	Thermoreflectance Imaging of (Ultra)wide Band-Gap Devices with MoS <sub>2</sub> Enhancement Coatings. ACS Applied Materials & Interfaces, 2021, 13, 42195-42204.	4.0	7
155	Quasi-ballistic thermal conduction in 6H-SiC. Materials Today Physics, 2021, 20, 100462.	2.9	7
156	Phonon heat conduction in Al <sub>1-x</sub> Sc <sub>x</sub> N thin films. Materials Today Physics, 2021, 21, 100498.	2.9	7
157	Comparison of the cohesive and delamination fatigue properties of atomic-layer-deposited alumina and titania ultrathin protective coatings deposited at 200 Å°C. Science and Technology of Advanced Materials, 2014, 15, 015003.	2.8	6
158	Nanometer-Scale Strain Measurements in AlGaIn/GaN High-Electron Mobility Transistors During Pulsed Operation. IEEE Transactions on Electron Devices, 2016, 63, 2742-2748.	1.6	6
159	Steady-state methods for measuring in-plane thermal conductivity of thin films for heat spreading applications. Review of Scientific Instruments, 2021, 92, 044907.	0.6	6
160	A Comparative Study of Thermal Metrology Techniques for Ultraviolet Light Emitting Diodes. Journal of Heat Transfer, 2013, 135, .	1.2	5
161	Pseudomorphic growth of InAs on misoriented GaAs for extending quantum cascade laser wavelength. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 06F109.	0.9	5
162	29.3: <i>Invited Paper</i> : The Mechanical Reliability of Flexible ALD Barrier Films. Digest of Technical Papers SID International Symposium, 2013, 44, 361-364.	0.1	5

#	ARTICLE	IF	CITATIONS
163	Thermal simulation of heterogeneous GaN/ InP/silicon 3DIC stacks. , 2015, , .		5
164	Design and Surface Modification of PET Substrates Using UV/Ozone Treatment for Roll-to-Roll Processed Solar Photovoltaic (PV) Module Packaging. , 2018, , .		5
165	The Impact of Temperature on GaN/Si HEMTs Under RF Operation Using Gate Resistance Thermometry. IEEE Transactions on Electron Devices, 2019, 66, 330-336.	1.6	5
166	Thermal science and engineering of $\hat{I}^2$ -Ga <sub>2</sub> O <sub>3</sub> materials and devices. Semiconductors and Semimetals, 2021, , 77-99.	0.4	5
167	Simultaneous Evaluation of Heat Capacity and In-plane Thermal Conductivity of Nanocrystalline Diamond Thin Films. Nanoscale and Microscale Thermophysical Engineering, 2021, 25, 166-178.	1.4	5
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