

Siddharth Rajan

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Gallium oxide power electronics. <i>APL Materials</i> , 2022 , 10, 029201	5.7	33
205	Si doping in MOCVD grown (010) $(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ thin films. <i>Journal of Applied Physics</i> , 2022 , 131, 145301	2.5	5
204	Integration of high permittivity BaTiO_3 with $\text{AlGaIn}/\text{GaIn}$ for near-theoretical breakdown field kV-class transistors. <i>Applied Physics Letters</i> , 2021 , 119, 193501	3.4	2
203	Atomic scale investigation of aluminum incorporation, defects, and phase stability in $(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ films. <i>APL Materials</i> , 2021 , 9, 051103	5.7	20
202	Hybrid $\text{BaTiO}_3/\text{SiN}_x/\text{AlGaIn}/\text{GaIn}$ lateral Schottky barrier diodes with low turn-on and high breakdown performance. <i>Applied Physics Letters</i> , 2021 , 119, 013504	3.4	2
201	Point Defects and Alloy Incorporation in Ultrawide Bandgap $(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ Films. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2140-2142	0.5	1
200	Small signal analysis of ultra-wide bandgap $\text{Al}_{0.7}\text{Ga}_{0.3}\text{N}$ channel MESFETs. <i>Microelectronic Engineering</i> , 2021 , 237, 111495	2.5	1
199	Electron transport of perovskite oxide BaSnO_3 on (110) DyScO_3 substrate with channel-recess for ferroelectric field effect transistors. <i>Applied Physics Letters</i> , 2021 , 118, 042105	3.4	2
198	High-Current-Density Enhancement-Mode Ultrawide-Bandgap AlGaIn Channel Metal-Insulator-Semiconductor Heterojunction Field-Effect Transistors with a Threshold Voltage of 5 V. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021 , 15, 2000576	2.5	2
197	Low voltage drop tunnel junctions grown monolithically by MOCVD. <i>Applied Physics Letters</i> , 2021 , 118, 053503	3.4	4
196	Breakdown Voltage Enhancement in ScAlN/GaIn High-Electron-Mobility Transistors by High-k Bismuth Zinc Niobate Oxide. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 3333-3338	2.9	2
195	Improved forward voltage and external quantum efficiency scaling in multi-active region III-nitride LEDs. <i>Applied Physics Express</i> , 2021 , 14, 092003	2.4	2
194	Depth-resolved cathodoluminescence and surface photovoltage spectroscopies of gallium vacancies in AlGa_2O_3 with neutron irradiation and forming gas anneals. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2021 , 39, 052205	1.3	1
193	Spectral Measurement of the Breakdown Limit of AlGa_2O_3 and Tunnel Ionization of Self-Trapped Excitons and Holes. <i>Physical Review Applied</i> , 2021 , 16,	4.3	1
192	Planar and three-dimensional damage-free etching of AlGa_2O_3 using atomic gallium flux. <i>Applied Physics Letters</i> , 2021 , 119, 123503	3.4	7
191	Electrostatic Engineering Using Extreme Permittivity Materials for Ultra-Wide Bandgap Semiconductor Transistors. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 29-35	2.9	21
190	All-MOCVD-grown gallium nitride diodes with ultra-low resistance tunnel junctions. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 155103	3	3

189	Γ (Al _x Ga _(1-x)) ₂ O ₃ epitaxial growth, doping and transport. <i>Semiconductors and Semimetals</i> , 2021 , 107, 49-76	0.6	
188	Local electric field measurement in GaN diodes by exciton Franz-Keldysh photocurrent spectroscopy. <i>Applied Physics Letters</i> , 2020 , 116, 202102	3.4	1
187	High electron density Γ (Al _{0.17} Ga _{0.83}) ₂ O ₃ /Ga ₂ O ₃ modulation doping using an ultra-thin (1 nm) spacer layer. <i>Journal of Applied Physics</i> , 2020 , 127, 215706	2.5	31
186	Probing unintentional Fe impurity incorporation in MOCVD homoepitaxy GaN: Toward GaN vertical power devices. <i>Journal of Applied Physics</i> , 2020 , 127, 215707	2.5	15
185	High-Current Perovskite Oxide BaTiO ₃ /BaSnO ₃ Heterostructure Field Effect Transistors. <i>IEEE Electron Device Letters</i> , 2020 , 41, 621-624	4.4	5
184	Al _{0.65} Ga _{0.35} N/Al _{0.4} Ga _{0.6} N Micro-Channel Heterojunction Field Effect Transistors With Current Density Over 900 mA/mm. <i>IEEE Electron Device Letters</i> , 2020 , 41, 677-680	4.4	12
183	Probing Charge Transport and Background Doping in Metal-Organic Chemical Vapor Deposition-Grown (010) Γ Ga ₂ O ₃ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 2000145	2.5	51
182	Demonstration of Wide Bandgap AlGa _N /Ga _N Negative-Capacitance High-Electron-Mobility Transistors (NC-HEMTs) Using Barium Titanate Ferroelectric Gates. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000074	6.4	9
181	Improved DC-RF dispersion with epitaxial passivation for high linearity graded AlGa _N channel field effect transistors. <i>Applied Physics Express</i> , 2020 , 13, 036502	2.4	6
180	Ultrafast Thermoreflectance Imaging and Electrothermal Modeling of Γ Ga ₂ O ₃ MESFETs. <i>IEEE Electron Device Letters</i> , 2020 , 41, 641-644	4.4	5
179	High Current Density SmTiO ₃ /SrTiO ₃ Field-Effect Transistors. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 510-516	4	4
178	BaTiO ₃ /Al _{0.58} Ga _{0.42} N lateral heterojunction diodes with breakdown field exceeding 8 MV/cm. <i>Applied Physics Letters</i> , 2020 , 116, 023507	3.4	12
177	Ultra-Wide Bandgap Al _x Ga _(1-x) N Channel Transistors. <i>Selected Topics in Electronics and Systems</i> , 2020 , 163-176	0	
176	Field-Effect Transistors 3. <i>Springer Series in Materials Science</i> , 2020 , 609-621	0.9	
175	All MOCVD grown Al _{0.7} Ga _{0.3} N/Al _{0.5} Ga _{0.5} N HFET: An approach to make ohmic contacts to Al-rich AlGa _N channel transistors. <i>Solid-State Electronics</i> , 2020 , 164, 107696	1.7	10
174	Linearity Improvement With AlGa _N Polarization- Graded Field Effect Transistors With Low Pressure Chemical Vapor Deposition Grown Si _N _x Passivation. <i>IEEE Electron Device Letters</i> , 2020 , 41, 19-22	4.4	20
173	Nanoscale etching of perovskite oxides for field effect transistor applications. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020 , 38, 012201	1.3	6
172	Electro-thermal co-design of Γ (Al _x Ga _(1-x)) ₂ O ₃ /Ga ₂ O ₃ modulation doped field effect transistors. <i>Applied Physics Letters</i> , 2020 , 117, 153501	3.4	25

171	Molecular beam epitaxy of GaN on 2H-MoS ₂ . <i>Applied Physics Letters</i> , 2020 , 117, 123102	3.4	0
170	Design and Fabrication of Vertical GaN p-n Diode With Step-Etched Triple-Zone Junction Termination Extension. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 3553-3557	2.9	10
169	The 2020 UV emitter roadmap. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 503001	3	123
168	Mg acceptor doping in MOCVD (010) β -Ga ₂ O ₃ . <i>Applied Physics Letters</i> , 2020 , 117, 222106	3.4	19
167	High-permittivity dielectric edge termination for vertical high voltage devices. <i>Journal of Computational Electronics</i> , 2020 , 19, 1538-1545	1.8	4
166	Fully transparent GaN homojunction tunnel junction-enabled cascaded blue LEDs. <i>Applied Physics Letters</i> , 2020 , 117, 051103	3.4	3
165	Deep-Recessed β -Ga ₂ O ₃ Delta-Doped Field-Effect Transistors With In Situ Epitaxial Passivation. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 4813-4819	2.9	14
164	2D Materials for Universal Thermal Imaging of Micro- and Nanodevices: An Application to Gallium Oxide Electronics. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 2945-2953	4	14
163	III-Nitride Tunneling Hot Electron Transfer Amplifier (THETA) 2020 , 109-157		0
162	Velocity saturation in La-doped BaSnO ₃ thin films. <i>Applied Physics Letters</i> , 2019 , 115, 092102	3.4	7
161	Atomic scale investigation of chemical heterogeneity in β -(Al _x Ga _{1-x}) ₂ O ₃ films using atom probe tomography. <i>Applied Physics Letters</i> , 2019 , 115, 132105	3.4	13
160	Breakdown Characteristics of β -(Al _{0.22} Ga _{0.78}) ₂ O ₃ /Ga ₂ O ₃ Field-Plated Modulation-Doped Field-Effect Transistors. <i>IEEE Electron Device Letters</i> , 2019 , 40, 1241-1244	4.4	51
159	Enhanced n-type β -Ga ₂ O ₃ (2 × 01) gate stack performance using Al ₂ O ₃ /SiO ₂ bi-layer dielectric. <i>Applied Physics Letters</i> , 2019 , 114, 212106	3.4	12
158	Recent progress of tunnel junction-based ultra-violet light emitting diodes. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SC0805	1.4	9
157	Al _{0.75} Ga _{0.25} N/Al _{0.6} Ga _{0.4} N heterojunction field effect transistor with FT of 40 GHz. <i>Applied Physics Express</i> , 2019 , 12, 066502	2.4	15
156	Design of AlGaIn-based lasers with a buried tunnel junction for sub-300 nm emission. <i>Semiconductor Science and Technology</i> , 2019 , 34, 074002	1.8	2
155	Compositionally Graded III-N HEMTs for Improved Linearity: A Simulation Study. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 2151-2157	2.9	13
154	Understanding the Growth Mechanism of β -(Al _x Ga _{1-x}) ₂ O ₃ by Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2019 , 25, 2508-2509	0.5	4

153	β -Ga ₂ O ₃ Delta-Doped Field-Effect Transistors With Current Gain Cutoff Frequency of 27 GHz. <i>IEEE Electron Device Letters</i> , 2019 , 40, 1052-1055	4.4	71
152	Design of compositionally graded contact layers for MOCVD grown high Al-content AlGa _N transistors. <i>Applied Physics Letters</i> , 2019 , 115, 043502	3.4	12
151	Mechanism of Si doping in plasma assisted MBE growth of β -Ga ₂ O ₃ . <i>Applied Physics Letters</i> , 2019 , 115, 152106	3.4	26
150	Identification of critical buffer traps in Si doped β -Ga ₂ O ₃ MESFETs. <i>Applied Physics Letters</i> , 2019 , 115, 153501	3.4	25
149	Electrothermal Characteristics of Delta-Doped β -Ga ₂ O ₃ Metal-Semiconductor Field-Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 5360-5366	2.9	8
148	Polarization Engineering of AlGa _N /Ga _N HEMT With Graded InGa _N Sub-Channel for High-Linearity X-Band Applications. <i>IEEE Electron Device Letters</i> , 2019 , 40, 522-525	4.4	16
147	Recent Progress in III-Nitride Tunnel Junction-Based Optoelectronics. <i>International Journal of High Speed Electronics and Systems</i> , 2019 , 28, 1940012	0.5	0
146	Epitaxial passivation of delta doped β -Ga ₂ O ₃ field effect transistors 2019 ,		1
145	Ultra-Wide Bandgap Al _x Ga _{1-x} N Channel Transistors. <i>International Journal of High Speed Electronics and Systems</i> , 2019 , 28, 1940009	0.5	3
144	Calibrated Digital Predistortion Using a Vector Network Analyzer as the Receiver 2019 ,		3
143	Metal/BaTiO ₃ / β -Ga ₂ O ₃ dielectric heterojunction diode with 5.7 MV/cm breakdown field. <i>Applied Physics Letters</i> , 2019 , 115, 252104	3.4	48
142	Zeeman spin-splitting in the (010) β -Ga ₂ O ₃ two-dimensional electron gas. <i>Applied Physics Letters</i> , 2019 , 115, 262103	3.4	0
141	Evaluation of Low-Temperature Saturation Velocity in β -(Al _x Ga _{1-x}) ₂ O ₃ /Ga ₂ O ₃ Modulation-Doped Field-Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 1574-1578	2.9	48
140	Design of Transistors Using High-Permittivity Materials. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 896-900	2.9	23
139	Advances in Ga ₂ O ₃ solar-blind UV photodetectors 2019 , 369-399		23
138	Low-pressure CVD-grown β -Ga ₂ O ₃ bevel-field-plated Schottky barrier diodes. <i>Applied Physics Express</i> , 2018 , 11, 031101	2.4	81
137	Delta Doped β -Ga ₂ O ₃ Field Effect Transistors With Regrown Ohmic Contacts. <i>IEEE Electron Device Letters</i> , 2018 , 39, 568-571	4.4	75
136	Tunnel-injected sub 290 nm ultra-violet light emitting diodes with 2.8% external quantum efficiency. <i>Applied Physics Letters</i> , 2018 , 112, 071107	3.4	45

135	Demonstration of high mobility and quantum transport in modulation-doped $\text{Al}_x\text{Ga}_{1-x}\text{O}_3/\text{Ga}_2\text{O}_3$ heterostructures. <i>Applied Physics Letters</i> , 2018 , 112, 173502	3.4	192
134	High Al-Content AlGa _N Transistor With 0.5 A/mm Current Density and Lateral Breakdown Field Exceeding 3.6 MV/cm. <i>IEEE Electron Device Letters</i> , 2018 , 39, 256-259	4.4	40
133	Room Temperature Intrinsic Ferromagnetism in Epitaxial Manganese Selenide Films in the Monolayer Limit. <i>Nano Letters</i> , 2018 , 18, 3125-3131	11.5	353
132	Analysis of Thermal Characteristics of Gallium Oxide Field-Effect-Transistors 2018 ,		2
131	Trapping Effects in Si δ -Doped β -Ga ₂ O ₃ MESFETs on an Fe-Doped β -Ga ₂ O ₃ Substrate. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1042-1045	4.4	64
130	Optical signatures of deep level defects in Ga ₂ O ₃ . <i>Applied Physics Letters</i> , 2018 , 112, 242102	3.4	82
129	Demonstration of $\text{Al}_x\text{Ga}_{1-x}\text{O}_3/\text{Ga}_2\text{O}_3$ double heterostructure field effect transistors. <i>Applied Physics Letters</i> , 2018 , 112, 233503	3.4	97
128	Ultrawide-Bandgap Semiconductors: Research Opportunities and Challenges. <i>Advanced Electronic Materials</i> , 2018 , 4, 1600501	6.4	520
127	MBE-Grown β -Ga ₂ O ₃ -Based Schottky UV-C Photodetectors With Rectification Ratio $\sim 10^7$. <i>IEEE Photonics Technology Letters</i> , 2018 , 30, 2025-2028	2.2	44
126	Polarity governs atomic interaction through two-dimensional materials. <i>Nature Materials</i> , 2018 , 17, 999-1004	10.4	107
125	Effect of buffer iron doping on delta-doped β -Ga ₂ O ₃ metal semiconductor field effect transistors. <i>Applied Physics Letters</i> , 2018 , 113, 123501	3.4	39
124	RF operation in graded $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ($x = 0.65$ to 0.82) channel transistors. <i>Electronics Letters</i> , 2018 , 54, 1351-1353	1.1	11
123	X-Band Power and Linearity Performance of Compositionally Graded AlGa _N Channel Transistors. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1884-1887	4.4	17
122	Design and Demonstration of $(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3/\text{Ga}_2\text{O}_3$ Double Heterostructure Field Effect Transistor (DHFET) 2018 ,		2
121	Demonstration of zero bias responsivity in MBE grown β -Ga ₂ O ₃ lateral deep-UV photodetector. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 060313	1.4	47
120	Ultra-wide band gap AlGa _N polarization-doped field effect transistor. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 074103	1.4	14
119	A self-limiting layer-by-layer etching technique for 2H-MoS ₂ . <i>Applied Physics Express</i> , 2017 , 10, 035201	2.4	11
118	Tunnel-injected sub-260 nm ultraviolet light emitting diodes. <i>Applied Physics Letters</i> , 2017 , 110, 201102	3.4	48

117	Delta-doped Gallium oxide field-effect transistor. <i>Applied Physics Express</i> , 2017 , 10, 051102	2.4	94
116	High responsivity in molecular beam epitaxy grown Ga ₂ O ₃ metal semiconductor metal solar blind deep-UV photodetector. <i>Applied Physics Letters</i> , 2017 , 110, 221107	3.4	124
115	Molecular beam epitaxy of 2D-layered gallium selenide on GaN substrates. <i>Journal of Applied Physics</i> , 2017 , 121, 094302	2.5	38
114	Small-signal characteristics of graded AlGa _N channel Po _L FETs 2017 ,		2
113	Atomic Scale Structure and Defects in 2D GaSe Films and Van der Waals Interface. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1728-1729	0.5	
112	Modulation-doped Al _{0.2} Ga _{0.8} O ₃ /Ga ₂ O ₃ field-effect transistor. <i>Applied Physics Letters</i> , 2017 , 111, 023502	3.4	188
111	Point and Extended Defects in Ultra Wide Band Gap Ga ₂ O ₃ Interfaces. <i>Microscopy and Microanalysis</i> , 2017 , 23, 1454-1455	0.5	2
110	Reflective metal/semiconductor tunnel junctions for hole injection in AlGa _N UV LEDs. <i>Applied Physics Letters</i> , 2017 , 111, 051104	3.4	26
109	Large-area SnSe ₂ /GaN heterojunction diodes grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2017 , 111, 202101	3.4	7
108	Ultralow-voltage-drop GaN/InGa _N /GaN tunnel junctions with 12% indium content. <i>Applied Physics Express</i> , 2017 , 10, 121003	2.4	13
107	Graded AlGa _N Channel Transistors for Improved Current and Power Gain Linearity. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 3114-3119	2.9	35
106	Changes in the Editorial Board. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 4556-4556	2.9	
105	Exploring Thermal Properties of MoS ₂ Using In Situ Quantitative STEM. <i>Microscopy and Microanalysis</i> , 2016 , 22, 912-913	0.5	
104	Deep level defects in N-rich and In-rich In _x Ga _{1-x} N: in composition dependence. <i>Superlattices and Microstructures</i> , 2016 , 99, 67-71	2.8	
103	Numerical Analysis of Terahertz Emissions From an Ungated HEMT Using Full-Wave Hydrodynamic Model. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 990-996	2.9	16
102	Analysis of plasma-modes of a gated bilayer system in high electron mobility transistors. <i>Journal of Applied Physics</i> , 2016 , 119, 193102	2.5	6
101	Low-resistance GaN tunnel homojunctions with 150 kA/cm ² current and repeatable negative differential resistance. <i>Applied Physics Letters</i> , 2016 , 108, 131103	3.4	37
100	Current gain above 10 in sub-10 nm base III-Nitride tunneling hot electron transistors with GaN/AlN emitter. <i>Applied Physics Letters</i> , 2016 , 108, 192101	3.4	6

99	Design of p-type cladding layers for tunnel-injected UV-A light emitting diodes. <i>Applied Physics Letters</i> , 2016 , 109, 191105	3.4	28
98	Resonant tunneling assisted propagation and amplification of plasmons in high electron mobility transistors. <i>Journal of Applied Physics</i> , 2016 , 119, 013102	2.5	6
97	Polarity in GaN and ZnO: Theory, measurement, growth, and devices. <i>Applied Physics Reviews</i> , 2016 , 3, 041303	17.3	85
96	High current density 2D/3D MoS ₂ /GaN Esaki tunnel diodes. <i>Applied Physics Letters</i> , 2016 , 109, 183505	3.4	44
95	Design and demonstration of ultra-wide bandgap AlGa _N tunnel junctions. <i>Applied Physics Letters</i> , 2016 , 109, 121102	3.4	43
94	Amplified spontaneous emission of phonons as a likely mechanism for density-dependent velocity saturation in GaN transistors. <i>Applied Physics Express</i> , 2016 , 9, 094101	2.4	16
93	AlGa _N channel field effect transistors with graded heterostructure ohmic contacts. <i>Applied Physics Letters</i> , 2016 , 109, 133508	3.4	52
92	Enhanced light extraction in tunnel junction-enabled top emitting UV LEDs. <i>Applied Physics Express</i> , 2016 , 9, 052102	2.4	23
91	GaN-based three-junction cascaded light-emitting diode with low-resistance InGa _N tunnel junctions. <i>Applied Physics Express</i> , 2015 , 8, 082103	2.4	37
90	Common Emitter Current and Voltage Gain in III-Nitride Tunneling Hot Electron Transistors. <i>IEEE Electron Device Letters</i> , 2015 , 36, 436-438	4.4	1
89	Recess-Free Nonalloyed Ohmic Contacts on Graded AlGa _N Heterojunction FETs. <i>IEEE Electron Device Letters</i> , 2015 , 36, 226-228	4.4	17
88	Sub 300 nm wavelength III-Nitride tunnel-injected ultraviolet LEDs 2015 ,		4
87	Room temperature detection of plasma resonances using multiple 2DEG channels in HEMT 2015 ,		2
86	Current gain in sub-10 nm base GaN tunneling hot electron transistors with AlN emitter barrier. <i>Applied Physics Letters</i> , 2015 , 106, 032101	3.4	7
85	Density-dependent electron transport and precise modeling of GaN high electron mobility transistors. <i>Applied Physics Letters</i> , 2015 , 107, 153504	3.4	44
84	Layer-transferred MoS ₂ /GaN PN diodes. <i>Applied Physics Letters</i> , 2015 , 107, 103505	3.4	53
83	Electronic transport of titanate heterostructures and their potential as channels on (001) Si. <i>Journal of Applied Physics</i> , 2015 , 118, 105301	2.5	10
82	Transferred large area single crystal MoS ₂ field effect transistors. <i>Applied Physics Letters</i> , 2015 , 107, 193503	3.4	19

81	Elastic scattering by hot electrons and apparent lifetime of longitudinal optical phonons in gallium nitride. <i>Applied Physics Letters</i> , 2015 , 107, 262101	3-4	3
80	Interband tunneling for hole injection in III-nitride ultraviolet emitters. <i>Applied Physics Letters</i> , 2015 , 106, 141103	3-4	67
79	Power switching transistors based on GaN and AlGa _N channels 2015 ,		1
78	p-type doping of MoS ₂ thin films using Nb. <i>Applied Physics Letters</i> , 2014 , 104, 092104	3-4	236
77	Electron transport in large-area epitaxial MoS ₂ 2014 ,		1
76	Lateral energy band engineering of Al ₂ O ₃ /III-nitride interfaces 2014 ,		1
75	1/f hopping noise in molybdenum disulphide 2014 ,		1
74	Interface Charge Engineering for Enhancement-Mode GaN MISHEMTs. <i>IEEE Electron Device Letters</i> , 2014 , 35, 312-314	4-4	66
73	Modeling of high composition AlGa _N channel high electron mobility transistors with large threshold voltage. <i>Applied Physics Letters</i> , 2014 , 105, 263503	3-4	51
72	Growth and electrical characterization of two-dimensional layered MoS ₂ /SiC heterojunctions. <i>Applied Physics Letters</i> , 2014 , 105, 203504	3-4	29
71	Energy band line-up of atomic layer deposited Al ₂ O ₃ on InGa ₂ O ₃ . <i>Applied Physics Letters</i> , 2014 , 104, 162106	3-4	39
70	Modulation of over 10 ¹⁴ cm ⁻² electrons in SrTiO ₃ /GdTiO ₃ heterostructures. <i>Applied Physics Letters</i> , 2014 , 104, 182904	3-4	35
69	Epitaxial growth of large area single-crystalline few-layer MoS ₂ with high space charge mobility of 192 cm ² V ⁻¹ s ⁻¹ . <i>Applied Physics Letters</i> , 2014 , 105, 072105	3-4	49
68	Energy band engineering for photoelectrochemical etching of GaN/InGa _N heterostructures. <i>Applied Physics Letters</i> , 2014 , 104, 243503	3-4	6
67	III-nitride tunnel junctions for efficient solid state lighting 2014 ,		1
66	InGa _N /GaN tunnel junctions for hole injection in GaN light emitting diodes. <i>Applied Physics Letters</i> , 2014 , 105, 141104	3-4	49
65	Negative differential resistance in GaN tunneling hot electron transistors. <i>Applied Physics Letters</i> , 2014 , 105, 202111	3-4	1
64	Electron tunneling spectroscopy study of electrically active traps in AlGa _N /GaN high electron mobility transistors. <i>Applied Physics Letters</i> , 2013 , 103, 223507	3-4	9

63	Low frequency noise in chemical vapor deposited MoS ₂ 2013 ,		4
62	Direct observation of 0.57 eV trap-related RF output power reduction in AlGa _N /Ga _N high electron mobility transistors. <i>Solid-State Electronics</i> , 2013 , 80, 19-22	1.7	50
61	Polarization-Engineered Ga-Face Ga _N -Based Heterostructures for Normally-Off Heterostructure Field-Effect Transistors. <i>Journal of Electronic Materials</i> , 2013 , 42, 10-14	1.9	3
60	Ohmic contact formation between metal and AlGa _N /Ga _N heterostructure via graphene insertion. <i>Applied Physics Letters</i> , 2013 , 102, 153501	3.4	23
59	Gd _N nanoisland-based Ga _N tunnel junctions. <i>Nano Letters</i> , 2013 , 13, 2570-5	11.5	49
58	N-polar Ga _N epitaxy and high electron mobility transistors. <i>Semiconductor Science and Technology</i> , 2013 , 28, 074009	1.8	124
57	Prospects for the application of Ga _N power devices in hybrid electric vehicle drive systems. <i>Semiconductor Science and Technology</i> , 2013 , 28, 074012	1.8	84
56	Large area single crystal (0001) oriented MoS ₂ . <i>Applied Physics Letters</i> , 2013 , 102, 252108	3.4	178
55	Tunneling-based carrier regeneration in cascaded Ga _N light emitting diodes to overcome efficiency droop. <i>Applied Physics Letters</i> , 2013 , 103, 081107	3.4	59
54	Determination of trap energy levels in AlGa _N /Ga _N HEMT 2013 ,		2
53	Low resistance Ga _N /InGa _N /Ga _N tunnel junctions. <i>Applied Physics Letters</i> , 2013 , 102, 113503	3.4	89
52	Gallium nitride electronics. <i>Semiconductor Science and Technology</i> , 2013 , 28, 070301	1.8	19
51	A study of electrically active traps in AlGa _N /Ga _N high electron mobility transistor. <i>Applied Physics Letters</i> , 2013 , 103, 173520	3.4	12
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