

# Siddharth Rajan

## List of Publications by Year in descending order

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225  
papers

9,998  
citations

32410

55  
h-index

45040

94  
g-index

229  
all docs

229  
docs citations

229  
times ranked

9606  
citing authors

#	ARTICLE	IF	CITATIONS
1	Temperature dependent carrier transport in few-layered MoS <sub>2</sub> : from hopping to band transport. Journal Physics D: Applied Physics, 2022, 55, 195109.	1.3	3
2	Î <sup>2</sup> -Gallium oxide power electronics. APL Materials, 2022, 10, .	2.2	184
3	Si doping in MOCVD grown (010) Î <sup>2</sup> -(Al <sub>x</sub> Ga <sub>1-<sup>x</sup></sub> ) <sub>2</sub> O <sub>3</sub> thin films. Journal of Applied Physics, 2022, 131, .	1.1	15
4	Demonstration of BaTiO <sub>3</sub> Integrated kV-class AlGaN/GaN Schottky Barrier Diodes with Record Average Breakdown Electric Field. , 2022, , .		0
5	III-Nitride p-down green (520â€%nm) light emitting diodes with near-ideal voltage drop. Applied Physics Letters, 2022, 121, .	1.5	3
6	Small signal analysis of ultra-wide bandgap Al <sub>0.7</sub> Ga <sub>0.3</sub> N channel MESFETs. Microelectronic Engineering, 2021, 237, 111495.	1.1	2
7	Electron transport of perovskite oxide BaSnO <sub>3</sub> on (110) DyScO <sub>3</sub> substrate with channel-recess for ferroelectric field effect transistors. Applied Physics Letters, 2021, 118, .	1.5	7
8	Highâ€%Currentâ€%Density Enhancementâ€%Mode Ultrawideâ€%Bandgap AlGaN Channel Metalâ€%Insulatorâ€%Semiconductor Heterojunction Fieldâ€%Effect Transistors with a Threshold Voltage of 5â€%V. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000576.	1.2	5
9	Low voltage drop tunnel junctions grown monolithically by MOCVD. Applied Physics Letters, 2021, 118, .	1.5	11
10	Atomic scale investigation of aluminum incorporation, defects, and phase stability in Î <sup>2</sup> -(Al <sub>x</sub> Ga <sub>1-<sup>x</sup></sub> ) <sub>2</sub> O <sub>3</sub> films. APL Materials, 2021, 9, .	2.2	35
11	Hybrid BaTiO <sub>3</sub> /SiN <sub>x</sub> /AlGaN/GaN lateral Schottky barrier diodes with low turn-on and high breakdown performance. Applied Physics Letters, 2021, 119, 013504.	1.5	6
12	Point Defects and Alloy Incorporation in Ultrawide Bandgap Î <sup>2</sup> -(Al <sub>x</sub> Ga <sub>1-<sup>x</sup></sub> ) <sub>2</sub> O <sub>3</sub> Films. Microscopy and Microanalysis, 2021, 27, 2140-2142.	0.2	1
13	Breakdown Voltage Enhancement in ScAlN/GaN High-Electron-Mobility Transistors by High- <i>k</i> Bismuth Zinc Niobate Oxide. IEEE Transactions on Electron Devices, 2021, 68, 3333-3338.	1.6	14
14	Improved forward voltage and external quantum efficiency scaling in multi-active region III-nitride LEDs. Applied Physics Express, 2021, 14, 092003.	1.1	7
15	Depth-resolved cathodoluminescence and surface photovoltage spectroscopies of gallium vacancies in Î <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> with neutron irradiation and forming gas anneals. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	0.6	5
16	Spectral Measurement of the Breakdown Limit of Î <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> and Tunnel Ionization of Self-Trapped Excitons and Holes. Physical Review Applied, 2021, 16, .	1.5	17
17	Planar and three-dimensional damage-free etching of Î <sup>2</sup> -Ga <sub>2</sub> O <sub>3</sub> using atomic gallium flux. Applied Physics Letters, 2021, 119, .	1.5	17
18	Electrostatic Engineering Using Extreme Permittivity Materials for Ultra-Wide Bandgap Semiconductor Transistors. IEEE Transactions on Electron Devices, 2021, 68, 29-35.	1.6	30

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19	All-MOCVD-grown gallium nitride diodes with ultra-low resistance tunnel junctions. Journal Physics D: Applied Physics, 2021, 54, 155103.	1.3	5
20	$\text{In}^{2-}(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ epitaxial growth, doping and transport. Semiconductors and Semimetals, 2021, 107, 49-76.	0.4	0
21	Integration of high permittivity BaTiO <sub>3</sub> with AlGaIn/GaN for near-theoretical breakdown field kV-class transistors. Applied Physics Letters, 2021, 119, .	1.5	11
22	III-Nitride Tunneling Hot Electron Transfer Amplifier (THETA)., 2020, , 109-157.		1
23	All MOCVD grown Al <sub>0.7</sub> Ga <sub>0.3</sub> N/Al <sub>0.5</sub> Ga <sub>0.5</sub> N HFET: An approach to make ohmic contacts to Al-rich AlGaIn channel transistors. Solid-State Electronics, 2020, 164, 107696.	0.8	17
24	Linearity Improvement With AlGaIn Polarization- Graded Field Effect Transistors With Low Pressure Chemical Vapor Deposition Grown SiN <sub>x</sub> Passivation. IEEE Electron Device Letters, 2020, 41, 19-22.	2.2	36
25	Nanoscale etching of perovskite oxides for field effect transistor applications. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, .	0.6	8
26	Electro-thermal co-design of $\text{In}^{2-}(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3/\text{Ga}_2\text{O}_3$ modulation doped field effect transistors. Applied Physics Letters, 2020, 117, .	1.5	35
27	Molecular beam epitaxy of GaN on 2H-MoS <sub>2</sub> . Applied Physics Letters, 2020, 117, .	1.5	3
28	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.	1.6	17
29	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	1.3	289
30	Mg acceptor doping in MOCVD (010) $\text{In}^{2-}(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ . Applied Physics Letters, 2020, 117, .	1.5	37
31	High-permittivity dielectric edge termination for vertical high voltage devices. Journal of Computational Electronics, 2020, 19, 1538-1545.	1.3	7
32	Fully transparent GaN homojunction tunnel junction-enabled cascaded blue LEDs. Applied Physics Letters, 2020, 117, .	1.5	9
33	Deep-Recessed $\text{In}^{2-}(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ Delta-Doped Field-Effect Transistors With <i>In Situ</i> Epitaxial Passivation. IEEE Transactions on Electron Devices, 2020, 67, 4813-4819.	1.6	25
34	2D Materials for Universal Thermal Imaging of Micro- and Nanodevices: An Application to Gallium Oxide Electronics. ACS Applied Electronic Materials, 2020, 2, 2945-2953.	2.0	19
35	Local electric field measurement in GaN diodes by exciton Franz-Keldysh photocurrent spectroscopy. Applied Physics Letters, 2020, 116, .	1.5	2
36	High electron density $\text{In}^{2-}(\text{Al}_{0.17}\text{Ga}_{0.83})_2\text{O}_3/\text{Ga}_2\text{O}_3$ modulation doping using an ultra-thin (1%nm) spacer layer. Journal of Applied Physics, 2020, 127, .	1.1	64

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37	Probing unintentional Fe impurity incorporation in MOCVD homoepitaxy GaN: Toward GaN vertical power devices. Journal of Applied Physics, 2020, 127, 215707.	1.1	26
38	High-Current Perovskite Oxide BaTiO <sub>3</sub> /BaSnO <sub>3</sub> Heterostructure Field Effect Transistors. IEEE Electron Device Letters, 2020, 41, 621-624.	2.2	8
39	Al <sub>0.65</sub> Ga <sub>0.35</sub> N/Al <sub>0.4</sub> Ga <sub>0.6</sub> N Micro-Channel Heterojunction Field Effect Transistors With Current Density Over 900 mA/mm. IEEE Electron Device Letters, 2020, 41, 677-680.	2.2	19
40	Probing Charge Transport and Background Doping in Metalâ€Organic Chemical Vapor Depositionâ€Grown (010) Î²-Ga <sub>2</sub> O <sub>3</sub> . Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000145.	1.2	79
41	Demonstration of Wide Bandgap AlGaIn/GaN Negativeâ€Capacitance Highâ€Electronâ€Mobility Transistors (NCâ€HEMTs) Using Barium Titanate Ferroelectric Gates. Advanced Electronic Materials, 2020, 6, 2000074.	2.6	16
42	Improved DC-RF dispersion with epitaxial passivation for high linearity graded AlGaIn channel field effect transistors. Applied Physics Express, 2020, 13, 036502.	1.1	10
43	Ultrafast Thermoreflectance Imaging and Electrothermal Modeling of Î²-Ga <sub>2</sub> O <sub>3</sub> MESFETs. IEEE Electron Device Letters, 2020, 41, 641-644.	2.2	11
44	High Current Density SmTiO <sub>3</sub> /SrTiO <sub>3</sub> Field-Effect Transistors. ACS Applied Electronic Materials, 2020, 2, 510-516.	2.0	6
45	BaTiO <sub>3</sub> /Al <sub>0.58</sub> Ga <sub>0.42</sub> N lateral heterojunction diodes with breakdown field exceeding 8 MV/cm. Applied Physics Letters, 2020, 116, .	1.5	17
46	Ultra-Wide Bandgap Al <sub>x</sub> Ga <sub>1-x</sub> N Channel Transistors. Selected Topics in Electronics and Systems, 2020, , 163-176.	0.2	0
47	Field-Effect Transistors 3. Springer Series in Materials Science, 2020, , 609-621.	0.4	0
48	Materials and Device Engineering for High-Performance Gallium Oxide Devices. , 2020, , .		2
49	Understanding the Growth Mechanism of Î²-(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> by Atom Probe Tomography. Microscopy and Microanalysis, 2019, 25, 2508-2509.	0.2	4
50	Î²-Ga <sub>2</sub> O <sub>3</sub> Delta-Doped Field-Effect Transistors With Current Gain Cutoff Frequency of 27 GHz. IEEE Electron Device Letters, 2019, 40, 1052-1055.	2.2	119
51	Design of compositionally graded contact layers for MOCVD grown high Al-content AlGaIn transistors. Applied Physics Letters, 2019, 115, .	1.5	17
52	Mechanism of Si doping in plasma assisted MBE growth of Î²-Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2019, 115, .	1.5	41
53	Identification of critical buffer traps in Si Î²-doped Î²-Ga <sub>2</sub> O <sub>3</sub> MESFETs. Applied Physics Letters, 2019, 115, .	1.5	38
54	Electrothermal Characteristics of Delta-Doped Î²-Ga <sub>2</sub> O <sub>3</sub> Metalâ€Semiconductor Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 5360-5366.	1.6	19

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55	Velocity saturation in La-doped BaSnO <sub>3</sub> thin films. Applied Physics Letters, 2019, 115, .	1.5	9
56	Atomic scale investigation of chemical heterogeneity in $\hat{\Gamma}^2$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> films using atom probe tomography. Applied Physics Letters, 2019, 115, .	1.5	14
57	Breakdown Characteristics of $\beta$ -(Al <sub>0.22</sub> Ga <sub>0.78</sub> ) <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> O <sub>3</sub> Field-Plated Modulation-Doped Field-Effect Transistors. IEEE Electron Device Letters, 2019, 40, 1241-1244.	2.2	82
58	Enhanced <i>n</i> -type $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> gate stack performance using Al <sub>2</sub> O <sub>3</sub> /SiO <sub>2</sub> bi-layer dielectric. Applied Physics Letters, 2019, 114, .	1.5	26
59	Recent progress of tunnel junction-based ultra-violet light emitting diodes. Japanese Journal of Applied Physics, 2019, 58, SC0805.	0.8	19
60	Al <sub>0.75</sub> Ga <sub>0.25</sub> N/Al <sub>0.6</sub> Ga <sub>0.4</sub> N heterojunction field effect transistor with <i>f</i> <sub>T</sub> of 40 GHz. Applied Physics Express, 2019, 12, 066502.	1.1	24
61	Design of AlGa <sub>N</sub> -based lasers with a buried tunnel junction for sub-300 nm emission. Semiconductor Science and Technology, 2019, 34, 074002.	1.0	4
62	Compositionally Graded III-N HEMTs for Improved Linearity: A Simulation Study. IEEE Transactions on Electron Devices, 2019, 66, 2151-2157.	1.6	23
63	Polarization Engineering of AlGa <sub>N</sub> /Ga <sub>N</sub> HEMT With Graded InGa <sub>N</sub> Sub-Channel for High-Linearity X-Band Applications. IEEE Electron Device Letters, 2019, 40, 522-525.	2.2	29
64	Recent Progress in III-Nitride Tunnel Junction-Based Optoelectronics. International Journal of High Speed Electronics and Systems, 2019, 28, 1940012.	0.3	1
65	Metal/BaTiO <sub>3</sub> / $\beta$ -Ga <sub>2</sub> O <sub>3</sub> Dielectric Heterojunction Diode with 5.6 MV/cm Breakdown Field. , 2019, , .		0
66	Epitaxial passivation of delta doped $\beta$ -Ga <sub>2</sub> O <sub>3</sub> field effect transistors. , 2019, , .		2
67	RF Performance of 130 nm Al <sub>0.75</sub> Ga <sub>0.25</sub> N/Al <sub>0.6</sub> Ga <sub>0.4</sub> N HFETs with MBE-Regrown Contacts. , 2019, , .		0
68	Ultra-Wide Bandgap Al <sub>x</sub> Ga <sub>1-x</sub> N Channel Transistors. International Journal of High Speed Electronics and Systems, 2019, 28, 1940009.	0.3	4
69	Calibrated Digital Predistortion Using a Vector Network Analyzer as the Receiver. , 2019, , .		9
70	Metal/BaTiO <sub>3</sub> / $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> dielectric heterojunction diode with 5.7 MV/cm breakdown field. Applied Physics Letters, 2019, 115, .	1.5	76
71	Zeeman spin-splitting in the (010) $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> two-dimensional electron gas. Applied Physics Letters, 2019, 115, .	1.5	1
72	Evaluation of Low-Temperature Saturation Velocity in $\beta$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> O <sub>3</sub> Modulation-Doped Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 1574-1578.	1.6	66

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73	Design of Transistors Using High-Permittivity Materials. IEEE Transactions on Electron Devices, 2019, 66, 896-900.	1.6	33
74	Advances in Ga <sub>2</sub> O <sub>3</sub> solar-blind UV photodetectors. , 2019, , 369-399.		36
75	Low-pressure CVD-grown $\text{In}^{2-}\text{Ga}_{2-}\text{O}_{3-}$ bevel-field-plated Schottky barrier diodes. Applied Physics Express, 2018, 11, 031101.	1.1	115
76	Delta Doped $\text{In}^{2-}\text{Ga}_{2-}\text{O}_{3-}$ Field Effect Transistors With Regrown Ohmic Contacts. IEEE Electron Device Letters, 2018, 39, 568-571.	2.2	106
77	Tunnel-injected sub 290-nm ultra-violet light emitting diodes with 2.8% external quantum efficiency. Applied Physics Letters, 2018, 112, .	1.5	58
78	Demonstration of high mobility and quantum transport in modulation-doped $\text{In}^{2-}(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3/\text{Ga}_2\text{O}_3$ heterostructures. Applied Physics Letters, 2018, 112, .	1.5	264
79	High Al-Content AlGa <sub>N</sub> 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.	2.2	46
80	Room Temperature Intrinsic Ferromagnetism in Epitaxial Manganese Selenide Films in the Monolayer Limit. Nano Letters, 2018, 18, 3125-3131.	4.5	567
81	Ultrawide-bandgap Semiconductors: Research Opportunities and Challenges. Advanced Electronic Materials, 2018, 4, 1600501.	2.6	839
82	MBE-Grown $\text{In}^{2-}\text{Ga}_{2-}\text{O}_{3-}$ -Based Schottky UV-C Photodetectors With Rectification Ratio $\sim 10^7$ . IEEE Photonics Technology Letters, 2018, 30, 2025-2028.	1.3	55
83	Polarity governs atomic interaction through two-dimensional materials. Nature Materials, 2018, 17, 999-1004.	13.3	182
84	Effect of buffer iron doping on delta-doped $\text{In}^{2-}\text{Ga}_2\text{O}_3$ metal semiconductor field effect transistors. Applied Physics Letters, 2018, 113, .	1.5	54
85	RF operation in graded Al <sub>x</sub> Ga <sub>1-x</sub> N ( $x = 0.65$ to $0.82$ ) channel transistors. Electronics Letters, 2018, 54, 1351-1353.	0.5	15
86	All MOCVD grown 250 nm gate length Al <sub>0.70</sub> Ga <sub>0.30</sub> N MESFETs. , 2018, , .		1
87	X-Band Power and Linearity Performance of Compositionally Graded AlGa <sub>N</sub> Channel Transistors. IEEE Electron Device Letters, 2018, 39, 1884-1887.	2.2	26
88	Ultra-wide band gap materials for high frequency applications. , 2018, , .		3
89	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
90	Demonstration of zero bias responsivity in MBE grown $\text{In}^{2-}\text{Ga}_2\text{O}_3$ lateral deep-UV photodetector. Japanese Journal of Applied Physics, 2018, 57, 060313.	0.8	64

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91	Ultra-wide band gap AlGa <sub>2</sub> N polarization-doped field effect transistor. Japanese Journal of Applied Physics, 2018, 57, 074103.	0.8	17
92	Analysis of Thermal Characteristics of Gallium Oxide Field-Effect-Transistors. , 2018, , .		4
93	Trapping Effects in Si-Doped -Ga <sub>2</sub> O <sub>3</sub> MESFETs on an Fe-Doped -Ga <sub>2</sub> O <sub>3</sub> Substrate. IEEE Electron Device Letters, 2018, 39, 1042-1045.	2.2	78
94	Optical signatures of deep level defects in Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2018, 112, .	1.5	113
95	Demonstration of $\hat{\Gamma}^2$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> O <sub>3</sub> double heterostructure field effect transistors. Applied Physics Letters, 2018, 112, .	1.5	130
96	A self-limiting layer-by-layer etching technique for 2H-MoS <sub>2</sub> . Applied Physics Express, 2017, 10, 035201.	1.1	15
97	Tunnel-injected sub-260nm ultraviolet light emitting diodes. Applied Physics Letters, 2017, 110, .	1.5	55
98	Delta-doped $\hat{\Gamma}^2$ -gallium oxide field-effect transistor. Applied Physics Express, 2017, 10, 051102.	1.1	117
99	High responsivity in molecular beam epitaxy grown $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> metal semiconductor metal solar blind deep-UV photodetector. Applied Physics Letters, 2017, 110, .	1.5	175
100	Molecular beam epitaxy of 2D-layered gallium selenide on GaN substrates. Journal of Applied Physics, 2017, 121, .	1.1	52
101	Atomic Scale Structure and Defects in 2D GaSe Films and Van der Waals Interface. Microscopy and Microanalysis, 2017, 23, 1728-1729.	0.2	0
102	Modulation-doped $\hat{\Gamma}^2$ -(Al <sub>0.2</sub> Ga <sub>0.8</sub> ) <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> O <sub>3</sub> field-effect transistor. Applied Physics Letters, 2017, 111, .	1.5	252
103	Point and Extended Defects in Ultra Wide Band Gap $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> Interfaces. Microscopy and Microanalysis, 2017, 23, 1454-1455.	0.2	3
104	Reflective metal/semiconductor tunnel junctions for hole injection in AlGa <sub>2</sub> N UV LEDs. Applied Physics Letters, 2017, 111, .	1.5	32
105	Large-area SnSe <sub>2</sub> /Ga <sub>2</sub> N heterojunction diodes grown by molecular beam epitaxy. Applied Physics Letters, 2017, 111, .	1.5	11
106	Ultralow-voltage-drop GaN/InGa <sub>2</sub> N/GaN tunnel junctions with 12% indium content. Applied Physics Express, 2017, 10, 121003.	1.1	18
107	Graded AlGa <sub>2</sub> N Channel Transistors for Improved Current and Power Gain Linearity. IEEE Transactions on Electron Devices, 2017, 64, 3114-3119.	1.6	61
108	Small-signal characteristics of graded AlGa <sub>2</sub> N channel PolFETs. , 2017, , .		2

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109	Analytical and multiphysical-numerical models for plasma-waves in double and multiple channel HEMTs. , 2016, , .		1
110	Analysis of plasma-modes of a gated bilayer system in high electron mobility transistors. Journal of Applied Physics, 2016, 119, .	1.1	8
111	Low-resistance GaN tunnel homojunctions with 150â€‰kA/cm <sup>2</sup> current and repeatable negative differential resistance. Applied Physics Letters, 2016, 108, .	1.5	45
112	Current gain above 10 in sub-10â€‰nm base III-Nitride tunneling hot electron transistors with GaN/AlN emitter. Applied Physics Letters, 2016, 108, .	1.5	9
113	Design of p-type cladding layers for tunnel-injected UV-A light emitting diodes. Applied Physics Letters, 2016, 109, .	1.5	32
114	Resonant tunneling assisted propagation and amplification of plasmons in high electron mobility transistors. Journal of Applied Physics, 2016, 119, .	1.1	8
115	Polarity in GaN and ZnO: Theory, measurement, growth, and devices. Applied Physics Reviews, 2016, 3, .	5.5	105
116	High current density 2D/3D MoS <sub>2</sub> /GaN Esaki tunnel diodes. Applied Physics Letters, 2016, 109, .	1.5	65
117	Design and demonstration of ultra-wide bandgap AlGa <sub>N</sub> tunnel junctions. Applied Physics Letters, 2016, 109, .	1.5	59
118	Amplified spontaneous emission of phonons as a likely mechanism for density-dependent velocity saturation in GaN transistors. Applied Physics Express, 2016, 9, 094101.	1.1	22
119	Ultra-wide bandgap AlGa <sub>N</sub> channel MISFET with polarization engineered ohmics. , 2016, , .		2
120	Current gain above 10 in sub-10 nm base III-nitride tunneling hot electron transistors with GaN/AlN emitter. , 2016, , .		0
121	AlGa <sub>N</sub> channel field effect transistors with graded heterostructure ohmic contacts. Applied Physics Letters, 2016, 109, .	1.5	68
122	Enhanced light extraction in tunnel junction-enabled top emitting UV LEDs. Applied Physics Express, 2016, 9, 052102.	1.1	27
123	Changes in the Editorial Board. IEEE Transactions on Electron Devices, 2016, 63, 4556-4556.	1.6	0
124	Exploring Thermal Properties of MoS <sub>2</sub> Using In Situ Quantitative STEM. Microscopy and Microanalysis, 2016, 22, 912-913.	0.2	0
125	Deep level defects in N-rich and In-rich In <sub>x</sub> Ga <sub>1-x</sub> N: in composition dependence. Superlattices and Microstructures, 2016, 99, 67-71.	1.4	0
126	Numerical Analysis of Terahertz Emissions From an Ungated HEMT Using Full-Wave Hydrodynamic Model. IEEE Transactions on Electron Devices, 2016, 63, 990-996.	1.6	22



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127	Density-dependent electron transport and precise modeling of GaN high electron mobility transistors. Applied Physics Letters, 2015, 107, .	1.5	59
128	Layer-transferred MoS <sub>2</sub> /GaN PN diodes. Applied Physics Letters, 2015, 107, .	1.5	69
129	Electronic transport of titanate heterostructures and their potential as channels on (001) Si. Journal of Applied Physics, 2015, 118, .	1.1	12
130	Transferred large area single crystal MoS <sub>2</sub> field effect transistors. Applied Physics Letters, 2015, 107, .	1.5	21
131	Elastic scattering by hot electrons and apparent lifetime of longitudinal optical phonons in gallium nitride. Applied Physics Letters, 2015, 107, .	1.5	5
132	Interband tunneling for hole injection in III-nitride ultraviolet emitters. Applied Physics Letters, 2015, 106, .	1.5	79
133	Power switching transistors based on GaN and AlGaN channels. , 2015, , .		1
134	GaN-based three-junction cascaded light-emitting diode with low-resistance InGaN tunnel junctions. Applied Physics Express, 2015, 8, 082103.	1.1	43
135	Common Emitter Current and Voltage Gain in III-Nitride Tunneling Hot Electron Transistors. IEEE Electron Device Letters, 2015, 36, 436-438.	2.2	2
136	Recess-Free Nonalloyed Ohmic Contacts on Graded AlGaN Heterojunction FETs. IEEE Electron Device Letters, 2015, 36, 226-228.	2.2	18
137	Density-dependent electron transport for accurate modeling of AlGaN/GaN HEMTs. , 2015, , .		0
138	Sub 300 nm wavelength III-Nitride tunnel-injected ultraviolet LEDs. , 2015, , .		4
139	Room temperature detection of plasma resonances using multiple 2DEG channels in HEMT. , 2015, , .		3
140	Current gain in sub-10 nm base GaN tunneling hot electron transistors with AlN emitter barrier. Applied Physics Letters, 2015, 106, 032101.	1.5	8
141	Modeling and experimental demonstration of sub-10 nm base III-nitride tunneling hot electron transistors. , 2015, , .		0
142	Modeling of high composition AlGaN channel high electron mobility transistors with large threshold voltage. Applied Physics Letters, 2014, 105, .	1.5	56
143	Growth and electrical characterization of two-dimensional layered MoS <sub>2</sub> /SiC heterojunctions. Applied Physics Letters, 2014, 105, .	1.5	42
144	Energy band line-up of atomic layer deposited Al <sub>2</sub> O <sub>3</sub> on $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> . Applied Physics Letters, 2014, 104, .	1.5	47

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145	Modulation of over $10^{14}$ cm <sup>-2</sup> electrons in SrTiO <sub>3</sub> /GdTiO <sub>3</sub> heterostructures. Applied Physics Letters, 2014, 104, .	1.5	38
146	Epitaxial growth of large area single-crystalline few-layer MoS <sub>2</sub> with high space charge mobility of $192$ cm <sup>2</sup> V <sup>-1</sup> s <sup>-1</sup> . Applied Physics Letters, 2014, 105, .	1.5	57
147	Energy band engineering for photoelectrochemical etching of GaN/InGaN heterostructures. Applied Physics Letters, 2014, 104, 243503.	1.5	9
148	III-nitride tunnel junctions for efficient solid state lighting. Proceedings of SPIE, 2014, , .	0.8	1
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