

Debdeep Jena

List of Publications by Year in descending order

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319
papers

14,259
citations

19608

61
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24915

109
g-index

323
all docs

323
docs citations

323
times ranked

12561
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-dimensional semiconductors for transistors. Nature Reviews Materials, 2016, 1, .	23.3	1,020
2	Ultrawideâ€Bandgap Semiconductors: Research Opportunities and Challenges. Advanced Electronic Materials, 2018, 4, 1600501.	2.6	839
3	Polarization-Induced Hole Doping in Wideâ€Band-Gap Uniaxial Semiconductor Heterostructures. Science, 2010, 327, 60-64.	6.0	662
4	Enhancement of Carrier Mobility in Semiconductor Nanostructures by Dielectric Engineering. Physical Review Letters, 2007, 98, 136805.	2.9	382
5	Esaki Diodes in van der Waals Heterojunctions with Broken-Gap Energy Band Alignment. Nano Letters, 2015, 15, 5791-5798.	4.5	319
6	Intrinsic electron mobility limits in In^{2+} -Ga ₂ O ₃ . Applied Physics Letters, 2016, 109, .	1.5	299
7	InAlN/AlN/GaN HEMTs With Regrown Ohmic Contacts and f_{T} of 370 GHz. IEEE Electron Device Letters, 2012, 33, 988-990.	2.2	292
8	High-voltage field effect transistors with wide-bandgap In^{2+} -Ga ₂ O ₃ nanomembranes. Applied Physics Letters, 2014, 104, .	1.5	288
9	High-mobility window for two-dimensional electron gases at ultrathin AlNâ€GaN heterojunctions. Applied Physics Letters, 2007, 90, 182112.	1.5	242
10	Enhancement-Mode Ga ₂ O ₃ Vertical Transistors With Breakdown Voltage >1 kV. IEEE Electron Device Letters, 2018, 39, 869-872.	2.2	241
11	Transistors with chemically synthesized layered semiconductor WS ₂ exhibiting 105 room temperature modulation and ambipolar behavior. Applied Physics Letters, 2012, 101, .	1.5	237
12	Dislocation scattering in a two-dimensional electron gas. Applied Physics Letters, 2000, 76, 1707-1709.	1.5	217
13	Graphene Nanoribbon Tunnel Transistors. IEEE Electron Device Letters, 2008, 29, 1344-1346.	2.2	193
14	Field-Plated Ga ₂ O ₃ Trench Schottky Barrier Diodes With a BV_{ext} of up to 0.95 GW/cm ² . IEEE Electron Device Letters, 2020, 41, 107-110.	2.2	184
15	Unique prospects for graphene-based terahertz modulators. Applied Physics Letters, 2011, 99, .	1.5	183
16	Determination of graphene work function and graphene-insulator-semiconductor band alignment by internal photoemission spectroscopy. Applied Physics Letters, 2012, 101, .	1.5	166
17	Realization of wide electron slabs by polarization bulk doping in graded IIIâ€V nitride semiconductor alloys. Applied Physics Letters, 2002, 81, 4395-4397.	1.5	163
18	1.9-kV AlGaN/GaN Lateral Schottky Barrier Diodes on Silicon. IEEE Electron Device Letters, 2015, 36, 375-377.	2.2	160

#	ARTICLE	IF	CITATIONS
19	1.7-kV and 0.55- $\text{ext}\{m\}\Omega \cdot \text{ext}\{cm\}^{\wedge}\{2\}$ GaN p-n Diodes on Bulk GaN Substrates With Avalanche Capability. IEEE Electron Device Letters, 2016, 37, 161-164.	2.2	153
20	Near unity ideality factor and Shockley-Read-Hall lifetime in GaN-on-GaN <i>p-n</i> diodes with avalanche breakdown. Applied Physics Letters, 2015, 107, .	1.5	146
21	Single-particle tunneling in doped graphene-insulator-graphene junctions. Journal of Applied Physics, 2012, 111, .	1.1	144
22	AlN/GaN Insulated-Gate HEMTs With 2.3 A/mm Output Current and 480 mS/mm Transconductance. IEEE Electron Device Letters, 2008, 29, 661-664.	2.2	141
23	Gate-Recessed Enhancement-Mode InAlN/AlN/GaN HEMTs With 1.9-A/mm Drain Current Density and 800-mS/mm Transconductance. IEEE Electron Device Letters, 2010, 31, 1383-1385.	2.2	134
24	Adsorption-controlled growth of La-doped BaSnO ₃ by molecular-beam epitaxy. APL Materials, 2017, 5, .	2.2	131
25	Breakdown mechanism in 1 kA/cm ² and 960 V E-mode $\text{In}^{\wedge}\{2\}$ -Ga ₂ O ₃ vertical transistors. Applied Physics Letters, 2018, 113, .	1.5	128
26	Polarization-Induced Zener Tunnel Junctions in Wide-Band-Gap Heterostructures. Physical Review Letters, 2009, 103, 026801.	2.9	123
27	MBE-Regrown Ohmics in InAlN HEMTs With a Regrowth Interface Resistance of 0.05 $\Omega \cdot \text{cm}$. IEEE Electron Device Letters, 2012, 33, 525-527.	2.2	118
28	GaN/NbN epitaxial semiconductor/superconductor heterostructures. Nature, 2018, 555, 183-189.	13.7	116
29	Intimate contacts. Nature Materials, 2014, 13, 1076-1078.	13.3	107
30	A polarization-induced 2D hole gas in undoped gallium nitride quantum wells. Science, 2019, 365, 1454-1457.	6.0	106
31	Two-Dimensional Heterojunction Interlayer Tunneling Field Effect Transistors (Thin-TFETs). IEEE Journal of the Electron Devices Society, 2015, 3, 200-207.	1.2	105
32	MBE-grown 232-270-nm deep-UV LEDs using monolayer thin binary GaN/AlN quantum heterostructures. Applied Physics Letters, 2017, 110, .	1.5	105
33	Efficient terahertz electro-absorption modulation employing graphene plasmonic structures. Applied Physics Letters, 2012, 101, .	1.5	103
34	Effect of Optical Phonon Scattering on the Performance of GaN Transistors. IEEE Electron Device Letters, 2012, 33, 709-711.	2.2	99
35	1230-V $\text{In}^{\wedge}\{2\}$ -Ga ₂ O ₃ trench Schottky barrier diodes with an ultra-low leakage current of $< \text{ext}\{1\}\text{A}/\text{cm}^2$. Applied Physics Letters, 2018, 113, .	1.5	94
36	SymFET: A Proposed Symmetric Graphene Tunneling Field-Effect Transistor. IEEE Transactions on Electron Devices, 2013, 60, 951-957.	1.6	93

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37	Intrinsic Mobility Limiting Mechanisms in Lanthanum-Doped Strontium Titanate. <i>Physical Review Letters</i> , 2014, 112, .	2.9	90
38	High-performance photocurrent generation from two-dimensional WS ₂ field-effect transistors. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	88
39	AlGaIn/GaN polarization-doped field-effect transistor for microwave power applications. <i>Applied Physics Letters</i> , 2004, 84, 1591-1593.	1.5	87
40	Near-ideal reverse leakage current and practical maximum electric field in $\hat{\Gamma}^2$ -Ga ₂ O ₃ Schottky barrier diodes. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	86
41	Controllable growth of layered selenide and telluride heterostructures and superlattices using molecular beam epitaxy. <i>Journal of Materials Research</i> , 2016, 31, 900-910.	1.2	85
42	Polarization-Engineering in group III-nitride heterostructures: New opportunities for device design. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 1511-1516.	0.8	83
43	High Breakdown Voltage in RF AlN/GaN/AlN Quantum Well HEMTs. <i>IEEE Electron Device Letters</i> , 2019, 40, 1293-1296.	2.2	79
44	Tunnel-injection quantum dot deep-ultraviolet light-emitting diodes with polarization-induced doping in III-nitride heterostructures. <i>Applied Physics Letters</i> , 2014, 104, 021105.	1.5	77
45	Layered transition metal dichalcogenides: promising near-lattice-matched substrates for GaN growth. <i>Scientific Reports</i> , 2016, 6, 23708.	1.6	76
46	Design and Realization of GaN Trench Junction-Barrier-Schottky-Diodes. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 1635-1641.	1.6	76
47	Hole mobility of strained GaN from first principles. <i>Physical Review B</i> , 2019, 100, .	1.1	75
48	Thermal conductivity of crystalline AlN and the influence of atomic-scale defects. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	75
49	Hot Electron Transistor with van der Waals Base-Collector Heterojunction and High-Performance GaN Emitter. <i>Nano Letters</i> , 2017, 17, 3089-3096.	4.5	74
50	Polarization-Engineered III-Nitride Heterojunction Tunnel Field-Effect Transistors. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2015, 1, 28-34.	1.1	73
51	Deep ultraviolet emission from ultra-thin GaN/AlN heterostructures. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	73
52	Prospects for Wide Bandgap and Ultrawide Bandgap CMOS Devices. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 4010-4020.	1.6	73
53	Graphene nanoribbon field-effect transistors on wafer-scale epitaxial graphene on SiC substrates. <i>APL Materials</i> , 2015, 3, .	2.2	72
54	220-GHz Quaternary Barrier InAlGaIn/AlN/GaN HEMTs. <i>IEEE Electron Device Letters</i> , 2011, 32, 1215-1217.	2.2	71

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55	Crystal orientation dictated epitaxy of ultrawide-bandgap 5.4- to 8.6-eV $\hat{\pm}$ -(AlGa) $\langle \text{sub} \rangle 2 \langle / \text{sub} \rangle$ O $\langle \text{sub} \rangle 3 \langle / \text{sub} \rangle$ on m-plane sapphire. Science Advances, 2021, 7, .	4.7	71
56	The new nitrides: layered, ferroelectric, magnetic, metallic and superconducting nitrides to boost the GaN photonics and electronics eco-system. Japanese Journal of Applied Physics, 2019, 58, SC0801.	0.8	69
57	GaN HEMTs on Si With Regrown Contacts and Cutoff/Maximum Oscillation Frequencies of 250/204 GHz. IEEE Electron Device Letters, 2020, 41, 689-692.	2.2	69
58	Hot phonon effect on electron velocity saturation in GaN: A second look. Applied Physics Letters, 2007, 91, .	1.5	67
59	Ultrascaled InAlN/GaN High Electron Mobility Transistors with Cutoff Frequency of 400 GHz. Japanese Journal of Applied Physics, 2013, 52, 08JN14.	0.8	66
60	Enhancement-Mode InAlN/AlN/GaN HEMTs With $\$ \text{hbox}\{10\}^{\{-12\}} \text{hbox}\{A/\text{mm}\} \$$ Leakage Current and $\$ \text{hbox}\{10\}^{\{12\}} \$$ on/off Current Ratio. IEEE Electron Device Letters, 2011, 32, 309-311.	2.2	65
61	N-polar III-nitride quantum well light-emitting diodes with polarization-induced doping. Applied Physics Letters, 2011, 99, .	1.5	63
62	Route to High Hole Mobility in GaN via Reversal of Crystal-Field Splitting. Physical Review Letters, 2019, 123, 096602.	2.9	63
63	Gate-Recessed E-mode p-Channel HFET With High On-Current Based on GaN/AlN 2D Hole Gas. IEEE Electron Device Letters, 2018, 39, 1848-1851.	2.2	62
64	1.1-kV Vertical GaN p-n Diodes With p-GaN Regrown by Molecular Beam Epitaxy. IEEE Electron Device Letters, 2017, 38, 1071-1074.	2.2	60
65	Quaternary Barrier InAlGaN HEMTs With $\$ f_{\{T\}}/f_{\{max\}} \$$ of 230/300 GHz. IEEE Electron Device Letters, 2013, 34, 378-380.	2.2	58
66	Polarization effects on gate leakage in InAlN/AlN/GaN high-electron-mobility transistors. Applied Physics Letters, 2012, 101, .	1.5	55
67	Transport properties of graphene nanoribbon transistors on chemical-vapor-deposition grown wafer-scale graphene. Applied Physics Letters, 2012, 100, .	1.5	55
68	Polarization-Induced GaN-on-Insulator E/D Mode p-Channel Heterostructure FETs. IEEE Electron Device Letters, 2013, 34, 852-854.	2.2	55
69	234â€‰nm and 246â€‰nm AlN-Delta-GaN quantum well deep ultraviolet light-emitting diodes. Applied Physics Letters, 2018, 112, .	1.5	55
70	Deep-UV emission at 219â€‰nm from ultrathin MBE GaN/AlN quantum heterostructures. Applied Physics Letters, 2017, 111, .	1.5	54
71	High breakdown single-crystal GaN p-n diodes by molecular beam epitaxy. Applied Physics Letters, 2015, 107, .	1.5	53
72	CdSe nanowires with illumination-enhanced conductivity: Induced dipoles, dielectrophoretic assembly, and field-sensitive emission. Journal of Applied Physics, 2007, 101, 073704.	1.1	52

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73	High-performance few-layer-MoS ₂ field-effect-transistor with record low contact-resistance. , 2013, , .		52
74	Effect of scattering by strain fields surrounding edge dislocations on electron transport in two-dimensional electron gases. Applied Physics Letters, 2002, 80, 64-66.	1.5	51
75	Room temperature microwave oscillations in GaN/AlN resonant tunneling diodes with peak current densities up to 220 kA/cm ² . Applied Physics Letters, 2018, 112, .	1.5	51
76	Fin-channel orientation dependence of forward conduction in kV-class Ga ₂ O ₃ trench Schottky barrier diodes. Applied Physics Express, 2019, 12, 061007.	1.1	50
77	Single and multi-fin normally-off Ga ₂ O ₃ vertical transistors with a breakdown voltage over 2.6 kV. , 2019, , .		50
78	Green luminescence of InGaN nanowires grown on silicon substrates by molecular beam epitaxy. Journal of Applied Physics, 2011, 109, .	1.1	48
79	Strained GaN quantum-well FETs on single crystal bulk AlN substrates. Applied Physics Letters, 2017, 110, .	1.5	48
80	Carrier transport and confinement in polarization-induced three-dimensional electron slabs: Importance of alloy scattering in AlGa _N . Applied Physics Letters, 2006, 88, 042109.	1.5	47
81	Threshold Voltage Control in $\text{Al}_{0.72}\text{Ga}_{0.28}\text{N}/\text{AlN}/\text{GaN}$ HEMTs by Work-Function Engineering. IEEE Electron Device Letters, 2010, 31, 954-956.	2.2	47
82	Conduction band offset at the InN-GaN heterojunction. Applied Physics Letters, 2007, 91, .	1.5	46
83	Inductively-coupled-plasma reactive ion etching of single-crystal $\text{In}^{2-}\text{Ga}_2\text{O}_3$. Japanese Journal of Applied Physics, 2017, 56, 030304.	0.8	46
84	Development of GaN Vertical Trench-MOSFET With MBE Regrown Channel. IEEE Transactions on Electron Devices, 2018, 65, 2558-2564.	1.6	46
85	Physics and polarization characteristics of 298-nm AlN-delta-GaN quantum well ultraviolet light-emitting diodes. Applied Physics Letters, 2017, 110, .	1.5	44
86	InGa _N channel high electron mobility transistor structures grown by metal organic chemical vapor deposition. Applied Physics Letters, 2012, 100, .	1.5	42
87	Ultra-low resistance ohmic contacts to GaN with high Si doping concentrations grown by molecular beam epitaxy. Applied Physics Letters, 2012, 101, .	1.5	42
88	Two-dimensional electron gases in strained quantum wells for AlN/GaN/AlN double heterostructure field-effect transistors on AlN. Applied Physics Letters, 2014, 104, .	1.5	42
89	New Tunneling Features in Polar III-Nitride Resonant Tunneling Diodes. Physical Review X, 2017, 7, .	2.8	42
90	Next generation electronics on the ultrawide-bandgap aluminum nitride platform. Semiconductor Science and Technology, 2021, 36, 044001.	1.0	42

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91	Very low sheet resistance and Shubnikovâ€“de-Haas oscillations in two-dimensional electron gases at ultrathin binary AlNâˆ•GaN heterojunctions. Applied Physics Letters, 2008, 92, .	1.5	40
92	Ultrathin Body GaN-on-Insulator Quantum Well FETs With Regrown Ohmic Contacts. IEEE Electron Device Letters, 2012, 33, 661-663.	2.2	40
93	Electron mobility in graded AlGaIn alloys. Applied Physics Letters, 2006, 88, 042103.	1.5	39
94	Polarization-engineered removal of buffer leakage for GaN transistors. Applied Physics Letters, 2010, 96, 042102.	1.5	39
95	A computational study of metal-contacts to beyond-graphene 2D semiconductor materials. , 2012, , .		38
96	Adsorption-controlled growth of Ga ₂ O ₃ by suboxide molecular-beam epitaxy. APL Materials, 2021, 9, .	2.2	38
97	Ultralow-Leakage AlGaIn/GaN High Electron Mobility Transistors on Si With Non-Alloyed Regrown Ohmic Contacts. IEEE Electron Device Letters, 2016, 37, 16-19.	2.2	37
98	Electron Transport in III-V Nitride Two-Dimensional Electron Gases. Physica Status Solidi (B): Basic Research, 2001, 228, 617-619.	0.7	36
99	Guiding Principles for Trench Schottky Barrier Diodes Based on Ultrawide Bandgap Semiconductors: A Case Study in Gaâ„Oâ„f. IEEE Transactions on Electron Devices, 2020, 67, 3938-3947.	1.6	36
100	Dipole scattering in polarization induced IIIâ€“V nitride two-dimensional electron gases. Journal of Applied Physics, 2000, 88, 4734.	1.1	35
101	InGaIn Channel High-Electron-Mobility Transistors with InAlGaIn Barrier and $f_{T,max}$ of 260/220 GHz. Applied Physics Express, 2013, 6, 016503.	1.1	35
102	Comparative study of chemically synthesized and exfoliated multilayer MoS ₂ field-effect transistors. Applied Physics Letters, 2013, 102, 043116.	1.5	35
103	Activation of buried p-GaN in MOCVD-regrown vertical structures. Applied Physics Letters, 2018, 113, 062105.	1.5	35
104	Structural and piezoelectric properties of ultra-thin ScxAl1-xN films grown on GaN by molecular beam epitaxy. Applied Physics Letters, 2020, 117, .	1.5	34
105	Effect of dislocation scattering on the transport properties of InN grown on GaN substrates by molecular beam epitaxy. Applied Physics Letters, 2006, 89, 162110.	1.5	33
106	Power Amplification at THz via Plasma Wave Excitation in RTD-Gated HEMTs. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 200-206.	2.0	33
107	First RF Power Operation of AlN/GaN/AlN HEMTs With >3 A/mm and 3 W/mm at 10 GHz. IEEE Journal of the Electron Devices Society, 2021, 9, 121-124.	1.2	33
108	Polarization-induced Zener tunnel diodes in GaN/InGaIn/GaN heterojunctions. Applied Physics Letters, 2015, 107, .	1.5	32

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109	1.6 kV Vertical Ga ₂ O ₃ FinFETs With Source-Connected Field Plates and Normally-off Operation. , 2019, , .		31
110	Thermal stability of epitaxial In _± -Ga ₂ O ₃ and (Al,Ga) ₂ O ₃ layers on m-plane sapphire. Applied Physics Letters, 2021, 119, .	1.5	30
111	Ultrathin CdSe nanowire field-effect transistors. Journal of Electronic Materials, 2006, 35, 170-172.	1.0	29
112	Oxygen Incorporation in the Molecular Beam Epitaxy Growth of Sc _x Ga _{1-x} N and Sc _x Al _{1-x} N. Physica Status Solidi (B): Basic Research, 2020, 257, 1900612.	0.7	29
113	Polarization-mediated remote surface roughness scattering in ultrathin barrier GaN high-electron mobility transistors. Applied Physics Letters, 2010, 97, .	1.5	28
114	Room temperature weak ferromagnetism in Sn _{1-x} MnxSe ₂ 2D films grown by molecular beam epitaxy. APL Materials, 2016, 4, .	2.2	28
115	On the possibility of sub 60 mV/decade subthreshold switching in piezoelectric gate barrier transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1469-1472.	0.8	27
116	Quantum and classical scattering times due to charged dislocations in an impure electron gas. Physical Review B, 2002, 66, .	1.1	26
117	Room-Temperature Graphene-Nanoribbon Tunneling Field-Effect Transistors. Npj 2D Materials and Applications, 2019, 3, .	3.9	26
118	Molecular beam homoepitaxy on bulk AlN enabled by aluminum-assisted surface cleaning. Applied Physics Letters, 2020, 116, .	1.5	26
119	Surface control and MBE growth diagram for homoepitaxy on single-crystal AlN substrates. Applied Physics Letters, 2020, 116, .	1.5	26
120	Metal-free InAlN/AlN/GaN high electron mobility transistors with regrown ohmic contacts by molecular beam epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1617-1619.	0.8	25
121	Sub-230 nm deep-UV emission from GaN quantum disks in AlN grown by a modified Stranski-Krastanov mode. Japanese Journal of Applied Physics, 2016, 55, 05FF06.	0.8	25
122	Broken Symmetry Effects due to Polarization on Resonant Tunneling Transport in Double-Barrier Nitride Heterostructures. Physical Review Applied, 2019, 11, .	1.5	25
123	Epitaxial niobium nitride superconducting nanowire single-photon detectors. Applied Physics Letters, 2020, 117, .	1.5	25
124	Rotationally aligned hexagonal boron nitride on sapphire by high-temperature molecular beam epitaxy. Physical Review Materials, 2019, 3, .	0.9	25
125	Phototransistors: High-Detectivity Multilayer MoS ₂ Phototransistors with Spectral Response from Ultraviolet to Infrared (Adv. Mater. 43/2012). Advanced Materials, 2012, 24, 5902-5902.	11.1	24
126	Graphene as transparent electrode for direct observation of hole photoemission from silicon to oxide. Applied Physics Letters, 2013, 102, .	1.5	24

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127	Molecular beam epitaxial growth of scandium nitride on hexagonal SiC, GaN, and AlN. Applied Physics Letters, 2019, 115, .	1.5	24
128	Polarization control in nitride quantum well light emitters enabled by bottom tunnel-junctions. Journal of Applied Physics, 2019, 125, 203104.	1.1	24
129	Thermionic emission or tunneling? The universal transition electric field for ideal Schottky reverse leakage current: A case study in $\text{In}^2\text{-Ga}_2\text{O}_3$. Applied Physics Letters, 2020, 117, .	1.5	24
130	Trapping and Detrapping Mechanisms in $\text{In}^2\text{-Ga}_2\text{O}_3$ Vertical FinFETs Investigated by Electro-Optical Measurements. IEEE Transactions on Electron Devices, 2020, 67, 3954-3959.	1.6	24
131	Effect of p-doped overlayer thickness on RF-dispersion in GaN junction FETs. IEEE Electron Device Letters, 2002, 23, 306-308.	2.2	23
132	Dipole scattering in highly polar semiconductor alloys. Journal of Applied Physics, 2004, 96, 2095-2101.	1.1	23
133	Low temperature AlN growth by MBE and its application in HEMTs. Journal of Crystal Growth, 2015, 425, 133-137.	0.7	23
134	Fully transparent field-effect transistor with high drain current and on-off ratio. APL Materials, 2020, 8, .	2.2	23
135	In^3 -phase inclusions as common structural defects in alloyed $\text{In}^2\text{-(Al}_x\text{Ga}_{1-x})_2\text{O}_3$ and doped $\text{In}^2\text{-Ga}_2\text{O}_3$ films. APL Materials, 2021, 9, .	2.2	23
136	Charged basal stacking fault scattering in nitride semiconductors. Applied Physics Letters, 2011, 98, 022109.	1.5	22
137	In-situ X-ray photoelectron spectroscopy of trimethyl aluminum and water half-cycle treatments on HF-treated and O_3 -oxidized GaN substrates. Physica Status Solidi - Rapid Research Letters, 2012, 6, 22-24.	1.2	22
138	Significantly reduced thermal conductivity in $\text{In}^2\text{-(Al}_0.1\text{Ga}_0.9)_2\text{O}_3/\text{Ga}_2\text{O}_3$ superlattices. Applied Physics Letters, 2019, 115, .	1.5	22
139	GaN/AlN Schottky-gate p-channel HFETs with InGaN contacts and 100 mA/mm on-current. , 2019, , .		22
140	Explanation of anomalously high current gain observed in GaN based bipolar transistors. IEEE Electron Device Letters, 2003, 24, 4-6.	2.2	21
141	First-principles study of high-field-related electronic behavior of group-III nitrides. Physical Review B, 2014, 90, .	1.1	20
142	Atomic Structure of Thin MoSe ₂ Films Grown by Molecular Beam Epitaxy. Microscopy and Microanalysis, 2014, 20, 164-165.	0.2	19
143	Measurement of ultrafast dynamics of photoexcited carriers in $\text{In}^2\text{-Ga}_2\text{O}_3$ by two-color optical pump-probe spectroscopy. Applied Physics Letters, 2018, 113, .	1.5	19
144	Wurtzite phonons and the mobility of a GaN/AlN 2D hole gas. Applied Physics Letters, 2019, 114, .	1.5	19

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145	Anisotropic dielectric functions, band-to-band transitions, and critical points in Ga_2O_3 . Applied Physics Letters, 2021, 118, .	1.5	19
146	ON-Resistance of Ga_2O_3 Trench-MOS Schottky Barrier Diodes: Role of Sidewall Interface Trapping. IEEE Transactions on Electron Devices, 2021, 68, 2420-2426.	1.6	19
147	Enhanced injection efficiency and light output in bottom tunnel-junction light-emitting diodes. Optics Express, 2020, 28, 4489.	1.7	19
148	Influence of Metal-Graphene Contact on the Operation and Scalability of Graphene Field-Effect Transistors. IEEE Transactions on Electron Devices, 2011, 58, 3170-3178.	1.6	18
149	Steep subthreshold swing tunnel FETs: GaN/InN/GaN and transition metal dichalcogenide channels. , 2015, , .		18
150	Realization of GaN PolarMOS using selective-area regrowth by MBE and its breakdown mechanisms. Japanese Journal of Applied Physics, 2019, 58, SCCD15.	0.8	18
151	Formation of ohmic contacts to ultra-thin channel AlN/GaN HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2030-2032.	0.8	17
152	Stokes and anti-Stokes resonant Raman scatterings from biased GaN/AlN heterostructure. Applied Physics Letters, 2008, 93, 051912.	1.5	17
153	Perspectives of TFETs for low power analog ICs. , 2012, , .		17
154	Epitaxial ScAl_2N on GaN exhibits attractive high-K dielectric properties. Applied Physics Letters, 2022, 120, .	1.5	17
155	2.3 nm barrier AlN/GaN HEMTs with insulated gates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2047-2049.	0.8	16
156	Subcritical barrier AlN/GaN E-mode HFETs and inverters. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1620-1622.	0.8	16
157	1.5 kV Vertical Ga_2O_3 Trench-MIS Schottky Barrier Diodes. , 2018, , .		16
158	Molecular Beam Epitaxy of Transition Metal Nitrides for Superconducting Device Applications. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900675.	0.8	16
159	MBE growth and donor doping of coherent ultrawide bandgap AlGaIn alloy layers on single-crystal AlN substrates. Applied Physics Letters, 2021, 118, .	1.5	16
160	Short-period AlN/GaN p^+n^+ superlattices: hole transport use in p^+n^+ junctions. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2386-2389.	0.8	15
161	Determination of the Mott-Hubbard gap in GdTiO_3 . Physical Review B, 2015, 92, .	1.1	15
162	Polarization-induced 2D hole gases in pseudomorphic undoped GaN/AlN heterostructures on single-crystal AlN substrates. Applied Physics Letters, 2021, 119, .	1.5	15

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163	High mobility two-dimensional electron gases in nitride heterostructures with high Al composition AlGaN alloy barriers. Applied Physics Letters, 2010, 97, .	1.5	14
164	Stark-effect scattering in rough quantum wells. Applied Physics Letters, 2011, 99, .	1.5	14
165	Two-dimensional heterojunction interlayer tunnel FET (Thin-TFET): From theory to applications. , 2016, , .		14
166	Single-crystal N-polar GaN p-n diodes by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2017, 110, .	1.5	14
167	High-frequency and below bandgap anisotropic dielectric constants in $(\text{Al}_{1-x}\text{Ga}_x)_2\text{O}_3$ ($x \approx 0.1$). Applied Physics Letters, 2021, 119, .	1.5	14
168	Strong effect of scandium source purity on chemical and electronic properties of epitaxial $\text{Sc}_x\text{Al}_{1-x}\text{N}/\text{GaN}$ heterostructures. APL Materials, 2021, 9, .	2.2	14
169	Top-down AlN/GaN enhancement- & depletion-mode nanoribbon HEMTs. , 2009, , .		13
170	Dual optical marker Raman characterization of strained GaN-channels on AlN using AlN/GaN/AlN quantum wells and ^{15}N isotopes. Applied Physics Letters, 2015, 106, .	1.5	13
171	Steep Sub-Boltzmann Switching in AlGaIn/GaN Phase-FETs With ALD VO_2 . IEEE Transactions on Electron Devices, 2018, 65, 945-949.	1.6	13
172	Bandgap narrowing and Mott transition in Si-doped $\text{Al}_{0.7}\text{Ga}_{0.3}\text{N}$. Applied Physics Letters, 2019, 114, .	1.5	13
173	GaN/AlN p-channel HFETs with $I_{\text{max}} \geq 420$ mA/mm and ~ 20 GHz f_{T} / f_{MAX} . , 2020, , .		13
174	Effect of growth conditions on the conductivity of Mg doped p-type GaN by Molecular Beam Epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1074-1077.	0.8	12
175	High-performance monolithically-integrated E/D mode InAlN/AlN/GaN HEMTs for mixed-signal applications. , 2010, , .		12
176	Surface potential analysis of AlN/GaN heterostructures by electrochemical capacitance-voltage measurements. Journal of Applied Physics, 2012, 112, 074508.	1.1	12
177	Molecular Beam Epitaxy Growth of Large Area GaN/AlN 2D Hole Gas Heterostructures. Physica Status Solidi (B): Basic Research, 2020, 257, 1900567.	0.7	12
178	Nitride LEDs and Lasers with Buried Tunnel Junctions. ECS Journal of Solid State Science and Technology, 2020, 9, 015018.	0.9	12
179	N-polar GaN/AlN resonant tunneling diodes. Applied Physics Letters, 2020, 117, .	1.5	12
180	An all-epitaxial nitride heterostructure with concurrent quantum Hall effect and superconductivity. Science Advances, 2021, 7, .	4.7	12

#	ARTICLE	IF	CITATIONS
181	High-conductivity polarization-induced 2D hole gases in undoped GaN/AlN heterojunctions enabled by impurity blocking layers. Journal of Applied Physics, 2021, 130, 025703.	1.1	12
182	High thermal conductivity and ultrahigh thermal boundary conductance of homoepitaxial AlN thin films. APL Materials, 2022, 10, .	2.2	12
183	Ultrathin MBE-Grown AlN/GaN HEMTs with record high current densities. , 2007, , .		11
184	Electron mobility in polarization-doped Al _{0.2} GaN with a low concentration near 10 ¹⁷ cm ⁻³ . Applied Physics Letters, 2017, 110, 182102.	1.5	11
185	Light-emitting diodes with AlN polarization-induced buried tunnel junctions: A second look. Applied Physics Letters, 2020, 117, .	1.5	11
186	Fighting Broken Symmetry with Doping: Toward Polar Resonant Tunneling Diodes with Symmetric Characteristics. Physical Review Applied, 2020, 13, .	1.5	11
187	A unified thermionic and thermionic-field emission (TE+TFE) model for ideal Schottky reverse-bias leakage current. Journal of Applied Physics, 2022, 131, .	1.1	11
188	Extending the Kinetic and Thermodynamic Limits of Molecular-Beam Epitaxy Utilizing Suboxide Sources or Metal-Oxide-Catalyzed Epitaxy. Physical Review Applied, 2022, 17, .	1.5	11
189	Hydrodynamic instability of confined two-dimensional electron flow in semiconductors. Journal of Applied Physics, 2009, 106, 014506.	1.1	10
190	Electrical Noise and Transport Properties of Graphene. Journal of Low Temperature Physics, 2013, 172, 202-211.	0.6	10
191	AlGa _N /GaN HEMTs on Si by MBE with regrown contacts and $f_{T} = 153$ GHz. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 887-889.	0.8	10
192	Demonstration of avalanche capability in polarization-doped vertical GaN pn diodes: study of walkout due to residual carbon concentration. , 2018, , .		10
193	Intra- and inter-conduction band optical absorption processes in $\hat{2}$ -Ga ₂ O ₃ . Applied Physics Letters, 2020, 117, 072103.	1.5	10
194	All- \hat{E} Epitaxial Bulk Acoustic Wave Resonators. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900786.	0.8	10
195	Unexplored MBE growth mode reveals new properties of superconducting NbN. Physical Review Materials, 2021, 5, .	0.9	10
196	Temperature-dependent Lowering of Coercive Field in 300 nm Sputtered Ferroelectric Al _{0.70} Sc _{0.30} N. , 2021, , .		10
197	Phonons of $\hat{3}$ compared to $\hat{2}$. Physical Review Materials, 2021, 5, .	0.9	10
198	Terahertz spectroscopy of an electron-hole bilayer system in AlN/GaN/AlN quantum wells. Applied Physics Letters, 2017, 111, .	1.5	9

#	ARTICLE	IF	CITATIONS
199	Breakdown Walkout in Polarization-Doped Vertical GaN Diodes. IEEE Transactions on Electron Devices, 2019, 66, 4597-4603.	1.6	9
200	High-mobility two-dimensional electron gases at AlGaN/GaN heterostructures grown on GaN bulk wafers and GaN template substrates. Applied Physics Express, 2019, 12, 121003.	1.1	9
201	Spin-orbit torque field-effect transistor (SOTFET): Proposal for a magnetoelectric memory. Applied Physics Letters, 2020, 116, 242405.	1.5	9
202	In-Situ Crystalline AlN Passivation for Reduced RF Dispersion in Strained-Channel AlN/GaN/AlN High-Electron-Mobility Transistors. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100452.	0.8	9
203	SiC Substrate-Integrated Waveguides for High-Power Monolithic Integrated Circuits Above 110 GHz. , 2021, , .		9
204	Distributed-feedback blue laser diode utilizing a tunnel junction grown by plasma-assisted molecular beam epitaxy. Optics Express, 2020, 28, 35321.	1.7	9
205	Breakdown Mechanisms in $\text{In}^2\text{-Ga}_{23}\text{O}_{33}$ Trench-MOS Schottky-Barrier Diodes. IEEE Transactions on Electron Devices, 2022, 69, 75-81.	1.6	9
206	Structural and transport properties of InN grown on GaN by MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1811-1814.	0.8	8
207	High aspect ratio features in poly(methylglutarimide) using electron beam lithography and solvent developers. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, 06F101.	0.6	8
208	Energy-Efficient Clocking Based on Resonant Switching for Low-Power Computation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1400-1408.	3.5	8
209	Degradation Mechanisms of GaN-Based Vertical Devices: A Review. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900750.	0.8	8
210	Very High Parallel-Plane Surface Electric Field of 4.3 MV/cm in $\text{Ga}_{23}\text{O}_{33}$ Schottky Barrier Diodes with PtO_x Contacts. , 2020, , .		8
211	Multiferroic LuFeO ₃ on GaN by molecular-beam epitaxy. Applied Physics Letters, 2020, 116, .	1.5	8
212	X-band epi-BAW resonators. Journal of Applied Physics, 2022, 132, .	1.1	8
213	Ultra-thin Body GaN-on-insulator nFETs and pFETs: Towards III-nitride complementary logic. , 2012, , .		7
214	Time delay analysis in high speed gate-recessed E-mode InAlN HEMTs. Solid-State Electronics, 2013, 80, 67-71.	0.8	7
215	Two dimensional electron transport in modulation-doped $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}/\text{AlAs}_{0.56}\text{Sb}_{0.44}$ ultrathin quantum wells. Journal of Applied Physics, 2014, 115, 123711.	1.1	7
216	Sub-60 mV/decade steep transistors with compliant piezoelectric gate barriers. , 2014, , .		7

#	ARTICLE	IF	CITATIONS
217	Faceted sidewall etching of n-GaN on sapphire by photoelectrochemical wet processing. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, .	0.6	7
218	GaN Heterostructure Barrier Diodes Exploiting Polarization-Induced Δ -Doping. IEEE Electron Device Letters, 2014, 35, 615-617.	2.2	7
219	Unique opportunity to harness polarization in GaN to override the conventional power electronics figure-of-merits. , 2015, , .		7
220	Self-assembly and properties of domain walls in BiFeO ₃ layers grown via molecular-beam epitaxy. APL Materials, 2019, 7, .	2.2	7
221	Gallium nitride tunneling field-effect transistors exploiting polarization fields. Applied Physics Letters, 2020, 116, .	1.5	7
222	Optically pumped deep-UV multimode lasing in AlGaIn double heterostructure grown by molecular beam homoepitaxy. AIP Advances, 2022, 12, .	0.6	7
223	AlN quasi-vertical Schottky barrier diode on AlN bulk substrate using Al _{0.9} Ga _{0.1} N current spreading layer. Applied Physics Express, 2022, 15, 061007.	1.1	7
224	4-NM AlN BARRIER ALL BINARY HFET WITH SiN _x GATE DIELECTRIC. International Journal of High Speed Electronics and Systems, 2009, 19, 153-159.	0.3	6
225	Investigation of hot electrons and hot phonons generated within an AlN/GaN high electron mobility transistor. Laser Physics, 2009, 19, 745-751.	0.6	6
226	High field transport properties of 2D and nanoribbon graphene FETs. , 2009, , .		6
227	Monolithically integrated E/D-mode InAlN HEMTs with t_{max} ; 200/220 GHz. , 2012, , .		6
228	Resonant clocking circuits for reversible computation. , 2012, , .		6
229	Photoluminescence-Based Electron and Lattice Temperature Measurements in GaN-Based HEMTs. Journal of Electronic Materials, 2014, 43, 341-347.	1.0	6
230	Transistor Switches Using Active Piezoelectric Gate Barriers. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2015, 1, 35-42.	1.1	6
231	Blue (In,Ga)N light-emitting diodes with buried n^+ tunnel junctions by plasma-assisted molecular beam epitaxy. Japanese Journal of Applied Physics, 2019, 58, 060914.	0.8	6
232	Modeling and Circuit Design of Associative Memories With Spin-Orbit Torque FETs. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2019, 5, 197-205.	1.1	6
233	Magnetic properties of MBE grown Mn ₄ N on MgO, SiC, GaN and Al ₂ O ₃ substrates. AIP Advances, 2020, 10, .	0.6	6
234	Enhanced efficiency in bottom tunnel junction InGaIn blue LEDs. , 2021, , .		6

#	ARTICLE	IF	CITATIONS
235	Ultrafast dynamics of gallium vacancy charge states in $\text{Al}_x\text{Ga}_{1-x}\text{N}$. Physical Review Research, 2021, 3, .	1.3	6
236	Dislocation and indium droplet related emission inhomogeneities in InGaN LEDs. Journal Physics D: Applied Physics, 2021, 54, 495106.	1.3	6
237	Very High Density ($>10^{14} \text{ cm}^{-2}$) Polarization-Induced 2D Hole Gases Observed in Undoped Pseudomorphic InGaN/AlN Heterostructures. Advanced Electronic Materials, 2022, 8, .	2.6	6
238	Graphene nanoribbon FETs for digital electronics: experiment and modeling. International Journal of Circuit Theory and Applications, 2013, 41, 603-607.	1.3	5
239	Bottom tunnel junction blue light-emitting field-effect transistors. Applied Physics Letters, 2020, 117, 031107.	1.5	5
240	Electric Fields and Surface Fermi Level in Undoped GaN/AlN Two-Dimensional Hole Gas Heterostructures. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000573.	1.2	5
241	Large Signal Response of AlN/GaN/AlN HEMTs at 30 GHz. , 2021, , .		5
242	Momentum-resolved electronic structure and band offsets in an epitaxial NbN/GaN superconductor/semiconductor heterojunction. Science Advances, 2021, 7, eabi5833.	4.7	5
243	Current-carrying Capacity of Long & Short Channel 2D Graphene Transistors. , 2008, , .		4
244	Temperature influence on hydrodynamic instabilities in a one-dimensional electron flow in semiconductors. Journal of Applied Physics, 2010, 107, 074504.	1.1	4
245	Multilayer transition-metal dichalcogenide channel Thin-Film Transistors. , 2012, , .		4
246	Novel III-N heterostructure devices for low-power logic and more. , 2016, , .		4
247	Demonstration of GaN HyperFETs with ALD VO ₂ . , 2016, , .		4
248	First demonstration of strained AlN/GaN/AlN quantum well FETs on SiC. , 2016, , .		4
249	Magnetotransport and superconductivity in InBi films grown on Si(111) by molecular beam epitaxy. Journal of Applied Physics, 2019, 126, 103901.	1.1	4
250	Impact of Residual Carbon on Avalanche Voltage and Stability of Polarization-Induced Vertical GaN p-n Junction. IEEE Transactions on Electron Devices, 2020, 67, 3978-3982.	1.6	4
251	Molecular beam epitaxy of polar III-nitride resonant tunneling diodes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 023409.	0.9	4
252	Infrared-active phonon modes and static dielectric constants in $(\text{Al}_{1-x}\text{Ga}_x)_2\text{O}_3$ (0.18 $\leq x \leq 0.54$) alloys. Applied Physics Letters, 2022, 120, .	1.5	4

#	ARTICLE	IF	CITATIONS
253	N-polar GaN p-n junction diodes with low ideality factors. Applied Physics Express, 2022, 15, 064004.	1.1	4
254	Electron transport properties of low sheet-resistance two-dimensional electron gases in ultrathin AlN/GaN heterojunctions grown by MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1873-1875.	0.8	3
255	Barrier height, interface charge & tunneling effective mass in ALD Al _{0.2} O _{0.3} /AlN/GaN HEMTs. , 2011, , .		3
256	Exfoliated MoTe ₂ field-effect transistor. , 2013, , .		3
257	High-voltage polarization-induced vertical heterostructure p-n junction diodes on bulk GaN substrates. , 2015, , .		3
258	Advanced concepts in Ga ₂ O ₃ power and RF devices. Semiconductors and Semimetals, 2021, 107, 23-47.	0.4	3
259	Epitaxial Ferrimagnetic Mn ₄ N Thin Films on GaN by Molecular Beam Epitaxy. IEEE Transactions on Magnetics, 2022, 58, 1-6.	1.2	3
260	New physics in GaN resonant tunneling diodes. , 2019, , .		3
261	Distributed polarization-doped GaN p-n diodes with near-unity ideality factor and avalanche breakdown voltage of 1.25 kV. Applied Physics Letters, 2022, 120, .	1.5	3
262	Structural and electronic properties of NbN/GaN junctions grown by molecular beam epitaxy. APL Materials, 2022, 10, 051103.	2.2	3
263	Magnetotransport measurement of effective mass, quantum scattering time, and alloy scattering potential of polarization-doped 3D electron slabs in graded-AlGaIn. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2339-2342.	0.8	2
264	Observation of strong many-body effects in thin InN films grown on GaN buffer layers. , 2006, , .		2
265	Evidence of many-body, fermi-energy edge singularity in InN films grown on GaN buffer layers. , 2007, , .		2
266	GaN and InGaIn Nanowires on Si Substrates by Ga-Droplet Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2008, 1080, 1.	0.1	2
267	Effect of optical phonon scattering on the performance limits of ultrafast GaN transistors. , 2011, , .		2
268	Sub-10 nm epitaxial graphene nanoribbon FETs. , 2011, , .		2
269	First demonstration of two-dimensional WS ₂ transistors exhibiting 10 ⁵ room temperature modulation and ambipolar behavior. , 2012, , .		2
270	Interband tunneling transport in 2-dimensional crystal semiconductors. , 2013, , .		2

#	ARTICLE	IF	CITATIONS
271	Electron transport in 2D crystal semiconductors and their device applications. , 2014, , .		2
272	GaN lateral PolarSJs: Polarization-doped super junctions. , 2014, , .		2
273	Comparing buffer leakage in PolarMOSH on SiC and free-standing GaN substrates. , 2016, , .		2
274	Wide-bandgap Gallium Nitride p-channel MISFETs with enhanced performance at high temperature. , 2017, , .		2
275	75 Years of the Device Research Conference“ A History Worth Repeating. IEEE Journal of the Electron Devices Society, 2018, 6, 116-120.	1.2	2
276	Enhancement of punch-through voltage in GaN with buried p-type layer utilizing polarization-induced doping. , 2018, , .		2
277	Resonant Tunneling Transport in Polar III-Nitride Heterostructures. , 2020, , 215-247.		2
278	Monolithically p-down nitride laser diodes and LEDs obtained by MBE using buried tunnel junction design. , 2020, , .		2
279	Quantitative scanning microwave microscopy of 2D electron and hole gases in AlN/GaN heterostructures. Applied Physics Letters, 2022, 120, 012103.	1.5	2
280	Ultrathin AlN/GaN Heterojunctions by MBE for THz Applications. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	1
281	Quantum transport in patterned graphene nanoribbons. , 2009, , .		1
282	High performance E-mode InAlN/GaN HEMTs: Interface states from subthreshold slopes. , 2010, , .		1
283	RF performance projections for 2D graphene transistors: Role of parasitics at the ballistic transport limit. , 2011, , .		1
284	Tunnel injection GaN/AlN quantum dot UV LED. , 2012, , .		1
285	A surface-potential based compact model for GaN HEMTs incorporating polarization charges. , 2012, , .		1
286	Tunnel FETs with tunneling normal to the gate. , 2013, , .		1
287	Nanomembrane $\text{Al}_2\text{O}_3/\text{Ga}_2\text{O}_3$ high-voltage field effect transistors. , 2013, , .		1
288	Deep-UV LEDs using polarization-induced doping: Electroluminescence at cryogenic temperatures. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
289	Vertical Ga _{0.2} O _{0.3} Schottky barrier diodes on single-crystal $\sqrt{2}$ -Ga _{0.2} O _{0.3} ($\hat{a}^{\sim}201$) substrates. , 2016, , .		1
290	Structural Properties of (Sn,Mn)Se 2 - a New 2D Magnetic Semiconductor with Potential for Spintronic Applications. Microscopy and Microanalysis, 2016, 22, 1512-1513.	0.2	1
291	S-shaped negative differential resistance in III-Nitride blue quantum-well laser diodes grown by plasma-assisted MBE. , 2017, , .		1
292	Materials Relevant to Realizing a Field-Effect Transistor Based on Spin-Orbit Torques. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2019, 5, 158-165.	1.1	1
293	Electron Transport in III-V Nitride Two-Dimensional Electron Gases. , 2001, 228, 617.		1
294	GaN/AlGaN 2DEGs in the quantum regime: Magneto-transport and photoluminescence to 60 tesla. Applied Physics Letters, 2020, 117, 262105.	1.5	1
295	Unified ballistic transport relation for anisotropic dispersions and generalized dimensions. Physical Review Research, 2020, 2, .	1.3	1
296	Polarization-Induced 3-Dimensional Electron Slabs in Graded AlGaIn Layers. Materials Research Society Symposia Proceedings, 2005, 892, 375.	0.1	0
297	Investigation of High Frequency Noise and Power in AlGaIn/GaN HEMTs. AIP Conference Proceedings, 2007, , .	0.3	0
298	Efficient Terahertz Generation from Nanolayers to Microlayers of InN. , 2007, , .		0
299	Anti-Stokes Raman scattering of photoluminescence phonon replica in gan heterostructures: An effective technique for Probing Hot Phonons. , 2007, , .		0
300	Efficient terahertz generation from nanolayers to microlayers of InN. , 2007, , .		0
301	Polarization Induced Graded AlGaIn p-n Junction grown by MBE. , 2008, , .		0
302	Gigahertz operation of epitaxial graphene transistors. , 2009, , .		0
303	Ultra-scaled AlN/GaN enhancement-mode depletion-mode nanoribbon HEMTs. , 2009, , .		0
304	MBE-grown buffer with high breakdown voltage for nitride HEMTs on GaN template. , 2009, , .		0
305	Operation regimes of double gated graphene nanoribbon FETs. , 2009, , .		0
306	Polarization-induced zener tunnel junctions in wide-bandgap heterostructures. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
307	Device characteristics of single-layer graphene FETs grown on copper. , 2010, , .		0
308	Polarization-engineered N-face III–V nitride quantum well LEDs. , 2010, , .		0
309	Work-function engineering in novel high Al composition Al_{0.72}<sub>Ga_{0.28}<sub>N</sub>/AlN/GaN HEMTs. , 2010, , .		0
310	Response to "Comment on "Zener tunneling semiconducting nanotubes and graphene nanoribbon p-n junctions" [Appl. Phys. Lett. 101, 256103 (2012)]. Applied Physics Letters, 2012, 101, 256104.	1.5	0
311	Novel logic devices based on 2D crystal semiconductors: Opportunities and challenges. , 2013, , .		0
312	Perspectives of graphene SymFETs for THz applications. , 2013, , .		0
313	MBE-grown Mn-doped SnSe₂ 2D films on GaAs (111)B substrates. , 2015, , .		0
314	Vertical Schottky barrier diodes fabricated on un-intentionally doped and Sn-doped (²01) bulk ²-Ga₂<sub>O₃ substrates. , 2016, , .		0
315	In Quest of the Next Information Processing Substrate. , 2017, , .		0
316	Tunneling devices over van der Waals bonded hetero-interface. , 2017, , .		0
317	4-NM AlN BARRIER ALL BINARY HFET WITH SiN_x GATE DIELECTRIC. Selected Topics in Electornics and Systems, 2009, , 153-159.	0.2	0
318	Photoelectric Generation Coefficient of Ga<sup>III</sup> Gallium Oxide during Exposure to High<sup>III</sup> Energy Ionizing Radiation. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100700.	0.8	0
319	Tight-binding band structure of <sup>II</sup>- and <sup>I</sup>-phase Ga₂<sub>O₃ and Al₂<sub>O₃. Journal of Applied Physics, 2022, 131, 175702.	1.1	0