Huili Grace Xing

List of Publications by Year
in descending order

331 papers	16,014 citations	16791 66 h-index	22488 117 g-index
337 all docs	337 docs citations	337 times ranked	17110 citing authors

#	Article	IF	Citations
1	Broadband graphene terahertz modulators enabled by intraband transitions. Nature Communications, 2012, 3, 780.	5.8	893
2	Exciton Dynamics in Suspended Monolayer and Few-Layer MoS₂ 2D Crystals. ACS Nano, 2013, 7, 1072-1080.	7.3	686
3	Thermal Conductivity of Monolayer Molybdenum Disulfide Obtained from Temperature-Dependent Raman Spectroscopy. ACS Nano, 2014, 8, 986-993.	7.3	666
4	Polarization-Induced Hole Doping in Wideâ€“Band-Gap Uniaxial Semiconductor Heterostructures. Science, 2010, 327, 60-64.	6.0	662
5	Carrier statistics and quantum capacitance of graphene sheets and ribbons. Applied Physics Letters, 2007, 91, .	1.5	541
6	Heavy doping effects in Mg-doped GaN. Journal of Applied Physics, 2000, 87, 1832-1835.	1.1	355
7	Esaki Diodes in van der Waals Heterojunctions with Broken-Gap Energy Band Alignment. Nano Letters, 2015, 15, 5791-5798.	4.5	319
8	High Breakdown Voltage AlGaNâ€“GaN HEMTs Achieved by Multiple Field Plates. IEEE Electron Device Letters, 2004, 25, 161-163.	2.2	300
9	Intrinsic electron mobility limits in Î²-Ga2O3. Applied Physics Letters, 2016, 109, .	1.5	299
10	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
11	High-voltage field effect transistors with wide-bandgap Î²-Ga2O3 nanomembranes. Applied Physics Letters, 2014, 104, .	1.5	288
12	Enhancement-Mode Ga₂O₃ Vertical Transistors With Breakdown Voltage >1 kV. IEEE Electron Device Letters, 2018, 39, 869-872.	2.2	241
13	Transistors with chemically synthesized layered semiconductor WS2 exhibiting 105 room temperature modulation and ambipolar behavior. Applied Physics Letters, 2012, 101, .	1.5	237
14	Extraordinary Control of Terahertz Beam Reflectance in Graphene Electro-absorption Modulators. Nano Letters, 2012, 12, 4518-4522.	4.5	235
15	Graphene Nanoribbon Tunnel Transistors. IEEE Electron Device Letters, 2008, 29, 1344-1346.	2.2	193
16	Field-Plated Ga₂O₃ Trench Schottky Barrier Diodes With a BV²/$R_{ext{on,sp}}$ of up to 0.95 GW/cm². IEEE Electron Device Letters, 2020, 41, 107-110.	2.2	184
17	Unique prospects for graphene-based terahertz modulators. Applied Physics Letters, 2011, 99, .	1.5	183
18	Determination of graphene work function and graphene-insulator-semiconductor band alignment by internal photoemission spectroscopy. Applied Physics Letters, 2012, 101, .	1.5	166

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19	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
20	1.9-kV AlGaN/GaN Lateral Schottky Barrier Diodes on Silicon. IEEE Electron Device Letters, 2015, 36, 375-377.	2.2	160
21	Memory Effect and Redistribution of Mg into Sequentially Regrown GaN Layer by Metalorganic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2003, 42, 50-53.	0.8	158
22	1.7-kV and 0.55-$ext{m}Omega cdot ext {cm}^{2}$ GaN p-n Diodes on Bulk GaN Substrates With Avalanche Capability. IEEE Electron Device Letters, 2016, 37, 161-164.	2.2	153
23	Near unity ideality factor and Shockley-Read-Hall lifetime in GaN-on-GaN p-n diodes with avalanche breakdown. Applied Physics Letters, 2015, 107, .	1.5	146
24	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
25	Presence and origin of interface charges at atomic-layer deposited Al2O3/III-nitride heterojunctions. Applied Physics Letters, 2011, 99, .	1.5	140
26	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
27	AlGaSb/InAs Tunnel Field-Effect Transistor With On-Current of 78 $muhbox{A}/muhbox{m}$ at 0.5 V. IEEE Electron Device Letters, 2012, 33, 363-365.	2.2	129
28	Breakdown mechanism in 1 kA/cm2 and 960 V E-mode Î²-Ga2O3 vertical transistors. Applied Physics Letters, 2018, 113, .	1.5	128
29	Polarization-Induced Zener Tunnel Junctions in Wide-Band-Gap Heterostructures. Physical Review Letters, 2009, 103, 026801.	2.9	123
30	Comprehensive structural and optical characterization of MBE grown MoSe ₂ on graphite, CaF ₂ and graphene. 2D Materials, 2015, 2, 024007.	2.0	120
31	MBE-Regrown Ohmics in InAlN HEMTs With a Regrowth Interface Resistance of 0.05 $Omegacdothbox{mm}$. IEEE Electron Device Letters, 2012, 33, 525-527.	2.2	118
32	GaN/NbN epitaxial semiconductor/superconductor heterostructures. Nature, 2018, 555, 183-189.	13.7	116
33	Graphene for Reconfigurable Terahertz Optoelectronics. Proceedings of the IEEE, 2013, 101, 1705-1716.	16.4	114
34	Terahertz imaging employing graphene modulator arrays. Optics Express, 2013, 21, 2324.	1.7	113
35	Polarization-Sensitive Nanowire Photodetectors Based on Solution-Synthesized CdSe Quantum-Wire Solids. Nano Letters, 2007, 7, 2999-3006.	4.5	108
36	A polarization-induced 2D hole gas in undoped gallium nitride quantum wells. Science, 2019, 365, 1454-1457.	6.0	106

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37	Two-Dimensional Heterojunction Interlayer Tunneling Field Effect Transistors (Thin-TFETs). IEEE Journal of the Electron Devices Society, 2015, 3, 200-207.	1.2	105
38	MBE-grown 232â€“270â€‰nm deep-UV LEDs using monolayer thin binary GaN/AlN quantum heterostructures. Applied Physics Letters, 2017, 110, .	1.5	105
39	Efficient terahertz electro-absorption modulation employing graphene plasmonic structures. Applied Physics Letters, 2012, 101, .	1.5	103
40	Performance of AlGaSb/InAs TFETs With Gate Electric Field and Tunneling Direction Aligned. IEEE Electron Device Letters, 2012, 33, 655-657.	2.2	103
41	A new class of electrically tunable metamaterial terahertz modulators. Optics Express, 2012, 20, 28664.	1.7	102
42	Studies of Intrinsic Hot Phonon Dynamics in Suspended Graphene by Transient Absorption Microscopy. Nano Letters, 2011, 11, 3184-3189.	4.5	99
43	Effect of Optical Phonon Scattering on the Performance of GaN Transistors. IEEE Electron Device Letters, 2012, 33, 709-711.	2.2	99
44	Gate-recessed integrated E/D GaN HEMT technology with f_T/f_{max} >300 GHz. IEEE Electron Device Letters, 2013, 34, 741-743.	2.2	94
45	Single particle transport in two-dimensional heterojunction interlayer tunneling field effect transistor. Journal of Applied Physics, 2014, 115, .	1.1	94
46	1230â€‰V Î²-Ga2O3 trench Schottky barrier diodes with an ultra-low leakage current of <1 Î¼A/cm2. Applied Physics Letters, 2018, 113, .	1.5	94
47	AlGaN/GaN polarization-doped field-effect transistor for microwave power applications. Applied Physics Letters, 2004, 84, 1591-1593.	1.5	87
48	Near-ideal reverse leakage current and practical maximum electric field in Î²-Ga2O3 Schottky barrier diodes. Applied Physics Letters, 2020, 116, .	1.5	86
49	Controllable growth of layered selenide and telluride heterostructures and superlattices using molecular beam epitaxy. Journal of Materials Research, 2016, 31, 900-910.	1.2	85
50	Polarizationâ€engineering in group IIIâ€nitride heterostructures: New opportunities for device design. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1511-1516.	0.8	83
51	Zener tunneling in semiconducting nanotube and graphene nanoribbon pâ^•n junctions. Applied Physics Letters, 2008, 93, .	1.5	80
52	High Breakdown Voltage in RF AlN/GaN/AlN Quantum Well HEMTs. IEEE Electron Device Letters, 2019, 40, 1293-1296.	2.2	79
53	Tunnel-injection quantum dot deep-ultraviolet light-emitting diodes with polarization-induced doping in III-nitride heterostructures. Applied Physics Letters, 2014, 104, 021105.	1.5	77
54	Layered transition metal dichalcogenides: promising near-lattice-matched substrates for GaN growth. Scientific Reports, 2016, 6, 23708.	1.6	76

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55	Design and Realization of GaN Trench Junction-Barrier-Schottky-Diodes. IEEE Transactions on Electron Devices, 2017, 64, 1635-1641.	1.6	76
56	Thermal conductivity of crystalline AlN and the influence of atomic-scale defects. Journal of Applied Physics, 2019, 126, .	1.1	75
57	GaN HBT: toward an RF device. IEEE Transactions on Electron Devices, 2001, 48, 543-551.	1.6	73
58	Prospects for Wide Bandgap and Ultrawide Bandgap CMOS Devices. IEEE Transactions on Electron Devices, 2020, 67, 4010-4020.	1.6	73
59	Graphene nanoribbon field-effect transistors on wafer-scale epitaxial graphene on SiC substrates. APL Materials, 2015, 3, .	2.2	72
60	Scanning Tunneling Microscopy and Spectroscopy of Air Exposure Effects on Molecular Beam Epitaxy Grown WSe₂ Monolayers and Bilayers. ACS Nano, 2016, 10, 4258-4267.	7.3	72
61	220-GHz Quaternary Barrier InAlGaN/AlN/GaN HEMTs. IEEE Electron Device Letters, 2011, 32, 1215-1217.	2.2	71
62	Crystal orientation dictated epitaxy of ultrawide-bandgap 5.4- to 8.6-eV Î±-(AlGa) ₂ O ₃ on m-plane sapphire. Science Advances, 2021, 7, .	4.7	71
63	Atomic Layer Deposition of Al₂O₃ on WSe₂ Functionalized by Titanyl Phthalocyanine. ACS Nano, 2016, 10, 6888-6896.	7.3	69
64	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
65	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
66	Direct Measurement of Dirac Point Energy at the Graphene/Oxide Interface. Nano Letters, 2013, 13, 131-136.	4.5	67
67	Exceptional Terahertz Wave Modulation in Graphene Enhanced by Frequency Selective Surfaces. ACS Photonics, 2016, 3, 315-323.	3.2	67
68	Ultrascaled InAlN/GaN High Electron Mobility Transistors with Cutoff Frequency of 400 GHz. Japanese Journal of Applied Physics, 2013, 52, 08JN14.	0.8	66
69	Tunnel-injection GaN quantum dot ultraviolet light-emitting diodes. Applied Physics Letters, 2013, 102, .	1.5	64
70	Fiber Reinforced Layered Dielectric Nanocomposite. Advanced Functional Materials, 2019, 29, 1900056.	7.8	64
71	N-polar III-nitride quantum well light-emitting diodes with polarization-induced doping. Applied Physics Letters, 2011, 99, .	1.5	63
72	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

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73	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
74	Quaternary Barrier InAlGaN HEMTs With f_{T}/f_{max} of 230/300 GHz. IEEE Electron Device Letters, 2013, 34, 378-380.	2.2	58
75	Polarization effects on gate leakage in InAlN/AlN/GaN high-electron-mobility transistors. Applied Physics Letters, 2012, 101, .	1.5	55
76	Transport properties of graphene nanoribbon transistors on chemical-vapor-deposition grown wafer-scale graphene. Applied Physics Letters, 2012, 100, .	1.5	55
77	Polarization-Induced GaN-on-Insulator E/D Mode p-Channel Heterostructure FETs. IEEE Electron Device Letters, 2013, 34, 852-854.	2.2	55
78	234â€‰nm and 246â€‰nm AlN-Delta-GaN quantum well deep ultraviolet light-emitting diodes. Applied Physics Letters, 2018, 112, .	1.5	55
79	Deep-UV emission at 219â€‰nm from ultrathin MBE GaN/AlN quantum heterostructures. Applied Physics Letters, 2017, 111, .	1.5	54
80	High breakdown single-crystal GaN p-n diodes by molecular beam epitaxy. Applied Physics Letters, 2015, 107, .	1.5	53
81	Physics-Inspired Neural Networks for Efficient Device Compact Modeling. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2016, 2, 44-49.	1.1	53
82	Room temperature microwave oscillations in GaN/AlN resonant tunneling diodes with peak current densities up to 220 kA/cm2. Applied Physics Letters, 2018, 112, .	1.5	51
83	Fin-channel orientation dependence of forward conduction in kV-class Ga₂O₃ trench Schottky barrier diodes. Applied Physics Express, 2019, 12, 061007.	1.1	50
84	Single and multi-fin normally-off Ga₂O₃ vertical transistors with a breakdown voltage over 2.6 kV. , 2019, , .		50
85	Green luminescence of InGaN nanowires grown on silicon substrates by molecular beam epitaxy. Journal of Applied Physics, 2011, 109, .	1.1	48
86	Strained GaN quantum-well FETs on single crystal bulk AlN substrates. Applied Physics Letters, 2017, 110, .	1.5	48
87	Carrier transport and confinement in polarization-induced three-dimensional electron slabs: Importance of alloy scattering in AlGaN. Applied Physics Letters, 2006, 88, 042109.	1.5	47
88	Threshold Voltage Control in $hbox{Al}_{0.72} hbox{Ga}_{0.28}hbox{N/AlN/GaN}$ HEMTs by Work-Function Engineering. IEEE Electron Device Letters, 2010, 31, 954-956.	2.2	47
89	Coded-Aperture Imaging Using Photo-Induced Reconfigurable Aperture Arrays for Mapping Terahertz Beams. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 321-327.	2.0	47
90	Inductively-coupled-plasma reactive ion etching of single-crystal Î²-Ga₂O₃. Japanese Journal of Applied Physics, 2017, 56, 030304.	0.8	46

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91	Development of GaN Vertical Trench-MOSFET With MBE Regrown Channel. IEEE Transactions on Electron Devices, 2018, 65, 2558-2564.	1.6	46
92	Quantum transport in graphene nanoribbons patterned by metal masks. Applied Physics Letters, 2010, 96, .	1.5	45
93	Very high voltage operation (>330 V) with high current gain of AlGaN/GaN HBTs. IEEE Electron Device Letters, 2003, 24, 141-143.	2.2	44
94	Physics and polarization characteristics of 298â€‰nm AlN-delta-GaN quantum well ultraviolet light-emitting diodes. Applied Physics Letters, 2017, 110, .	1.5	44
95	MBE growth of few-layer 2H-MoTe2 on 3D substrates. Journal of Crystal Growth, 2018, 482, 61-69.	0.7	43
96	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
97	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
98	New Tunneling Features in Polar III-Nitride Resonant Tunneling Diodes. Physical Review X, 2017, 7, .	2.8	42
99	Next generation electronics on the ultrawide-bandgap aluminum nitride platform. Semiconductor Science and Technology, 2021, 36, 044001.	1.0	42
100	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
101	Ultrathin Body GaN-on-Insulator Quantum Well FETs With Regrown Ohmic Contacts. IEEE Electron Device Letters, 2012, 33, 661-663.	2.2	40
102	Electron mobility in graded AlGaN alloys. Applied Physics Letters, 2006, 88, 042103.	1.5	39
103	Polarization-engineered removal of buffer leakage for GaN transistors. Applied Physics Letters, 2010, 96, 042102.	1.5	39
104	InAs/AlGaSb heterojunction tunnel fieldâ€effect transistor with tunnelling inâ€line with the gate field. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 389-392.	0.8	39
105	2.44 kV Ga<inf>2</inf>O<inf>3</inf> vertical trench Schottky barrier diodes with very low reverse leakage current. , 2018, , .		39
106	Adsorption-controlled growth of Ga2O3 by suboxide molecular-beam epitaxy. APL Materials, 2021, 9, .	2.2	38
107	Ultralow-Leakage AlGaN/GaN High Electron Mobility Transistors on Si With Non-Alloyed Regrown Ohmic Contacts. IEEE Electron Device Letters, 2016, 37, 16-19.	2.2	37
108	Guiding Principles for Trench Schottky Barrier Diodes Based on Ultrawide Bandgap Semiconductors: A Case Study in Gaâ„Oâ„ƒ. IEEE Transactions on Electron Devices, 2020, 67, 3938-3947.	1.6	36

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109	InGaN Channel High-Electron-Mobility Transistors with InAlGaN Barrier andf_T/f_{max}of 260/220 GHz. Applied Physics Express, 2013, 6, 016503.	1.1	35
110	Comparative study of chemically synthesized and exfoliated multilayer MoS2 field-effect transistors. Applied Physics Letters, 2013, 102, 043116.	1.5	35
111	Activation of buried p-GaN in MOCVD-regrown vertical structures. Applied Physics Letters, 2018, 113, 062105.	1.5	35
112	Structural and piezoelectric properties of ultra-thin ScxAl1â^'xN films grown on GaN by molecular beam epitaxy. Applied Physics Letters, 2020, 117, .	1.5	34
113	Photocurrent Polarization Anisotropy of Randomly Oriented Nanowire Networks. Nano Letters, 2008, 8, 1352-1357.	4.5	33
114	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
115	Approaching realâ€time terahertz imaging with photoâ€induced coded apertures and compressed sensing. Electronics Letters, 2014, 50, 801-803.	0.5	33
116	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
117	Polarization-induced Zener tunnel diodes in GaN/InGaN/GaN heterojunctions. Applied Physics Letters, 2015, 107, .	1.5	32
118	1.6 kV Vertical Ga₂O₃ FinFETs With Source-Connected Field Plates and Normally-off Operation. , 2019, , .		31
119	Thermal stability of epitaxial Î±-Ga2O3 and (Al,Ga)2O3 layers on m-plane sapphire. Applied Physics Letters, 2021, 119, .	1.5	30
120	Oxygen Incorporation in the Molecular Beam Epitaxy Growth of Sc_xGa_{1â^'x}N and Sc_xAl_{1â^'x}N. Physica Status Solidi (B): Basic Research, 2020, 257, 1900612.	0.7	29
121	Polarization-mediated remote surface roughness scattering in ultrathin barrier GaN high-electron mobility transistors. Applied Physics Letters, 2010, 97, .	1.5	28
122	Room temperature weak ferromagnetism in Sn1â^'xMnxSe2 2D films grown by molecular beam epitaxy. APL Materials, 2016, 4, .	2.2	28
123	Room-Temperature Graphene-Nanoribbon Tunneling Field-Effect Transistors. Npj 2D Materials and Applications, 2019, 3, .	3.9	26
124	Molecular beam homoepitaxy on bulk AlN enabled by aluminum-assisted surface cleaning. Applied Physics Letters, 2020, 116, .	1.5	26
125	Surface control and MBE growth diagram for homoepitaxy on single-crystal AlN substrates. Applied Physics Letters, 2020, 116, .	1.5	26
126	Metalâ€face 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

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127	GaN-on-GaN p-n power diodes with 3.48 kV and 0.95 mâ„¦-cm2: A record high figure-of-merit of 12.8 GW/cm2. , 2015, , .		25
128	Sub-230 nm deep-UV emission from GaN quantum disks in AlN grown by a modified Stranskiâ€“Krastanov mode. Japanese Journal of Applied Physics, 2016, 55, 05FF06.	0.8	25
129	Broken Symmetry Effects due to Polarization on Resonant Tunneling Transport in Double-Barrier Nitride Heterostructures. Physical Review Applied, 2019, 11, .	1.5	25
130	Epitaxial niobium nitride superconducting nanowire single-photon detectors. Applied Physics Letters, 2020, 117, .	1.5	25
131	Rotationally aligned hexagonal boron nitride on sapphire by high-temperature molecular beam epitaxy. Physical Review Materials, 2019, 3, .	0.9	25
132	Electrical transport properties of wafer-fused p-GaAs/n-GaN heterojunctions. Applied Physics Letters, 2008, 93, .	1.5	24
133	Graphene as transparent electrode for direct observation of hole photoemission from silicon to oxide. Applied Physics Letters, 2013, 102, .	1.5	24
134	Selective Chemical Response of Transition Metal Dichalcogenides and Metal Dichalcogenides in Ambient Conditions. ACS Applied Materials & Interfaces, 2017, 9, 29255-29264.	4.0	24
135	Molecular beam epitaxial growth of scandium nitride on hexagonal SiC, GaN, and AlN. Applied Physics Letters, 2019, 115, .	1.5	24
136	Polarization control in nitride quantum well light emitters enabled by bottom tunnel-junctions. Journal of Applied Physics, 2019, 125, 203104.	1.1	24
137	Thermionic emission or tunneling? The universal transition electric field for ideal Schottky reverse leakage current: A case study in Î² -Ga2O3. Applied Physics Letters, 2020, 117, .	1.5	24
138	Trapping and Detrapping Mechanisms in Î²-Gaâ„Oâ„ Vertical FinFETs Investigated by Electro-Optical Measurements. IEEE Transactions on Electron Devices, 2020, 67, 3954-3959.	1.6	24
139	Low temperature AlN growth by MBE and its application in HEMTs. Journal of Crystal Growth, 2015, 425, 133-137.	0.7	23
140	Fully transparent field-effect transistor with high drain current and on-off ratio. APL Materials, 2020, 8, .	2.2	23
141	Î³-phase inclusions as common structural defects in alloyed Î²-(AlxGa1â^'x)2O3 and doped Î²-Ga2O3 films. APL Materials, 2021, 9, .	2.2	23
142	DC Characteristics of AlGaAs/GaAs/GaN HBTs Formed by Direct Wafer Fusion. IEEE Electron Device Letters, 2007, 28, 8-10.	2.2	22
143	Inâ€situ Xâ€ray photoelectron spectroscopy of trimethyl aluminum and water halfâ€cycle treatments on HFâ€treated and O₃â€oxidized GaN substrates. Physica Status Solidi - Rapid Research Letters, 2012, 6, 22-24.	1.2	22
144	Significantly reduced thermal conductivity in Î² -(Al0.1Ga0.9)2O3/Ga2O3 superlattices. Applied Physics Letters, 2019, 115, .	1.5	22

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145	GaN/AlN Schottky-gate p-channel HFETs with InGaN contacts and 100 mA/mm on-current. , 2019, , .		22
146	Band Structure Engineering of Layered WSe₂ via One-Step Chemical Functionalization. ACS Nano, 2019, 13, 7545-7555.	7.3	21
147	Impact of CF₄plasma treatment on threshold voltage and mobility in Al₂O₃/InAlN/GaN MOSHEMTs. Applied Physics Express, 2014, 7, 031002.	1.1	19
148	Atomic Structure of Thin MoSe2 Films Grown by Molecular Beam Epitaxy. Microscopy and Microanalysis, 2014, 20, 164-165.	0.2	19
149	Measurement of ultrafast dynamics of photoexcited carriers in Î²-Ga2O3 by two-color optical pump-probe spectroscopy. Applied Physics Letters, 2018, 113, .	1.5	19
150	Wurtzite phonons and the mobility of a GaN/AlN 2D hole gas. Applied Physics Letters, 2019, 114, .	1.5	19
151	Anisotropic dielectric functions, band-to-band transitions, and critical points in Î± -Ga2O3. Applied Physics Letters, 2021, 118, .	1.5	19
152	ON-Resistance of Ga₂O₃ Trench-MOS Schottky Barrier Diodes: Role of Sidewall Interface Trapping. IEEE Transactions on Electron Devices, 2021, 68, 2420-2426.	1.6	19
153	Enhanced injection efficiency and light output in bottom tunnel-junction light-emitting diodes. Optics Express, 2020, 28, 4489.	1.7	19
154	Fabrication of top-gated epitaxial graphene nanoribbon FETs using hydrogen-silsesquioxane. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	18
155	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
156	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
157	Scalability of Atomic-Thin-Body (ATB) Transistors Based on Graphene Nanoribbons. IEEE Electron Device Letters, 2010, 31, 531-533.	2.2	17
158	Perspectives of TFETs for low power analog ICs. , 2012, , .		17
159	Electronic Structure of the Metastable Epitaxial Rock-Salt SnSe <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo stretchy="false">{</mml:mo><mml:mn>111</mml:mn><mml:mo stretchy="false">}</mml:mo></mml:mrow></mml:math> Topological Crystalline Insulator. Physical Review X, 2017, 7, .	2.8	17
160	Thermal design of multi-fin Ga2O3 vertical transistors. Applied Physics Letters, 2021, 119, .	1.5	17
161	Epitaxial ScxAl1â^'xN on GaN exhibits attractive high-K dielectric properties. Applied Physics Letters, 2022, 120, .	1.5	17
162	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

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163	Subcritical barrier AlN/GaN E/Dâ€mode HFETs and inverters. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1620-1622.	0.8	16
164	A 570-630 GHz FREQUENCY DOMAIN TERAHERTZ SPECTROSCOPY SYSTEM BASED ON A BROADBAND QUASI-OPTICAL ZERO BIAS SCHOTTKY DIODE DETECTOR. International Journal of High Speed Electronics and Systems, 2011, 20, 629-638.	0.3	16
165	1.5 kV Vertical Ga₂O₃ Trench-MIS Schottky Barrier Diodes. , 2018, , .		16
166	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
167	MBE growth and donor doping of coherent ultrawide bandgap AlGaN alloy layers on single-crystal AlN substrates. Applied Physics Letters, 2021, 118, .	1.5	16
168	Terahertz amplification in RTD-gated HEMTs with a grating-gate wave coupling topology. Applied Physics Letters, 2016, 109, .	1.5	15
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