Siddharth Rajan

List of Publications by Citations

206 papers	7,251 citations	48 h-index	79 g-index
229 ext. papers	8,538 ext. citations	3.2 avg, IF	6.04 L-index

#	Paper	IF	Citations
206	Ultrawide-Bandgap Semiconductors: Research Opportunities and Challenges. *Advanced Electronic Materials*, **2018**, 4, 1600501	6.4	520
205	Room Temperature Intrinsic Ferromagnetism in Epitaxial Manganese Selenide Films in the Monolayer Limit. *Nano Letters*, **2018**, 18, 3125-3131	11.5	353
204	p-type doping of MoS2 thin films using Nb. *Applied Physics Letters*, **2014**, 104, 092104	3.4	236
203	Electrostatic carrier doping of GdTiO3/SrTiO3 interfaces. *Applied Physics Letters*, **2011**, 99, 232116	3.4	195
202	Demonstration of high mobility and quantum transport in modulation-doped □(AlxGa1-x)2O3/Ga2O3 heterostructures. *Applied Physics Letters*, **2018**, 112, 173502	3.4	192
201	Modulation-doped □(Al0.2Ga0.8)2O3/Ga2O3 field-effect transistor. *Applied Physics Letters*, **2017**, 111, 023502	3.4	188
200	Large area single crystal (0001) oriented MoS2. *Applied Physics Letters*, **2013**, 102, 252108	3.4	178
199	N-polar GaN□AlGaN□GaN high electron mobility transistors. *Journal of Applied Physics*, **2007**, 102, 044501	2.5	176
198	Electrical properties of atomic layer deposited aluminum oxide on gallium nitride. *Applied Physics Letters*, **2011**, 99, 133503	3.4	138
197	High responsivity in molecular beam epitaxy grown □Ga2O3 metal semiconductor metal solar blind deep-UV photodetector. *Applied Physics Letters*, **2017**, 110, 221107	3.4	124
196	N-polar GaN epitaxy and high electron mobility transistors. *Semiconductor Science and Technology*, **2013**, 28, 074009	1.8	124
195	The 2020 UV emitter roadmap. *Journal Physics D: Applied Physics*, **2020**, 53, 503001	3	123
194	Polarization-engineered GaN/InGaN/GaN tunnel diodes. *Applied Physics Letters*, **2010**, 97, 203502	3.4	121
193	Suppression of electron overflow and efficiency droop in N-polar GaN green light emitting diodes. *Applied Physics Letters*, **2012**, 100, 111118	3.4	118
192	Polarity governs atomic interaction through two-dimensional materials. *Nature Materials*, **2018**, 17, 999-1004	27	107
191	Demonstration of □(AlxGa1-x)2O3/Ga2O3 double heterostructure field effect transistors. *Applied Physics Letters*, **2018**, 112, 233503	3.4	97
190	Polarization-induced pn diodes in wide-band-gap nanowires with ultraviolet electroluminescence. *Nano Letters*, **2012**, 12, 915-20	11.5	97

189	Delta-doped gallium oxide field-effect transistor. *Applied Physics Express*, **2017**, 10, 051102	2.4	94
188	Low resistance GaN/InGaN/GaN tunnel junctions. *Applied Physics Letters*, **2013**, 102, 113503	3.4	89
187	Polarity in GaN and ZnO: Theory, measurement, growth, and devices. *Applied Physics Reviews*, **2016**, 3, 041303	17.3	85
186	Prospects for the application of GaN power devices in hybrid electric vehicle drive systems. *Semiconductor Science and Technology*, **2013**, 28, 074012	1.8	84
185	Optical signatures of deep level defects in Ga2O3. *Applied Physics Letters*, **2018**, 112, 242102	3.4	82
184	Low-pressure CVD-grown Ga2O3bevel-field-plated Schottky barrier diodes. *Applied Physics Express*, **2018**, 11, 031101	2.4	81
183	Effect of Optical Phonon Scattering on the Performance of GaN Transistors. *IEEE Electron Device Letters*, **2012**, 33, 709-711	4.4	76
182	Delta Doped $beta$ -Ga2O3 Field Effect Transistors With Regrown Ohmic Contacts. *IEEE Electron Device Letters*, **2018**, 39, 568-571	4.4	75
181	AlGaN/GaN polarization-doped field-effect transistor for microwave power applications. *Applied Physics Letters*, **2004**, 84, 1591-1593	3.4	74
180	$beta$ -Ga2O3 Delta-Doped Field-Effect Transistors With Current Gain Cutoff Frequency of 27 GHz. *IEEE Electron Device Letters*, **2019**, 40, 1052-1055	4.4	71
179	Interband tunneling for hole injection in III-nitride ultraviolet emitters. *Applied Physics Letters*, **2015**, 106, 141103	3.4	67
178	Interface Charge Engineering for Enhancement-Mode GaN MISHEMTs. *IEEE Electron Device Letters*, **2014**, 35, 312-314	4.4	66
177	Interface charge engineering at atomic layer deposited dielectric/III-nitride interfaces. *Applied Physics Letters*, **2013**, 102, 072105	3.4	65
176	Trapping Effects in Si $delta$ -Doped $beta$ -Ga2O3 MESFETs on an Fe-Doped $beta$ -Ga2O3 Substrate. *IEEE Electron Device Letters*, **2018**, 39, 1042-1045	4.4	64
175	AlGaN Channel High Electron Mobility Transistors: Device Performance and Power-Switching Figure of Merit. *Japanese Journal of Applied Physics*, **2008**, 47, 3359-3361	1.4	64
174	Tunneling-based carrier regeneration in cascaded GaN light emitting diodes to overcome efficiency droop. *Applied Physics Letters*, **2013**, 103, 081107	3.4	59
173	Simulation of Short-Channel Effects in N- and Ga-Polar AlGaN/GaN HEMTs. *IEEE Transactions on Electron Devices*, **2011**, 58, 704-708	2.9	59
172	Demonstration of forward inter-band tunneling in GaN by polarization engineering. *Applied Physics Letters*, **2011**, 99, 233504	3.4	55

171	Layer-transferred MoS2/GaN PN diodes. *Applied Physics Letters*, **2015**, 107, 103505	3.4	53
170	Molecular beam epitaxy of N-polar InGaN. *Applied Physics Letters*, **2010**, 97, 071903	3.4	53
169	A heterojunction modulation-doped Mott transistor. *Journal of Applied Physics*, **2011**, 110, 084503	2.5	52
168	AlGaN channel field effect transistors with graded heterostructure ohmic contacts. *Applied Physics Letters*, **2016**, 109, 133508	3.4	52
167	Breakdown Characteristics of $beta$ -(Al0.22Ga0.78)2O3/Ga2O3 Field-Plated Modulation-Doped Field-Effect Transistors. *IEEE Electron Device Letters*, **2019**, 40, 1241-1244	4.4	51
166	Probing Charge Transport and Background Doping in Metal-Organic Chemical Vapor Deposition-Grown (010) Ga2O3. *Physica Status Solidi - Rapid Research Letters*, **2020**, 14, 2000145	2.5	51
165	Modeling of high composition AlGaN channel high electron mobility transistors with large threshold voltage. *Applied Physics Letters*, **2014**, 105, 263503	3.4	51
164	Direct observation of 0.57 eV trap-related RF output power reduction in AlGaN/GaN high electron mobility transistors. *Solid-State Electronics*, **2013**, 80, 19-22	1.7	50
163	Interfacial charge effects on electron transport in III-Nitride metal insulator semiconductor transistors. *Applied Physics Letters*, **2011**, 99, 162104	3.4	50
162	Structural Properties of GaN Buffer Layers on 4H-SiC(0001) Grown by Plasma-Assisted Molecular Beam Epitaxy for High Electron Mobility Transistors. *Japanese Journal of Applied Physics*, **2004**, 43, L1520-L1523	1.4	50
161	Epitaxial growth of large area single-crystalline few-layer MoS2 with high space charge mobility of 192 cm2 V s. *Applied Physics Letters*, **2014**, 105, 072105	3.4	49
160	InGaN/GaN tunnel junctions for hole injection in GaN light emitting diodes. *Applied Physics Letters*, **2014**, 105, 141104	3.4	49
159	GdN nanoisland-based GaN tunnel junctions. *Nano Letters*, **2013**, 13, 2570-5	11.5	49
158	Tunnel-injected sub-260 nm ultraviolet light emitting diodes. *Applied Physics Letters*, **2017**, 110, 201102	3.4	48
157	Metal/BaTiO3/Ga2O3 dielectric heterojunction diode with 5.7 MV/cm breakdown field. *Applied Physics Letters*, **2019**, 115, 252104	3.4	48
156	Evaluation of Low-Temperature Saturation Velocity in $beta$ -(AlxGa1)2O3/Ga2O3 Modulation-Doped Field-Effect Transistors. *IEEE Transactions on Electron Devices*, **2019**, 66, 1574-1578	2.9	48
155	Demonstration of zero bias responsivity in MBE grown Ga2O3 lateral deep-UV photodetector. *Japanese Journal of Applied Physics*, **2018**, 57, 060313	1.4	47
154	Tunnel-injected sub 290 nm ultra-violet light emitting diodes with 2.8% external quantum efficiency. *Applied Physics Letters*, **2018**, 112, 071107	3.4	45

153	Frequency dispersion in III-V metal-oxide-semiconductor capacitors. *Applied Physics Letters*, **2012**, 100, 233510	3.4	45
152	Density-dependent electron transport and precise modeling of GaN high electron mobility transistors. *Applied Physics Letters*, **2015**, 107, 153504	3.4	44
151	High current density 2D/3D MoS2/GaN Esaki tunnel diodes. *Applied Physics Letters*, **2016**, 109, 183505	3.4	44
150	MBE-Grown $beta$ -Ga2O3-Based Schottky UV-C Photodetectors With Rectification Ratio ~107. *IEEE Photonics Technology Letters*, **2018**, 30, 2025-2028	2.2	44
149	Design and demonstration of ultra-wide bandgap AlGaN tunnel junctions. *Applied Physics Letters*, **2016**, 109, 121102	3.4	43
148	High Al-Content AlGaN Transistor With 0.5 A/mm Current Density and Lateral Breakdown Field Exceeding 3.6 MV/cm. *IEEE Electron Device Letters*, **2018**, 39, 256-259	4.4	40
147	Energy band line-up of atomic layer deposited Al2O3 on Ga2O3. *Applied Physics Letters*, **2014**, 104, 162106	3.4	39
146	Effect of buffer iron doping on delta-doped Ga2O3 metal semiconductor field effect transistors. *Applied Physics Letters*, **2018**, 113, 123501	3.4	39
145	Molecular beam epitaxy of 2D-layered gallium selenide on GaN substrates. *Journal of Applied Physics*, **2017**, 121, 094302	2.5	38
144	Carrier transport and confinement in polarization-induced three-dimensional electron slabs: Importance of alloy scattering in AlGaN. *Applied Physics Letters*, **2006**, 88, 042109	3.4	38
143	N-Polar III Nitride Green (540 nm) Light Emitting Diode. *Japanese Journal of Applied Physics*, **2011**, 50, 052101	1.4	38
142	GaN-based three-junction cascaded light-emitting diode with low-resistance InGaN tunnel junctions. *Applied Physics Express*, **2015**, 8, 082103	2.4	37
141	Growth model for plasma-assisted molecular beam epitaxy of N-polar and Ga-polar InxGa1 N. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 021206	1.3	37
140	Low-resistance GaN tunnel homojunctions with 150 kA/cm2 current and repeatable negative differential resistance. *Applied Physics Letters*, **2016**, 108, 131103	3.4	37
139	Graded AlGaN Channel Transistors for Improved Current and Power Gain Linearity. *IEEE Transactions on Electron Devices*, **2017**, 64, 3114-3119	2.9	35
138	Modulation of over 1014 cm 2 electrons in SrTiO3/GdTiO3 heterostructures. *Applied Physics Letters* , **2014**, 104, 182904	3.4	35
137	Electron mobility in graded AlGaN alloys. *Applied Physics Letters*, **2006**, 88, 042103	3.4	33
136	Gallium oxide power electronics. *APL Materials*, **2022**, 10, 029201	5.7	33

135	High electron density β-(Al0.17Ga0.83)2O3/Ga2O3 modulation doping using an ultra-thin (1 nm) spacer layer. *Journal of Applied Physics*, **2020**, 127, 215706	2.5	31
134	N-Face Metal–Insulator–Semiconductor High-Electron-Mobility Transistors With AlN Back-Barrier. *IEEE Electron Device Letters*, **2008**, 29, 1101-1104	4.4	31
133	Growth and electrical characterization of two-dimensional layered MoS2/SiC heterojunctions. *Applied Physics Letters*, **2014**, 105, 203504	3.4	29
132	Extreme charge density SrTiO3/GdTiO3 heterostructure field effect transistors. *Applied Physics Letters*, **2013**, 102, 242909	3.4	29
131	Electron gas dimensionality engineering in AlGaN/GaN high electron mobility transistors using polarization. *Applied Physics Letters*, **2012**, 100, 063507	3.4	28
130	Enhancement-Modem-plane AlGaN/GaN Heterojunction Field-Effect Transistors. *Applied Physics Express*, **2009**, 2, 011001	2.4	28
129	N-Polar III–Nitride Green (540 nm) Light Emitting Diode. *Japanese Journal of Applied Physics*, **2011**, 50, 052101	1.4	28
128	Effect of Dielectric Thickness on Power Performance of AlGaN/GaN HEMTs . *IEEE Electron Device Letters*, **2009**, 30, 313-315	4.4	28
127	Design of p-type cladding layers for tunnel-injected UV-A light emitting diodes. *Applied Physics Letters*, **2016**, 109, 191105	3.4	28
126	Mechanism of Si doping in plasma assisted MBE growth of β-Ga2O3. *Applied Physics Letters*, **2019**, 115, 152106	3.4	26
125	Reflective metal/semiconductor tunnel junctions for hole injection in AlGaN UV LEDs. *Applied Physics Letters*, **2017**, 111, 051104	3.4	26
124	Identification of critical buffer traps in Si δ-doped β-Ga2O3 MESFETs. *Applied Physics Letters*, **2019**, 115, 153501	3.4	25
123	Electro-thermal co-design of β-(AlxGa1-x)2O3/Ga2O3 modulation doped field effect transistors. *Applied Physics Letters*, **2020**, 117, 153501	3.4	25
122	Ohmic contact formation between metal and AlGaN/GaN heterostructure via graphene insertion. *Applied Physics Letters*, **2013**, 102, 153501	3.4	23
121	Enhanced light extraction in tunnel junction-enabled top emitting UV LEDs. *Applied Physics Express*, **2016**, 9, 052102	2.4	23
120	Design of Transistors Using High-Permittivity Materials. *IEEE Transactions on Electron Devices*, **2019**, 66, 896-900	2.9	23
119	Advances in Ga2O3 solar-blind UV photodetectors **2019**, 369-399		23
118	Electrostatic Engineering Using Extreme Permittivity Materials for Ultra-Wide Bandgap Semiconductor Transistors. *IEEE Transactions on Electron Devices*, **2021**, 68, 29-35	2.9	21

117	Influence of AlN interlayer on the anisotropic electron mobility and the device characteristics of N-polar AlGaN/GaN metal-insulator-semiconductor-high electron mobility transistors grown on vicinal substrates. *Journal of Applied Physics*, **2010**, 108, 074502	2.5	20
116	Linearity Improvement With AlGaN Polarization- Graded Field Effect Transistors With Low Pressure Chemical Vapor Deposition Grown SiNx Passivation. *IEEE Electron Device Letters*, **2020**, 41, 19-22	4.4	20
115	Atomic scale investigation of aluminum incorporation, defects, and phase stability in □(AlxGa1□)2O3 films. *APL Materials*, **2021**, 9, 051103	5.7	20
114	Transferred large area single crystal MoS2 field effect transistors. *Applied Physics Letters*, **2015**, 107, 193503	3.4	19
113	Gallium nitride electronics. *Semiconductor Science and Technology*, **2013**, 28, 070301	1.8	19
112	Pulsed-IV Pulsed-RF Cold-FET Parasitic Extraction of Biased AlGaN/GaN HEMTs Using Large Signal Network Analyzer. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 1077-1088	4.1	19
111	Mg acceptor doping in MOCVD (010) □Ga2O3. *Applied Physics Letters*, **2020**, 117, 222106	3.4	19
110	Recess-Free Nonalloyed Ohmic Contacts on Graded AlGaN Heterojunction FETs. *IEEE Electron Device Letters*, **2015**, 36, 226-228	4.4	17
109	Analytical Model for Power Switching GaN-Based HEMT Design. *IEEE Transactions on Electron Devices*, **2011**, 58, 1456-1461	2.9	17
108	Study of interface barrier of SiNx/GaN interface for nitrogen-polar GaN based high electron mobility transistors. *Journal of Applied Physics*, **2008**, 103, 124508	2.5	17
107	X-Band Power and Linearity Performance of Compositionally Graded AlGaN Channel Transistors. *IEEE Electron Device Letters*, **2018**, 39, 1884-1887	4.4	17
106	Numerical Analysis of Terahertz Emissions From an Ungated HEMT Using Full-Wave Hydrodynamic Model. *IEEE Transactions on Electron Devices*, **2016**, 63, 990-996	2.9	16
105	Amplified spontaneous emission of phonons as a likely mechanism for density-dependent velocity saturation in GaN transistors. *Applied Physics Express*, **2016**, 9, 094101	2.4	16
104	Polarization Engineering of AlGaN/GaN HEMT With Graded InGaN Sub-Channel for High-Linearity X-Band Applications. *IEEE Electron Device Letters*, **2019**, 40, 522-525	4.4	16
103	Al0.75Ga0.25N/Al0.6Ga0.4N heterojunction field effect transistor with fT of 40 GHz. *Applied Physics Express*, **2019**, 12, 066502	2.4	15
102	Probing unintentional Fe impurity incorporation in MOCVD homoepitaxy GaN: Toward GaN vertical power devices. *Journal of Applied Physics*, **2020**, 127, 215707	2.5	15
101	Lateral confinement of electrons in vicinal N-polar AlGaN/GaN heterostructure. *Applied Physics Letters*, **2010**, 97, 162106	3.4	14
100	Deep-Recessed □GaO□ Delta-Doped Field-Effect Transistors With In Situ Epitaxial Passivation. *IEEE Transactions on Electron Devices*, **2020**, 67, 4813-4819	2.9	14

99	2D Materials for Universal Thermal Imaging of Micro- and Nanodevices: An Application to Gallium Oxide Electronics. *ACS Applied Electronic Materials*, **2020**, 2, 2945-2953	4	14
98	Ultra-wide band gap AlGaN polarization-doped field effect transistor. *Japanese Journal of Applied Physics*, **2018**, 57, 074103	1.4	14
97	Atomic scale investigation of chemical heterogeneity in □(AlxGa1□)2O3 films using atom probe tomography. *Applied Physics Letters*, **2019**, 115, 132105	3.4	13
96	Compositionally Graded III-N HEMTs for Improved Linearity: A Simulation Study. *IEEE Transactions on Electron Devices*, **2019**, 66, 2151-2157	2.9	13
95	Ultralow-voltage-drop GaN/InGaN/GaN tunnel junctions with 12% indium content. *Applied Physics Express*, **2017**, 10, 121003	2.4	13
94	Electron mobility in N-polar GaN/AlGaN/GaN heterostructuress. *Applied Physics Letters*, **2008**, 93, 042104	3.4	13
93	Enhanced n-type □Ga2O3 (2 □01) gate stack performance using Al2O3/SiO2 bi-layer dielectric. *Applied Physics Letters*, **2019**, 114, 212106	3.4	12
92	Al0.65Ga0.35N/Al0.4Ga0.6N Micro-Channel Heterojunction Field Effect Transistors With Current Density Over 900 mA/mm. *IEEE Electron Device Letters*, **2020**, 41, 677-680	4.4	12
91	BaTiO3/Al0.58Ga0.42N lateral heterojunction diodes with breakdown field exceeding 8 MV/cm. *Applied Physics Letters*, **2020**, 116, 023507	3.4	12
90	Design of compositionally graded contact layers for MOCVD grown high Al-content AlGaN transistors. *Applied Physics Letters*, **2019**, 115, 043502	3.4	12
89	Quantum Capacitance in N-Polar GaN/AlGaN/GaN Heterostructures. *IEEE Electron Device Letters*, **2012**, 33, 991-993	4.4	12
88	A study of electrically active traps in AlGaN/GaN high electron mobility transistor. *Applied Physics Letters*, **2013**, 103, 173520	3.4	12
87	A self-limiting layer-by-layer etching technique for 2H-MoS2. *Applied Physics Express*, **2017**, 10, 035201	2.4	11
86	Metal-oxide barrier extraction by Fowler-Nordheim tunnelling onset in Al2O3-on-GaN MOS diodes. *Electronics Letters*, **2012**, 48, 347	1.1	11
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84	RF operation in graded AlxGa1□N (x = 0.65 to 0.82) channel transistors. *Electronics Letters*, **2018**, 54, 1351-1353	1.1	11
83	Electronic transport of titanate heterostructures and their potential as channels on (001) Si. *Journal of Applied Physics*, **2015**, 118, 105301	2.5	10
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81	Design and Fabrication of Vertical GaN p-n Diode With Step-Etched Triple-Zone Junction Termination Extension. *IEEE Transactions on Electron Devices*, **2020**, 67, 3553-3557	2.9	10
80	Recent progress of tunnel junction-based ultra-violet light emitting diodes. *Japanese Journal of Applied Physics*, **2019**, 58, SC0805	1.4	9
79	Demonstration of Wide Bandgap AlGaN/GaN Negative-Capacitance High-Electron-Mobility Transistors (NC-HEMTs) Using Barium Titanate Ferroelectric Gates. *Advanced Electronic Materials*, **2020**, 6, 2000074	6.4	9
78	Electron tunneling spectroscopy study of electrically active traps in AlGaN/GaN high electron mobility transistors. *Applied Physics Letters*, **2013**, 103, 223507	3.4	9
77	Electrothermal Characteristics of Delta-Doped $beta$ -Ga2O3 Metal□emiconductor Field-Effect Transistors. *IEEE Transactions on Electron Devices*, **2019**, 66, 5360-5366	2.9	8
76	Velocity saturation in La-doped BaSnO3 thin films. *Applied Physics Letters*, **2019**, 115, 092102	3.4	7
75	Current gain in sub-10 nm base GaN tunneling hot electron transistors with AlN emitter barrier. *Applied Physics Letters*, **2015**, 106, 032101	3.4	7
74	Large-area SnSe2/GaN heterojunction diodes grown by molecular beam epitaxy. *Applied Physics Letters*, **2017**, 111, 202101	3.4	7
73	Polarization engineered 1-dimensional electron gas arrays. *Journal of Applied Physics*, **2012**, 111, 043715	2.5	7
72	Planar and three-dimensional damage-free etching of □Ga2O3 using atomic gallium flux. *Applied Physics Letters*, **2021**, 119, 123503	3.4	7
71	Improved DC-RF dispersion with epitaxial passivation for high linearity graded AlGaN channel field effect transistors. *Applied Physics Express*, **2020**, 13, 036502	2.4	6
70	Energy band engineering for photoelectrochemical etching of GaN/InGaN heterostructures. *Applied Physics Letters*, **2014**, 104, 243503	3.4	6
69	Characterization of a dielectric/GaN system using atom probe tomography. *Applied Physics Letters*, **2013**, 103, 151601	3.4	6
68	First principles calculation of polarization induced interfacial charges in GaN/AlN heterostructures. *Applied Physics Letters*, **2011**, 98, 232114	3.4	6
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66	Analysis of plasma-modes of a gated bilayer system in high electron mobility transistors. *Journal of Applied Physics*, **2016**, 119, 193102	2.5	6
65	Current gain above 10 in sub-10 nm base III-Nitride tunneling hot electron transistors with GaN/AlN emitter. *Applied Physics Letters*, **2016**, 108, 192101	3.4	6
64	Resonant tunneling assisted propagation and amplification of plasmons in high electron mobility transistors. *Journal of Applied Physics*, **2016**, 119, 013102	2.5	6

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62	Ultrafast Thermoreflectance Imaging and Electrothermal Modeling of Ga2O3 MESFETs. *IEEE Electron Device Letters*, **2020**, 41, 641-644	4.4	5
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60	Improved Performance of Plasma-Assisted Molecular Beam Epitaxy Grown AlGaN/GaN High Electron Mobility Transistors with Gate-Recess and CF4-Treatment. *Applied Physics Express*, **2008**, 1, 061101	2.4	5
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57	High Current Density SmTiO3/SrTiO3 Field-Effect Transistors. *ACS Applied Electronic Materials*, **2020**, 2, 510-516	4	4
56	Understanding the Growth Mechanism of (AlxGa1)2O3 by Atom Probe Tomography. *Microscopy and Microanalysis*, **2019**, 25, 2508-2509	0.5	4
55	Low frequency noise in chemical vapor deposited MoS2 **2013**,		4
54	Fabrication and characterization of a piezoelectric gallium nitride switch for optical MEMS applications. *Smart Materials and Structures*, **2012**, 21, 094003	3.4	4
53	Methods for attaining high interband tunneling current in III-Nitrides **2012**,		4
52	High-permittivity dielectric edge termination for vertical high voltage devices. *Journal of Computational Electronics*, **2020**, 19, 1538-1545	1.8	4
51	Low voltage drop tunnel junctions grown monolithically by MOCVD. *Applied Physics Letters*, **2021**, 118, 053503	3.4	4
50	Polarization-Engineered Ga-Face GaN-Based Heterostructures for Normally-Off Heterostructure Field-Effect Transistors. *Journal of Electronic Materials*, **2013**, 42, 10-14	1.9	3
49	Elastic scattering by hot electrons and apparent lifetime of longitudinal optical phonons in gallium nitride. *Applied Physics Letters*, **2015**, 107, 262101	3.4	3
48	Graded nanowire ultraviolet LEDs by polarization engineering **2012**,		3
47	Fully transparent GaN homojunction tunnel junction-enabled cascaded blue LEDs. *Applied Physics Letters*, **2020**, 117, 051103	3.4	3
46	Ultra-Wide Bandgap AlxGa1-xN Channel Transistors. *International Journal of High Speed Electronics and Systems*, **2019**, 28, 1940009	0.5	3

45	Calibrated Digital Predistortion Using a Vector Network Analyzer as the Receiver **2019**,		3
44	All-MOCVD-grown gallium nitride diodes with ultra-low resistance tunnel junctions. *Journal Physics D: Applied Physics*, **2021**, 54, 155103	3	3
43	Design of AlGaN-based lasers with a buried tunnel junction for sub-300 nm emission. *Semiconductor Science and Technology*, **2019**, 34, 074002	1.8	2
42	Room temperature detection of plasma resonances using multiple 2DEG channels in HEMT **2015**,		2
41	Small-signal characteristics of graded AlGaN channel PolFETs **2017**,		2
40	Analysis of Thermal Characteristics of Gallium Oxide Field-Effect-Transistors **2018**,		2
39	Point and Extended Defects in Ultra Wide Band Gap □Ga2O3 Interfaces. *Microscopy and Microanalysis*, **2017**, 23, 1454-1455	0.5	2
38	Determination of trap energy levels in AlGaN/GaN HEMT **2013**,		2
37	Effect of optical phonon scattering on the performance limits of ultrafast GaN transistors **2011**,		2
36	Electron transport in nitrogen-polar high electron mobility transistors. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, S960-S963		2
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32	High-Current-Density Enhancement-Mode Ultrawide-Bandgap AlGaN Channel Metal□nsulator□emiconductor Heterojunction Field-Effect Transistors with a Threshold Voltage of 5 V. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2000576	2.5	2
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