Michael J. Uren

List of Publications by Year
in descending order

231 papers	10,080 citations	53660 45 h-index	40881 93 g-index
233 all docs	233 docs citations	233 times ranked	5737 citing authors

#	Article	IF	Citations
1	Breakdown Mechanisms in Î²-Ga₂O₃ Trench-MOS Schottky-Barrier Diodes. IEEE Transactions on Electron Devices, 2022, 69, 75-81.	1.6	9
2	Study of Drain Injected Breakdown Mechanisms in AlGaN/GaN-on-SiC HEMTs. IEEE Transactions on Electron Devices, 2022, 69, 525-530.	1.6	2
3	Ga₂O₃ â€“ diamond for next generation power electronics. , 2022, , .		1
4	Edge termination in vertical GaN diodes: Electric field distribution probed by second harmonic generation. Applied Physics Letters, 2022, 120, .	1.5	4
5	Impact of carbon in the buffer on power switching GaN-on-Si and RF GaN-on-SiC HEMTs. Japanese Journal of Applied Physics, 2021, 60, SB0802.	0.8	26
6	Thermal Design Rules of AlGaN/GaN-Based Microwave Transistors on Diamond. IEEE Transactions on Electron Devices, 2021, 68, 1530-1536.	1.6	16
7	UV-induced change in channel conductivity in AlGaN/GaN high electron mobility transistors to measure doping. Applied Physics Letters, 2021, 118, .	1.5	3
8	Noise Analysis of the Leakage Current in Time-Dependent Dielectric Breakdown in a GaN SLCFET. IEEE Transactions on Electron Devices, 2021, 68, 2220-2225.	1.6	5
9	Electric field mapping of wide-bandgap semiconductor devices at a submicrometre resolution. Nature Electronics, 2021, 4, 478-485.	13.1	13
10	Suppression of charge trapping in ON-state operation of AlGaN/GaN HEMTs by Si-rich passivation. Semiconductor Science and Technology, 2021, 36, 095024.	1.0	6
11	Electrical and Thermal Performance of Gaâ„Oâ‚ƒâ€“Alâ„Oâ‚ƒâ€“Diamond Super-Junction Schottky Barrier Diodes. IEEE Transactions on Electron Devices, 2021, 68, 5055-5061.	1.6	10
12	Vertical field inhomogeneity associated with threading dislocations in GaN high electron mobility transistor epitaxial stacks. Applied Physics Letters, 2021, 119, .	1.5	6
13	Low Field Vertical Charge Transport in the Channel and Buffer Layers of GaN-on-Si High Electron Mobility Transistors. IEEE Electron Device Letters, 2020, 41, 1754-1757.	2.2	19
14	Characterization of trap states in buried nitrogen-implanted Î²-Ga2O3. Applied Physics Letters, 2020, 117, .	1.5	7
15	Variable range hopping mechanism and modeling of isolation leakage current in GaN-based high-electron-mobility transistors. Applied Physics Letters, 2020, 116, .	1.5	13
16	GaN-on-diamond technology platform: Bonding-free membrane manufacturing process. AIP Advances, 2020, 10, .	0.6	21
17	The Impact of Hot Electrons and Self-Heating During Hard-Switching in AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2020, 67, 869-874.	1.6	19
18	Polarity dependence in Cl2-based plasma etching of GaN, AlGaN and AlN. Applied Surface Science, 2020, 521, 146297.	3.1	7

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19	Current collapse and kink effect in GaN RF HEMTs: the key role of the epitaxial buffer. , 2020, , .		2
20	Insight into Buffer Trap-Induced Current Saturation and Current Collapse in GaN RF Heterojunction Field-Effect Transistors. IEEE Transactions on Electron Devices, 2020, 67, 5460-5465.	1.6	10
21	Thermal Transport in Superlattice Castellated Field Effect Transistors. IEEE Electron Device Letters, 2019, 40, 1374-1377.	2.2	9
22	Reliability and lifetime estimations of GaN-on-GaN vertical pn diodes. Microelectronics Reliability, 2019, 95, 48-51.	0.9	7
23	Impact of thinning the GaN buffer and interface layer on thermal and electrical performance in GaN-on-diamond electronic devices. Applied Physics Express, 2019, 12, 024003.	1.1	7
24	Quantifying Temperature-Dependent Substrate Loss in GaN-on-Si RF Technology. IEEE Transactions on Electron Devices, 2019, 66, 1681-1687.	1.6	22
25	Lateral charge spreading and device-to-device coupling in C-doped AlGaN/GaN-on-Si wafers. Microelectronics Reliability, 2019, 95, 81-86.	0.9	4
26	Field Plate Designs in All-GaN Cascode Heterojunction Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 1688-1693.	1.6	3
27	Raman Thermography of Peak Channel Temperature in <inline-formula> <tex-math notation="LaTeX">eta </tex-math> </inline-formula>-Ga²O³ MOSFETs. IEEE Electron Device Letters, 2019, 40, 189-192.	2.2	54
28	The Effect of Proton Irradiation in Suppressing Current Collapse in AlGaN/GaN High-Electron-Mobility Transistors. IEEE Transactions on Electron Devices, 2019, 66, 372-377.	1.6	19
29	Determination of the Self-Compensation Ratio of Carbon in AlGaN for HEMTs. IEEE Transactions on Electron Devices, 2018, 65, 1838-1842.	1.6	28
30	Ohmic Contact-Free Mobility Measurement in Ultra-Wide Bandgap AlGaN/AlGaN Devices. IEEE Electron Device Letters, 2018, 39, 55-58.	2.2	3
31	The 2018 GaN power electronics roadmap. Journal Physics D: Applied Physics, 2018, 51, 163001.	1.3	843
32	On the origin of dynamic Ron in commercial GaN-on-Si HEMTs. Microelectronics Reliability, 2018, 81, 306-311.	0.9	16
33	Neutron Irradiation Impact on AlGaN/GaN HEMT Switching Transients. IEEE Transactions on Nuclear Science, 2018, 65, 2862-2869.	1.2	13
34	Evaluation of Pulsed Iâ€“V Analysis as Validation Tool of Nonlinear RF Models of GaN-Based HFETs. IEEE Transactions on Electron Devices, 2018, 65, 5307-5313.	1.6	12
35	The Impact of Ti/Al Contacts on AlGaN/GaN HEMT Vertical Leakage and Breakdown. IEEE Electron Device Letters, 2018, 39, 1580-1583.	2.2	7
36	â€œKinkâ€•in AlGaN/GaN-HEMTs: Floating Buffer Model. IEEE Transactions on Electron Devices, 2018, 65, 3746-3753.	1.6	37

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37	Lateral Charge Distribution and Recovery of Dynamic <inline-formula> <tex-math notation="LaTeX">$R_{mathrm{scriptscriptstyle ON}}$ </tex-math> </inline-formula> in AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2018, 65, 4462-4468.	1.6	5
38	Buffer-Induced Current Collapse in GaN HEMTs on Highly Resistive Si Substrates. IEEE Electron Device Letters, 2018, 39, 1556-1559.	2.2	29
39	Pulsed Large Signal RF Performance of Field-Plated Ga₂O₃ MOSFETs. IEEE Electron Device Letters, 2018, 39, 1572-1575.	2.2	55
40	Leakage mechanisms in GaN-on-GaN vertical pn diodes. Applied Physics Letters, 2018, 112, .	1.5	44
41	TEM studies of multilayer ohmic contacts to n-type AlGaN/GaN. , 2018, , 483-486.		0
42	Lateral Charge Transport in the Carbon-Doped Buffer in AlGaN/GaN-on-Si HEMTs. IEEE Transactions on Electron Devices, 2017, 64, 977-983.	1.6	31
43	Impact of Silicon Nitride Stoichiometry on the Effectiveness of AlGaN/GaN HEMT Field Plates. IEEE Transactions on Electron Devices, 2017, 64, 1197-1202.	1.6	24
44	Hot-Electron Electroluminescence Under RF Operation in GaN-HEMTs: A Comparison Among Operational Classes. IEEE Transactions on Electron Devices, 2017, 64, 2155-2160.	1.6	6
45	Control of Buffer-Induced Current Collapse in AlGaN/GaN HEMTs Using SiN_x Deposition. IEEE Transactions on Electron Devices, 2017, 64, 4044-4049.	1.6	28
46	Negative dynamic Ron in AlGaN/GaN power devices. , 2017, , .		15
47	â€œLeaky Dielectricâ€•Model for the Suppression of Dynamic $R_{mathrm{ON}}$ in Carbon-Doped AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2017, 64, 2826-2834.	1.6	170
48	Morphological and electrical comparison of Ti and Ta based ohmic contacts for AlGaN/GaN-on-SiC HFETs. Microelectronics Reliability, 2017, 68, 2-4.	0.9	10
49	Simultaneous measurement of optical and RF behavior under CW and pulsed Fully Active Harmonic Load-Pull. , 2016, , .		1
50	Impact of buffer charge on the reliability of carbon doped AlGaN/GaN-on-Si HEMTs. , 2016, , .		3
51	Mechanism of hot electron electroluminescence in GaN-based transistors. Journal Physics D: Applied Physics, 2016, 49, 435101.	1.3	20
52	Subthreshold Mobility in AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2016, 63, 1861-1865.	1.6	5
53	Reverse-biased induced mechanical stress in AlGaN/GaN power diodes. , 2016, , .		3
54	(Invited) Intrinsic Reliability Assessment of 650V Rated AlGaN/GaN Based Power Devices: An Industry Perspective. ECS Transactions, 2016, 72, 65-76.	0.3	25

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55	Study of hot electrons in AlGaN/GaN HEMTs under RF Class B and Class J operation using electroluminescence. Microelectronics Reliability, 2015, 55, 2493-2498.	0.9	7
56	Charge movement in a GaN-based hetero-structure field effect transistor structure with carbon doped buffer under applied substrate bias. Journal of Applied Physics, 2015, 118, .	1.1	29
57	Impact of buffer leakage on intrinsic reliability of 650V AlGaN/GaN HEMTs. , 2015, , .		34
58	Progressive failure site generation in AlGaN/GaN high electron mobility transistors under OFF-state stress: Weibull statistics and temperature dependence. Applied Physics Letters, 2015, 106, .	1.5	13
59	Floating body effects in carbon doped GaN HEMTs. , 2015, , .		3
60	Enhancement-mode metalâ€“insulatorâ€“semiconductor GaN/AlInN/GaN heterostructure field-effect transistors on Si with a threshold voltage of +3.0 V and blocking voltage above 1000 V. Applied Physics Express, 2015, 8, 036502.	1.1	10
61	Electric Field Reduction in C-Doped AlGaN/GaN on Si High Electron Mobility Transistors. IEEE Electron Device Letters, 2015, 36, 826-828.	2.2	61
62	Electroluminescence of hot electrons in AlGaN/GaN high-electron-mobility transistors under radio frequency operation. Applied Physics Letters, 2015, 106, .	1.5	17
63	Interface State Artefact in Long Gate-Length AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2015, 62, 2464-2469.	1.6	21
64	On the impact of carbon-doping on the dynamic Ron and off-state leakage current of 650V GaN power devices. , 2015, , .		60
65	Operating channel temperature in GaN HEMTs: DC versus RF accelerated life testing. Microelectronics Reliability, 2015, 55, 2505-2510.	0.9	47
66	GaN transistor reliability and instabilities. , 2014, , .		8
67	Buffer transport mechanisms in intentionally carbon doped GaN heterojunction field effect transistors. Applied Physics Letters, 2014, 104, .	1.5	87
68	Implications of gate-edge electric field in AlGaN/GaN high electron mobility transistors during OFF-state degradation. Microelectronics Reliability, 2014, 54, 2650-2655.	0.9	11
69	Liquid crystal electrography: Electric field mapping and detection of peak electric field strength in AlGaN/GaN high electron mobility transistors. Microelectronics Reliability, 2014, 54, 921-925.	0.9	3
70	Investigation of the GaN-on-GaAs interface for vertical power device applications. Journal of Applied Physics, 2014, 116, .	1.1	7
71	Impact ionization in N-polar AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 2014, 105, .	1.5	10
72	Intentionally Carbon-Doped AlGaN/GaN HEMTs: Necessity for Vertical Leakage Paths. IEEE Electron Device Letters, 2014, 35, 327-329.	2.2	108

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73	Time evolution of off-state degradation of AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 2014, 104, .	1.5	20
74	Localization of off-stress-induced damage in AlGaN/GaN high electron mobility transistors by means of low frequency 1/f noise measurements. Applied Physics Letters, 2013, 103, .	1.5	37
75	Transport behavior of holes in boron delta-doped diamond structures. Journal of Applied Physics, 2013, 113, .	1.1	28
76	Junction temperature measurements and reliability of GaN FETs. , 2013, , .		0
77	Iron-induced deep-level acceptor center in GaN/AlGaN high electron mobility transistors: Energy level and cross section. Applied Physics Letters, 2013, 102, .	1.5	111
78	On the link between electroluminescence, gate current leakage, and surface defects in AlGaN/GaN high electron mobility transistors upon off-state stress. Applied Physics Letters, 2012, 101, .	1.5	54
79	Development of a RF waveform stress test procedure for GaN HFETs subjected to infinite VSWR sweeps. , 2012, , .		5
80	Origin of kink effect in AlGaN/GaN high electron mobility transistors: Yellow luminescence and Fe doping. Applied Physics Letters, 2012, 101, .	1.5	15
81	2 dimensional electron gas uniformity of GaN HFET layers on SiC. Journal of Crystal Growth, 2012, 338, 125-128.	0.7	1
82	Effects of gate shaping and consequent process changes on AlGaN/GaN HEMT reliability. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2646-2652.	0.8	9
83	Buffer Design to Minimize Current Collapse in GaN/AlGaN HFETs. IEEE Transactions on Electron Devices, 2012, 59, 3327-3333.	1.6	271
84	Dynamic Transconductance Dispersion Characterization of Channel Hot-Carrier Stressed 0.25-$muhbox{m}$ AlGaN/GaN HEMTs. IEEE Electron Device Letters, 2012, 33, 1550-1552.	2.2	18
85	Development of an RF IV waveform based stress test procedure for use on GaN HFETs. Microelectronics Reliability, 2012, 52, 2880-2883.	0.9	2
86	GaAs X-band high efficiency (>65%) Broadband (>30%) amplifier MMIC based on the Class B to Class J continuum. , 2011, , .		1
87	Time-dependent thermal crosstalk in multifinger AlGaN/GaN HEMTs and implications on their electrical performance. Solid-State Electronics, 2011, 57, 14-18.	0.8	26
88	Micro-Raman spectroscopy as a voltage probe in AlGaN/GaN heterostructure devices: Determination of buffer resistances. Solid-State Electronics, 2011, 55, 5-7.	0.8	1
89	Determination of the dielectric constant of GaN in the kHz frequency range. Semiconductor Science and Technology, 2011, 26, 085006.	1.0	15
90	DRAM concept based on the hole gas transient effect in a AlGaN/GaN HEMT. Solid-State Electronics, 2010, 54, 616-620.	0.8	11

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91	Characterization of gate recessed GaN/AlGaN/GaN high electron mobility transistors fabricated using a SiCl4/SF6 dry etch recipe. Journal of Applied Physics, 2010, 108, 013711.	1.1	9
92	Correlation between kink and cathodoluminescence spectra in AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 2010, 96, .	1.5	40
93	Temperature analysis of AlGaN/GaN based devices using photoluminescence spectroscopy: Challenges and comparison to Raman thermography. Journal of Applied Physics, 2010, 107, .	1.1	26
94	Converse piezoelectric strain in undoped and Fe-doped AlGaN/GaN heterostructure field effect transistors studied by Raman scattering. Semiconductor Science and Technology, 2010, 25, 085004.	1.0	12
95	Bi-layer SixNypassivation on AlGaN/GaN HEMTs to suppress current collapse and improve breakdown. Semiconductor Science and Technology, 2010, 25, 125010.	1.0	4
96	Comparison of damage introduced into GaN/AlGaN/GaN heterostructures using selective dry etch recipes. Semiconductor Science and Technology, 2009, 24, 075020.	1.0	5
97	Analysis of DCâ€“RF Dispersion in AlGaN/GaN HFETs Using RF Waveform Engineering. IEEE Transactions on Electron Devices, 2009, 56, 13-19.	1.6	71
98	Impact of the field induced polarization space-charge on the characteristics of AlGaN/GaN HEMT: Self-consistent simulation study. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S1007-S1011.	0.8	2
99	Simultaneous measurement of temperature and thermal stress in AlGaN/GaN high electron mobility transistors using Raman scattering spectroscopy. Journal of Applied Physics, 2009, 106, .	1.1	58
100	Anomalous Kink Effect in GaN High Electron Mobility Transistors. IEEE Electron Device Letters, 2009, 30, 100-102.	2.2	86
101	Reducing Thermal Resistance of AlGaN/GaN Electronic Devices Using Novel Nucleation Layers. IEEE Electron Device Letters, 2009, 30, 103-106.	2.2	59
102	High-Temperature Microwave Performance of Submicron AlGaN/GaN HEMTs on SiC. IEEE Electron Device Letters, 2009, 30, 808-810.	2.2	17
103	Direct optical measurement of hotâ€phonons in active AlGaN/GaN devices. Physica Status Solidi (B): Basic Research, 2008, 245, 910-912.	0.7	7
104	Channel Temperature Determination in High-Power AlGaN/GaN HFETs Using Electrical Methods and Raman Spectroscopy. IEEE Transactions on Electron Devices, 2008, 55, 478-482.	1.6	109
105	Current collapse in AlGaN/GaN transistors studied using time-resolved Raman thermography. Applied Physics Letters, 2008, 93, 203510.	1.5	20
106	Structural and electrical characterization of AuPtAlTi Ohmic contacts to AlGaNâˆ•GaN with varying annealing temperature and Al content. Journal of Applied Physics, 2008, 103, .	1.1	10
107	High-performance 40nm gate length InSb p-channel compressively strained quantum well field effect transistors for low-power (VCC=0.5V) logic applications. , 2008, , .		67
108	X-Band GaN SPDT MMIC with over 25 Watt Linear Power Handling. , 2008, , .		14

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109	Nanosecond Timescale Thermal Dynamics of AlGaN/GaN Electronic Devices. IEEE Electron Device Letters, 2008, 29, 416-418.	2.2	38
110	Raman-IR micro-thermography tool for reliability and failure analysis of electronic devices. , 2008, , .		4
111	Advances in AlGaN/GaN/SiC Microwave Devices. Materials Science Forum, 2007, 556-557, 1017-1022.	0.3	1
112	High Temperature Characterisation of 4H-SiC VJFET. Materials Science Forum, 2007, 556-557, 799-802.	0.3	3
113	High Temperature Applications Of 4H-SiC Vertical Junction Field-Effect Transistors And Schottky Diodes. Materials Science Forum, 2007, 556-557, 987-990.	0.3	1
114	High Voltage Silicon Carbide Schottky Diodes with Single Zone Junction Termination Extension. Materials Science Forum, 2007, 556-557, 873-876.	0.3	17
115	Time-Resolved Temperature Measurement of AlGaN/GaN Electronic Devices Using Micro-Raman Spectroscopy. IEEE Electron Device Letters, 2007, 28, 86-89.	2.2	114
116	Optimising AlGaN/GaN HFET designs for high efficiency. , 2007, , .		1
117	Thermal Properties and Reliability of GaN Microelectronics: Sub-Micron Spatial and Nanosecond Time Resolution Thermography. , 2007, , .		14
118	Utilization of waveform measurements for degradation analysis of AlGaN/GaN HFETs. , 2007, , .		2
119	Time-resolved nanosecond sub-micron resolution thermal analysis of high-power AlGaN/GaN HFETs. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2014-2018.	0.8	2
120	Thermal Boundary Resistance Between GaN and Substrate in AlGaN/GaN Electronic Devices. IEEE Transactions on Electron Devices, 2007, 54, 3152-3158.	1.6	231
121	Detailed Analysis of DC-RF Dispersion in AlGaN/GaN HFETs using Waveform Measurements. , 2006, , .		11
122	High Temperature Operation of Silicon Carbide Schottky Diodes with Recoverable Avalanche Breakdown. Materials Science Forum, 2006, 527-529, 931-934.	0.3	11
123	Control of Short-Channel Effects in GaN/AlGaN HFETs. , 2006, , .		24
124	Piezoelectric strain in AlGaNâˆ•GaN heterostructure field-effect transistors under bias. Applied Physics Letters, 2006, 88, 103502.	1.5	88
125	Surface leakage currents in SiN/sub x/ passivated AlGaN/GaN HFETs. IEEE Electron Device Letters, 2006, 27, 1-3.	2.2	107
126	Nanoscale characterisation of electronic and spintronic nitrides and arsenides. Journal of Physics: Conference Series, 2006, 26, 175-178.	0.3	0

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127	On the incorporation mechanism of Fe in GaN grown by metal-organic vapour phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1429-1434.	0.8	26
128	High temperature performance of AlGaN/GaN HEMTs on Si substrates. Solid-State Electronics, 2006, 50, 511-513.	0.8	89
129	Punch-through in short-channel AlGaN/GaN HFETs. IEEE Transactions on Electron Devices, 2006, 53, 395-398.	1.6	191
130	On the temperature and carrier density dependence of electron saturation velocity in an AlGaN/GaN HEMT. IEEE Transactions on Electron Devices, 2006, 53, 565-567.	1.6	63
131	Integrated micro-Raman/infrared thermography probe for monitoring of self-heating in AlGaN/GaN transistor structures. IEEE Transactions on Electron Devices, 2006, 53, 2438-2447.	1.6	212
132	Integrated Raman - IR Thermography on AlGaN/GaN Transistors. , 2006, , .		14
133	Insights into electroluminescent emission from AlGaNâˆ•GaN field effect transistors using micro-Raman thermal analysis. Applied Physics Letters, 2006, 88, 023507.	1.5	30
134	Direct demonstration of the â€˜virtual gateâ€™ mechanism for current collapse in AlGaN/GaN HFETs. Solid-State Electronics, 2005, 49, 279-282.	0.8	59
135	Measurements of Unity Gain Cutoff Frequency and Saturation Velocity of a GaN HEMT Transistor. IEEE Transactions on Electron Devices, 2005, 52, 165-169.	1.6	63
136	High spatial resolution micro-Raman temperature measurements of nitride devices (FETs and light) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.8	22
137	Extraction of temperature and number dependent scattering rates for an AlGaN/GaN 2DEG. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 812-815.	0.8	6
138	Protection of selectively implanted and patterned silicon carbide surfaces with graphite capping layer during post-implantation annealing. Semiconductor Science and Technology, 2005, 20, 271-278.	1.0	51
139	Experimental gallium nitride microwave Doherty amplifier. Electronics Letters, 2005, 41, 1284.	0.5	10
140	Analysis of DC-RF dispersion in AlGaN/GaN HFETs using pulsed I-V and time-domain waveform measurements. , 2005, , .		14
141	Characterisation of an experimental gallium nitride microwave Doherty amplifier. , 2005, , .		1
142	Thermal mapping of defects in AlGaNâˆ•GaN heterostructure field-effect transistors using micro-Raman spectroscopy. Applied Physics Letters, 2005, 87, 103508.	1.5	34
143	Structural and electrical characterization of AuPdAlTi ohmic contacts to AlGaNâˆ•GaN with varying Ti content. Journal of Applied Physics, 2004, 96, 5588-5595.	1.1	37
144	Hole trap generation in gate dielectric during substrate hole injection. Semiconductor Science and Technology, 2004, 19, L1-L3.	1.0	13

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145	Analysis of thin AlN carrier exclusion layers in AlGaN/GaN microwave heterojunction field-effect transistors. Semiconductor Science and Technology, 2004, 19, L65-L67.	1.0	28
146	Micro-Raman Temperature Measurements for Electric Field Assessment in Active AlGaNâ€“GaN HFETs. IEEE Electron Device Letters, 2004, 25, 456-458.	2.2	79
147	Low frequency drain noise comparison of AlGaN/GaN HEMTâ€™s grown on silicon, SiC and sapphire substrates. Microelectronics Reliability, 2003, 43, 1713-1718.	0.9	14
148	Characterisation of nitrides by energy filtered TEM and EELS. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2452-2455.	0.8	0
149	AlGaN/GaN microwave HFET including a thin AlN carrier exclusion layer. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2331-2334.	0.8	23
150	TEM Assessment of AuTiAlTi and AuPdAlTi Ohmic Contacts to AlGaN/GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 219-222.	0.8	2
151	Measurement of temperature distribution in multifinger AlGaN/GaN heterostructure field-effect transistors using micro-Raman spectroscopy. Applied Physics Letters, 2003, 82, 124-126.	1.5	163
152	Generation of coherent gigahertz acoustic phonons in AlGaN/GaN microwave field-effect transistors. Applied Physics Letters, 2003, 83, 1023-1025.	1.5	5
153	Surface Control of 4H-SiC MESFETs. Materials Science Forum, 2002, 389-393, 1387-1390.	0.3	9
154	Monte Carlo simulations of AlGaN/GaN heterojunction field-effect transistors (HFETs). Journal of Physics Condensed Matter, 2002, 14, 3479-3497.	0.7	11
155	Self-Heating Effects in Multi-Finger AlGaN/GaN HFETs. Materials Research Society Symposia Proceedings, 2002, 743, L9.7.1.	0.1	1
156	Comparative morphology of AuTiAlTi, AuPdAlTi and AuAlTi ohmic contacts to AlGaN/GaN. Materials Research Society Symposia Proceedings, 2002, 743, L11.55.1.	0.1	2
157	Micro-Raman Spectroscopy: Self-Heating Effects In Deep UV Light Emitting Diodes. Materials Research Society Symposia Proceedings, 2002, 743, L7.8.1.	0.1	3
158	Structural and electrical characterization of AuTiAlTi/AlGaN/GaN ohmic contacts. Journal of Applied Physics, 2002, 92, 94-100.	1.1	81
159	Body charge modelling for accurate simulation of small-signal behaviour in floating body SOI. Solid-State Electronics, 2002, 46, 529-537.	0.8	0
160	Measurement of temperature in active high-power AlGaN/GaN HFETs using Raman spectroscopy. IEEE Electron Device Letters, 2002, 23, 7-9.	2.2	295
161	A physically based compact model of partially depleted SOI MOSFETs for analog circuit simulation. IEEE Journal of Solid-State Circuits, 2001, 36, 110-121.	3.5	38
162	TEM assessment of GaN/AlGaN/TiAlTiAu and GaN/AlGaN/TiAlPdAu ohmic contacts. Materials Research Society Symposia Proceedings, 2001, 693, 224.	0.1	0

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163	Observations of deep levels in 4H-SiC using optoelectronic modulation spectroscopy. Journal of Electronic Materials, 2001, 30, 1361-1368.	1.0	2
164	Dependence of energy distributions of interface states on stress conditions. Microelectronic Engineering, 2001, 59, 95-99.	1.1	2
165	Electrical characterisation of AlGaN/GaN heterostructure wafers for high-power HFETs. Journal of Crystal Growth, 2001, 230, 579-583.	0.7	9
166	A physically based relation between extracted threshold voltage and surface potential flat band voltage for MOSFET compact modeling. IEEE Transactions on Electron Devices, 2001, 48, 1019-1021.	1.6	20
167	Recent progress and current issues in SiC semiconductor devices for power applications. IET Circuits, Devices and Systems, 2001, 148, 101.	0.6	26
168	On the interface states generated under different stress conditions. Applied Physics Letters, 2001, 79, 3092-3094.	1.5	24
169	Effect of post-implantation anneal on the electrical characteristics of Ni 4H-SiC Schottky barrier diodes terminated using self-aligned argon ion implantation. Solid-State Electronics, 2000, 44, 1879-1885.	0.8	19
170	Infra-red reflectivity of ion-implanted and pulsed excimer laser irradiated 4H-SiC. Thin Solid Films, 2000, 364, 200-203.	0.8	21
171	Effect of Plasma Etching and Sacrificial Oxidation on 4H-SiC Schottky Barrier Diodes. Materials Science Forum, 2000, 338-342, 1199-1202.	0.3	15
172	Optical Characterization of Lattice Damage and Recovery in Ion-Implanted and Pulsed Excimer Laser Irradiated 4H-SiC. Materials Science Forum, 2000, 338-342, 655-658.	0.3	4
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