

Samuel Graham

List of Publications by Year in descending order

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197
papers

8,781
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53794
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200
all docs

200
docs citations

200
times ranked

10913
citing authors

#	ARTICLE	IF	CITATIONS
1	Perspective on thermal conductance across heterogeneously integrated interfaces for wide and ultrawide bandgap electronics. Applied Physics Letters, 2022, 120, .	3.3	14
2	Stable salt hydrate-based thermal energy storage materials. Composites Part B: Engineering, 2022, 233, 109621.	12.0	19
3	Thermally-Aware Layout Design of In^{2+} -Ga O_x Lateral MOSFETs. IEEE Transactions on Electron Devices, 2022, 69, 1251-1257.	3.0	11
4	In^{2+} -Gallium oxide power electronics. APL Materials, 2022, 10, .	5.1	184
5	Towards a better understanding of the forming and resistive switching behavior of Ti-doped HfO_x RRAM. Journal of Materials Chemistry C, 2022, 10, 5896-5904.	5.5	16
6	Considering the Role of Ion Transport in Diffusion-Dominated Thermal Conductivity. Advanced Energy Materials, 2022, 12, .	19.5	27
7	Impact of oxygen concentration at the HfO_x/Ti interface on the behavior of HfO_x filamentary memristors. Journal of Materials Science, 2022, 57, 9299-9311.	3.7	8
8	Effect of expanded graphite on the thermal conductivity of sodium sulfate decahydrate ($\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$) phase change composites. Journal of Energy Storage, 2022, 52, 104949.	8.1	8
9	Gate resistance thermometry: An electrical thermal characterization technique. , 2022, , 201-221.		0
10	Fundamental understanding of thermal transport across solid interfaces. , 2022, , 69-82.		1
11	Room-temperature bonded thermally conductive semiconductor interfaces. , 2022, , 359-377.		0
12	Stability of plasma-enhanced atomic layer deposited barrier films in biological solutions. Engineering Reports, 2021, 3, e12303.	1.7	1
13	Thermal management strategies for gallium oxide vertical trench-fin MOSFETs. Journal of Applied Physics, 2021, 129, .	2.5	20
14	Applications and Impacts of Nanoscale Thermal Transport in Electronics Packaging. Journal of Electronic Packaging, Transactions of the ASME, 2021, 143, .	1.8	38
15	High In-Plane Thermal Conductivity of Aluminum Nitride Thin Films. ACS Nano, 2021, 15, 9588-9599.	14.6	58
16	Steady-state methods for measuring in-plane thermal conductivity of thin films for heat spreading applications. Review of Scientific Instruments, 2021, 92, 044907.	1.3	6
17	Polycrystalline diamond growth on $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ for thermal management. Applied Physics Express, 2021, 14, 055502.	2.4	29
18	Integrating boron arsenide into power devices. Nature Electronics, 2021, 4, 380-381.	26.0	3

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19	Self-Heating and Quality Factor: Thermal Challenges in Aluminum Scandium Nitride Bulk Acoustic Wave Resonators. , 2021, , .		8
20	Thermal Transport across Metal/ Ga_2O_3 Interfaces. ACS Applied Materials & Interfaces, 2021, 13, 29083-29091.	8.0	21
21	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.	8.0	19
22	Dielectric Fluids for the Direct Forced Convection Cooling of Power Electronics. , 2021, , .		2
23	Understanding supercooling mechanism in sodium sulfate decahydrate phase-change material. Journal of Applied Physics, 2021, 129, .	2.5	15
24	Thermal Management of InGaAs Current Aperture Vertical Electron Transistors. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1171-1176.	2.5	10
25	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.	2.5	22
26	Thermoreflectance Imaging of (Ultra)wide Band-Gap Devices with MoS_2 Enhancement Coatings. ACS Applied Materials & Interfaces, 2021, 13, 42195-42204.	8.0	7
27	Thermal transport in defective and disordered materials. Applied Physics Reviews, 2021, 8, .	11.3	45
28	Quasi-ballistic thermal conduction in 6H-SiC . Materials Today Physics, 2021, 20, 100462.	6.0	7
29	Phonon heat conduction in $\text{Al}_{1-x}\text{Sc}_x\text{N}$ thin films. Materials Today Physics, 2021, 21, 100498.	6.0	7
30	Thermal science and engineering of $\text{In}_2\text{Ga}_2\text{O}_3$ materials and devices. Semiconductors and Semimetals, 2021, , 77-99.	0.7	5
31	High thermal conductivity and thermal boundary conductance of homoepitaxially grown gallium nitride (GaN) thin films. Physical Review Materials, 2021, 5, .	2.4	10
32	A perspective on the electro-thermal co-design of ultra-wide bandgap lateral devices. Applied Physics Letters, 2021, 119, .	3.3	28
33	Simultaneous Evaluation of Heat Capacity and In-plane Thermal Conductivity of Nanocrystalline Diamond Thin Films. Nanoscale and Microscale Thermophysical Engineering, 2021, 25, 166-178.	2.6	5
34	Experimental observation of localized interfacial phonon modes. Nature Communications, 2021, 12, 6901.	12.8	46
35	Record-Low Thermal Boundary Resistance between Diamond and GaN-on-SiC for Enabling Radiofrequency Device Cooling. ACS Applied Materials & Interfaces, 2021, 13, 60553-60560.	8.0	42
36	Creating Low Thermal Resistance Interfaces in Wide Bandgap Semiconductors Through Bonding. , 2021, , .		2

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37	Skin-like low-noise elastomeric organic photodiodes. Science Advances, 2021, 7, eabj6565.	10.3	30
38	Thermal conductance across harmonic-matched epitaxial Al-sapphire heterointerfaces. Communications Physics, 2020, 3, .	5.3	41
39	Heteroepitaxial growth of $\text{In}^{2-}\text{Ga}_2\text{O}_3$ films on SiC via molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	33
40	Thermal Conductivity of $\text{In}^{2-}\text{Ga}_2\text{O}_3$ Thin Films Grown by Molecular Beam Epitaxy. , 2020, , .		4
41	Mechanical Deformation Study of Flexible Leadset Components for Electromechanical Reliability of Wearable Electrocardiogram Sensors. , 2020, , .		1
42	Monitoring the Joule heating profile of GaN/SiC high electron mobility transistors via cross-sectional thermal imaging. Journal of Applied Physics, 2020, 128, 075705.	2.5	10
43	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.	8.0	66
44	Thermal boundary conductance across epitaxial metal/sapphire interfaces. Physical Review B, 2020, 102, .	3.2	26
45	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.	1.8	10
46	Bulk-like Intrinsic Phonon Thermal Conductivity of Micrometer-Thick AlN Films. ACS Applied Materials & Interfaces, 2020, 12, 29443-29450.	8.0	22
47	Substrate dependent resistive switching in amorphous- HfO_x memristors: an experimental and computational investigation. Journal of Materials Chemistry C, 2020, 8, 5092-5101.	5.5	25
48	Integration of polycrystalline Ga_2O_3 on diamond for thermal management. Applied Physics Letters, 2020, 116, .	3.3	68
49	Impact of the thermal environment on the analog temporal response of HfO_x -based neuromorphic devices. Applied Physics Letters, 2020, 116, .	3.3	13
50	Thermal Performance of GaN/Si HEMTs Using Near-Bandgap Thermoreflectance Imaging. IEEE Transactions on Electron Devices, 2020, 67, 822-827.	3.0	23
51	Interfacial Thermal Conductance across Room-Temperature-Bonded GaN/Diamond Interfaces for GaN-on-Diamond Devices. ACS Applied Materials & Interfaces, 2020, 12, 8376-8384.	8.0	109
52	Modeling and analysis for thermal management in gallium oxide field-effect transistors. Journal of Applied Physics, 2020, 127, .	2.5	41
53	Experimental and computational analysis of thermal environment in the operation of HfO_2 memristors. AIP Advances, 2020, 10, .	1.3	13
54	Impact of interface materials on side permeation in indirect encapsulation of organic electronics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 033203.	2.1	2

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55	Experimental observation of high intrinsic thermal conductivity of AlN. Physical Review Materials, 2020, 4, .	2.4	60
56	Guidelines for Reduced-Order Thermal Modeling of Multifinger GaN HEMTs. Journal of Electronic Packaging, Transactions of the ASME, 2020, 142, .	1.8	14
57	High Thermal Boundary Conductance across Bonded Heterogeneous GaN–SiC Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 33428-33434.	8.0	82
58	Kinetics of environmentally assisted cracking in SiNx barrier films. Applied Physics Letters, 2019, 115, 051901.	3.3	4
59	Review of stability and thermal conductivity enhancements for salt hydrates. Journal of Energy Storage, 2019, 24, 100794.	8.1	91
60	Structure and Interface Analysis of Diamond on an AlGaIn/GaN HEMT Utilizing an in Situ SiN _x Interlayer Grown by MOCVD. ACS Applied Electronic Materials, 2019, 1, 1387-1399.	4.3	34
61	Moisture Barrier, Mechanical, and Thermal Properties of PDMS-PIB Blends for Solar Photovoltaic (PV) Module Encapsulant. , 2019, , .		1
62	Significantly reduced thermal conductivity in $\text{Al}_{0.1}\text{Ga}_{0.9}\text{O}_3/\text{Ga}_2\text{O}_3$ superlattices. Applied Physics Letters, 2019, 115, .	3.3	22
63	Pool boiling enhancement using vapor channels in microporous surfaces. International Journal of Heat and Mass Transfer, 2019, 143, 118532.	4.8	24
64	Atomic layer deposited Al ₂ O ₃ capping layer effect on environmentally assisted cracking in SiNx barrier films. Journal of Applied Physics, 2019, 125, .	2.5	11
65	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.	3.9	20
66	Tunable Thermal Energy Transport across Diamond Membranes and Diamond–Si Interfaces by Nanoscale Graphoepitaxy. ACS Applied Materials & Interfaces, 2019, 11, 18517-18527.	8.0	49
67	Optimizing Crack Onset Strain for Silicon Nitride/Fluoropolymer Nanolaminate Barrier Films. ACS Applied Nano Materials, 2019, 2, 2525-2532.	5.0	16
68	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.	3.0	8
69	Thermal conductance across $\text{Si}^2\text{-Ga}_2\text{O}_3$ -diamond van der Waals heterogeneous interfaces. APL Materials, 2019, 7, .	5.1	87
70	Liquid-Cooled Aluminum Silicon Carbide Heat Sinks for Reliable Power Electronics Packages. Journal of Electronic Packaging, Transactions of the ASME, 2019, 141, .	1.8	9
71	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.	2.5	11
72	The Impact of Temperature on GaN/Si HEMTs Under RF Operation Using Gate Resistance Thermometry. IEEE Transactions on Electron Devices, 2019, 66, 330-336.	3.0	5

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73	UltrabARRIER Films for Packaging Flexible Electronics: Examining the Role of Thin-Film Technology. IEEE Nanotechnology Magazine, 2019, 13, 30-36.	1.3	2
74	Development of ALD Coatings for Harsh Environment Applications. ACS Applied Materials & Interfaces, 2019, 11, 7498-7509.	8.0	22
75	Diffusion-driven ultralow thermal conductivity in amorphous N_2O_5 thin films. Physical Review Materials, 2019, 3, .	2.4	18
76	Thermal characterization of gallium nitride p-i-n diodes. Applied Physics Letters, 2018, 112, .	3.3	42
77	A Comparative Study on the Junction Temperature Measurements of LEDs With Raman Spectroscopy, Microinfrared (IR) Imaging, and Forward Voltage Methods. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 1914-1922.	2.5	16
78	Experimental and analytical evaluation of a hydro-pneumatic compressed-air Ground-Level Integrated Diverse Energy Storage (GLIDES) system. Applied Energy, 2018, 221, 75-85.	10.1	54
79	Direct Visualization of Thermal Conductivity Suppression Due to Enhanced Phonon Scattering Near Individual Grain Boundaries. Nano Letters, 2018, 18, 3466-3472.	9.1	74
80	Thermal charging performance of enhanced phase change material composites for thermal battery design. International Journal of Thermal Sciences, 2018, 127, 19-28.	4.9	63
81	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.	8.0	52
82	Transient Thermal Characterization of AlGaIn/GaN HEMTs Under Pulsed Biasing. IEEE Transactions on Electron Devices, 2018, 65, 1753-1758.	3.0	37
83	Influence of Polymer Substrate Damage on the Time Dependent Cracking of SiNx Barrier Films. Scientific Reports, 2018, 8, 4560.	3.3	10
84	Thermal rectification in thin films driven by gradient grain microstructure. Journal of Applied Physics, 2018, 123, .	2.5	8
85	Ultrawide-Bandgap Semiconductors: Research Opportunities and Challenges. Advanced Electronic Materials, 2018, 4, 1600501.	5.1	839
86	Thermal Boundary Conductance Across Heteroepitaxial ZnO/GaN Interfaces: Assessment of the Phonon Gas Model. Nano Letters, 2018, 18, 7469-7477.	9.1	53
87	Thin Film Encapsulation. , 2018, , 1-51.		2
88	Low Thermal Boundary Resistance Interfaces for GaN-on-Diamond Devices. ACS Applied Materials & Interfaces, 2018, 10, 24302-24309.	8.0	98
89	Improving the Transient Thermal Characterization of GaN HEMTs. , 2018, , .		8
90	Design and Surface Modification of PET Substrates Using UV/Ozone Treatment for Roll-to-Roll Processed Solar Photovoltaic (PV) Module Packaging. , 2018, , .		5

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91	Transient Liquid Phase Bonding of AlN to AlSiC for Durable Power Electronic Packages. Advanced Engineering Materials, 2018, 20, 1800039.	3.5	16
92	Characterization of AlGaIn/GaN HEMTs Using Gate Resistance Thermometry. IEEE Transactions on Electron Devices, 2017, 64, 78-83.	3.0	39
93	Near room-temperature direct encapsulation of organic photovoltaics by plasma-based deposition techniques. Journal Physics D: Applied Physics, 2017, 50, 024003.	2.8	12
94	Note: A single specimen channel crack growth technique applied to brittle thin films on polymer substrates. Review of Scientific Instruments, 2017, 88, 036102.	1.3	12
95	Solution-based electrical doping of semiconducting polymer films over a limited depth. Nature Materials, 2017, 16, 474-480.	27.5	121
96	Near-isothermal-isobaric compressed gas energy storage. Journal of Energy Storage, 2017, 12, 276-287.	8.1	35
97	Investigation of the Heterogeneous Thermal Conductivity in Bulk CVD Diamond for Use in Electronics Thermal Management. , 2017, , .		2
98	Optimization of Graphite Composite Latent Heat Storage Systems. , 2017, , .		2
99	Simultaneous determination of the lattice thermal conductivity and grain/grain thermal resistance in polycrystalline diamond. Acta Materialia, 2017, 139, 215-225.	7.9	60
100	Pool boiling characteristics and critical heat flux mechanisms of microporous surfaces and enhancement through structural modification. Applied Physics Letters, 2017, 111, .	3.3	38
101	Experimental considerations of CVD diamond film measurements using time domain thermoreflectance. , 2017, , .		4
102	Solution-Processed Doping of Trilayer WSe ₂ with Redox-Active Molecules. Chemistry of Materials, 2017, 29, 7296-7304.	6.7	25
103	Efficient single-phase cooling techniques for durable power electronics module. , 2017, , .		0
104	Cooling of power electronics by integrating sintered Cu particle wick onto a direct-bond copper substrate. , 2017, , .		2
105	Rethinking phonons: The issue of disorder. Npj Computational Materials, 2017, 3, .	8.7	66
106	Thermal conductivity measurements on suspended diamond membranes using picosecond and femtosecond time-domain thermoreflectance. , 2017, , .		10
107	Thermal characterization of GaN vertical p-i-n diodes. , 2017, , .		2
108	Hybridization-Induced Carrier Localization at the C ₆₀ /ZnO Interface. Advanced Materials, 2016, 28, 3960-3965.	21.0	13

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109	The thermal effects of substrate removal on GaN HEMTs using Raman Thermometry. , 2016, , .		9
110	Ultraviolet micro-Raman spectroscopy stress mapping of a 75-mm GaN-on-diamond wafer. Applied Physics Letters, 2016, 108, .	3.3	24
111	Experimental investigation of defect-assisted and intrinsic water vapor permeation through ultrabARRIER films. Review of Scientific Instruments, 2016, 87, 033902.	1.3	13
112	Thermal charging study of compressed expanded natural graphite/phase change material composites. Carbon, 2016, 109, 495-504.	10.3	40
113	Thermal raman and IR measurement of heterogeneous integration stacks. , 2016, , .		3
114	Environmentally Assisted Cracking in Silicon Nitride Barrier Films on Poly(ethylene terephthalate) Substrates. ACS Applied Materials & Interfaces, 2016, 8, 27169-27178.	8.0	25
115	Characterization of the Thermal Conductivity of CVD Diamond for GaN-on-Diamond Devices. , 2016, , .		20
116	Thermal analysis of near-isothermal compressed gas energy storage system. Applied Energy, 2016, 179, 948-960.	10.1	97
117	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.	8.0	23
118	Nanometer-Scale Strain Measurements in AlGaIn/GaN High-Electron Mobility Transistors During Pulsed Operation. IEEE Transactions on Electron Devices, 2016, 63, 2742-2748.	3.0	6
119	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.	2.6	69
120	Field-effect transistors based on wafer-scale, highly uniform few-layer p-type WSe ₂ . Nanoscale, 2016, 8, 2268-2276.	5.6	58
121	Engineering the mechanical properties of ultrabARRIER films grown by atomic layer deposition for the encapsulation of printed electronics. Journal of Applied Physics, 2015, 118, .	2.5	42
122	The Mechanical Behavior of ALD-Polymer Hybrid Films Under Tensile Strain. Advanced Engineering Materials, 2015, 17, 1057-1067.	3.5	16
123	Thermal simulation of heterogeneous GaN/ InP/silicon 3DIC stacks. , 2015, , .		5
124	Signature Vibrational Bands for Defects in CVD Single-Layer Graphene by Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 964-969.	4.6	22
125	Investigation of ultra-thin titania films as hole-blocking contacts for organic photovoltaics. Journal of Materials Chemistry A, 2015, 3, 17332-17343.	10.3	11
126	Invited Review Article: Error and uncertainty in Raman thermal conductivity measurements. Review of Scientific Instruments, 2015, 86, 041101.	1.3	41

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127	Disrupted Attosecond Charge Carrier Delocalization at a Hybrid Organic/Inorganic Semiconductor Interface. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1935-1941.	4.6	16
128	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.	13.7	192
129	The Impact of Nongray Thermal Transport on the Temperature of AlGaIn/GaN HFETs. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 2437-2444.	3.0	14
130	Transient stress characterization of AlGaIn/GaN HEMTs due to electrical and thermal effects. <i>Microelectronics Reliability</i> , 2015, 55, 2634-2639.	1.7	32
131	Stability of inverted organic solar cells with ZnO contact layers deposited from precursor solutions. <i>Energy and Environmental Science</i> , 2015, 8, 592-601.	30.8	103
132	A Numerical Study on Comparing the Active and Passive Cooling of AlGaIn/GaN HEMTs. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 4056-4061.	3.0	48
133	Formation of Air Stable Graphene n-p Junctions Using an Amine-Containing Polymer Coating. <i>Advanced Materials Interfaces</i> , 2014, 1, 1400378.	3.7	7
134	Highly Uniform Trilayer Molybdenum Disulfide for Wafer-Scale Device Fabrication. <i>Advanced Functional Materials</i> , 2014, 24, 6389-6400.	14.9	99
135	Comparison of the cohesive and delamination fatigue properties of atomic-layer-deposited alumina and titania ultrathin protective coatings deposited at 200 Å°C. <i>Science and Technology of Advanced Materials</i> , 2014, 15, 015003.	6.1	6
136	Production of heavily n- and p-doped CVD graphene with solution-processed redox-active metal-organic species. <i>Materials Horizons</i> , 2014, 1, 111-115.	12.2	67
137	Systematic Reliability Study of Top-Gate p- and n-Channel Organic Field-Effect Transistors. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 3378-3386.	8.0	45
138	The Impact of Noncontinuum Thermal Transport on the Temperature of AlGaIn/GaN HFETs. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 2041-2048.	3.0	21
139	Reduced Graphene Oxide Thin Films as Ultrabarrriers for Organic Electronics. <i>Advanced Energy Materials</i> , 2014, 4, 1300986.	19.5	59
140	Tailoring Electron-Transfer Barriers for Zinc Oxide/C ₆₀ Fullerene Interfaces. <i>Advanced Functional Materials</i> , 2014, 24, 7381-7389.	14.9	54
141	Analysis and characterization of thermal transport in GaN HEMTs on Diamond substrates. , 2014, , .		26
142	Photochemical Doping and Tuning of the Work Function and Dirac Point in Graphene Using Photoacid and Photobase Generators. <i>Advanced Functional Materials</i> , 2014, 24, 5147-5156.	14.9	25
143	A multiscale thermal modeling approach for ballistic and diffusive heat transport in two dimensional domains. <i>International Journal of Thermal Sciences</i> , 2014, 76, 235-244.	4.9	21
144	Electrical and structural dependence of operating temperature of AlGaIn/GaN HEMTs. <i>Microelectronics Reliability</i> , 2013, 53, 872-877.	1.7	52

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145	A Comparative Study of Thermal Metrology Techniques for Ultraviolet Light Emitting Diodes. Journal of Heat Transfer, 2013, 135, .	2.1	5
146	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.	2.8	40
147	Measuring the Thermal Resistance in Light Emitting Diodes Using a Transient Thermal Analysis Technique. IEEE Transactions on Electron Devices, 2013, 60, 2548-2555.	3.0	10
148	Thermometry of AlGaIn/GaN HEMTs Using Multispectral Raman Features. IEEE Transactions on Electron Devices, 2013, 60, 1898-1904.	3.0	74
149	Development of highly flexible and ultra-low permeation rate thin-film barrier structure for organic electronics. Thin Solid Films, 2013, 547, 57-62.	1.8	45
150	Buckling-driven delamination of carbon nanotube forests. Applied Physics Letters, 2013, 102, .	3.3	22
151	The Impact of Bias Conditions on Self-Heating in AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2013, 60, 159-162.	3.0	64
152	Analysis of the residual stress distribution in AlGaIn/GaN high electron mobility transistors. Journal of Applied Physics, 2013, 113, .	2.5	84
153	Transfer-Free Selective Area Synthesis of Graphene Using Solid-State Self-Segregation of Carbon In Cu/Ni Bilayers. ECS Journal of Solid State Science and Technology, 2013, 2, M17-M21.	1.8	14
154	The impact of mechanical stress on the degradation of AlGaIn/GaN high electron mobility transistors. Journal of Applied Physics, 2013, 114, .	2.5	58
155	Compressive response of vertically aligned carbon nanotube films gleaned from in situ flat-punch indentations. Journal of Materials Research, 2013, 28, 984-997.	2.6	22
156	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.	2.1	5
157	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.	0.3	5
158	Transparent Electrodes From Graphene/Single Wall Carbon Nanotube Composites. , 2013, , .		0
159	Conformally coating vertically aligned carbon nanotube arrays using thermal decomposition of iron pentacarbonyl. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 03D101.	1.2	4
160	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, .	1.2	43
161	Thermal metrology techniques for UV LED light sources. , 2012, , .		2
162	Investigation of the stability of paraffinâ€“exfoliated graphite nanoplatelet composites for latent heat thermal storage systems. Journal of Materials Chemistry, 2012, 22, 24469.	6.7	15

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163	Creating Graphene p-n Junctions Using Self-Assembled Monolayers. ACS Applied Materials & Interfaces, 2012, 4, 4781-4786.	8.0	56
164	Facile Formation of Graphene P-n Junctions Using Self-Assembled Monolayers. Journal of Physical Chemistry C, 2012, 116, 19095-19103.	3.1	34
165	A Universal Method to Produce Low-Work Function Electrodes for Organic Electronics. Science, 2012, 336, 327-332.	12.6	1,878
166	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.	3.1	27
167	MEMS-Based Nanomechanics: Influence of MEMS Design on Test Temperature. Experimental Mechanics, 2012, 52, 607-617.	2.0	22
168	A correlation study between the total permeated water vapor and lifetime of an encapsulated OPV. , 2011,, .		0
169	The development of thin film barriers for encapsulating organic electronics. , 2011,, .		3
170	Traveling dipole domains in AlGaIn/GaN heterostructures and the direct generation of millimeter-wave oscillations. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2285-2287.	0.8	4
171	Temperature- and Doping-Dependent Anisotropic Stationary Electron Velocity in Wurtzite GaN. IEEE Electron Device Letters, 2011, 32, 1522-1524.	3.9	9
172	The Thermal Response of Gallium Nitride HFET Devices Grown on Silicon and SiC Substrates. ECS Transactions, 2011, 41, 13-30.	0.5	7
173	A Review of Carbon Nanotube Ensembles as Flexible Electronics and Advanced Packaging Materials. Journal of Electronic Packaging, Transactions of the ASME, 2011, 133, .	1.8	27
174	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.	2.5	7
175	Evaluation of Transparent Carbon Nanotube Networks of Homogeneous Electronic Type. ACS Nano, 2010, 4, 1377-1384.	14.6	59
176	Multiscale Lattice Boltzmann Modeling of Phonon Transport in Crystalline Semiconductor Materials. Numerical Heat Transfer, Part B: Fundamentals, 2010, 57, 89-109.	0.9	43
177	A hybrid encapsulation method for organic electronics. Applied Physics Letters, 2009, 94, .	3.3	83
178	Assessment of stress contributions in GaN high electron mobility transistors of differing substrates using Raman spectroscopy. Journal of Applied Physics, 2009, 106, .	2.5	30
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