Huili Grace Xing

List of Publications by Year in Descending Order

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

299	12,283	57	103
papers	citations	h-index	g-index

336	14,253	4.3	6.39
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
299	Breakdown Mechanisms in β-Ga_2O_3 Trench-MOS Schottky-Barrier Diodes. *IEEE Transactions on Electron Devices*, **2022**, 69, 75-81	2.9	2
298	Quantitative scanning microwave microscopy of 2D electron and hole gases in AlN/GaN heterostructures. *Applied Physics Letters*, **2022**, 120, 012103	3.4	0
297	A unified thermionic and thermionic-field emission (TE–TFE) model for ideal Schottky reverse-bias leakage current. *Journal of Applied Physics*, **2022**, 131, 015702	2.5	5
296	High thermal conductivity and ultrahigh thermal boundary conductance of homoepitaxial AlN thin films. *APL Materials*, **2022**, 10, 011115	5.7	1
295	Nucleation, growth, and stability of WSe_2 thin films deposited on HOPG examined using in situ, real-time synchrotron x-ray radiation. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2022**, 40, 012201	2.9	
294	Infrared dielectric functions and Brillouin zone center phonons of α-Ga_2O_3 compared to α-Al_2O_3. *Physical Review Materials*, **2022**, 6,	3.2	5
293	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, 122111	3.4	0
292	Infrared-active phonon modes and static dielectric constants in β-$(Al_xGa_{1-x})_2O_3$ ($0.18 \leq x \leq 0.54$) alloys. *Applied Physics Letters*, **2022**, 120, 112202	3.4	1
291	Optically pumped deep-UV multimode lasing in AlGaN double heterostructure grown by molecular beam homoepitaxy. *AIP Advances*, **2022**, 12, 035023	1.5	2
290	Epitaxial $Sc_xAl_{1-x}N$ on GaN exhibits attractive high-K dielectric properties. *Applied Physics Letters*, **2022**, 120, 152901	3.4	5
289	Structural and electronic properties of NbN/GaN junctions grown by molecular beam epitaxy. *APL Materials*, **2022**, 10, 051103	5.7	0
288	Polarization-induced 2D hole gases in pseudomorphic undoped GaN/AlN heterostructures on single-crystal AlN substrates. *Applied Physics Letters*, **2021**, 119, 162104	3.4	6
287	Adsorption-controlled growth of Ga_2O_3 by suboxide molecular-beam epitaxy. *APL Materials*, **2021**, 9, 031101	5.7	11
286	MBE growth and donor doping of coherent ultrawide bandgap AlGaN alloy layers on single-crystal AlN substrates. *Applied Physics Letters*, **2021**, 118, 092101	3.4	5
285	Enhanced efficiency in bottom tunnel junction InGaN blue LEDs **2021**,		3
284	Next generation electronics on the ultrawide-bandgap aluminum nitride platform. *Semiconductor Science and Technology*, **2021**, 36, 044001	1.8	17
283	Ultrafast dynamics of gallium vacancy charge states in β-Ga_2O_3. *Physical Review Research*, **2021**, 3,	3.9	4

282	□phase inclusions as common structural defects in alloyed □(AlxGa1□)2O3 and doped □Ga2O3 films. *APL Materials*, **2021**, 9, 051119	5.7	7
281	ON-Resistance of Ga2O3 Trench-MOS Schottky Barrier Diodes: Role of Sidewall Interface Trapping. *IEEE Transactions on Electron Devices*, **2021**, 68, 2420-2426	2.9	5
280	Temperature-dependent Lowering of Coercive Field in 300 nm Sputtered Ferroelectric Al0.70Sc0.30N **2021**,		4
279	High-conductivity polarization-induced 2D hole gases in undoped GaN/AlN heterojunctions enabled by impurity blocking layers. *Journal of Applied Physics*, **2021**, 130, 025703	2.5	7
278	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	2.3	16
277	Crystal orientation dictated epitaxy of ultrawide-bandgap 5.4- to 8.6-eV □(AlGa)O on m-plane sapphire. *Science Advances*, **2021**, 7,	14.3	35
276	Advanced concepts in Ga2O3 power and RF devices. *Semiconductors and Semimetals*, **2021**, 107, 23-47	0.6	2
275	Epitaxial Ferrimagnetic Mn4N Thin Films on GaN by Molecular Beam Epitaxy. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	0
274	An all-epitaxial nitride heterostructure with concurrent quantum Hall effect and superconductivity. *Science Advances*, **2021**, 7,	14.3	4
273	Electric Fields and Surface Fermi Level in Undoped GaN/AlN Two-Dimensional Hole Gas Heterostructures. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2000573	2.5	2
272	Anisotropic dielectric functions, band-to-band transitions, and critical points in □Ga2O3. *Applied Physics Letters*, **2021**, 118, 062103	3.4	12
271	Unexplored MBE growth mode reveals new properties of superconducting NbN. *Physical Review Materials*, **2021**, 5,	3.2	5
270	Molecular beam epitaxy of polar III-nitride resonant tunneling diodes. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 023409	2.9	1
269	Thermal stability of epitaxial □Ga2O3 and (Al,Ga)2O3 layers on m-plane sapphire. *Applied Physics Letters*, **2021**, 119, 062102	3.4	8
268	High-frequency and below bandgap anisotropic dielectric constants in □(AlxGa1□)2O3 (0□□1). *Applied Physics Letters*, **2021**, 119, 092103	3.4	9
267	Dislocation and indium droplet related emission inhomogeneities in InGaN LEDs. *Journal Physics D: Applied Physics*, **2021**, 54, 495106	3	1
266	Thermal design of multi-fin Ga2O3 vertical transistors. *Applied Physics Letters*, **2021**, 119, 103502	3.4	6
265	Strong effect of scandium source purity on chemical and electronic properties of epitaxial ScxAl1□N/GaN heterostructures. *APL Materials*, **2021**, 9, 091106	5.7	3

264	Momentum-resolved electronic structure and band offsets in an epitaxial NbN/GaN superconductor/semiconductor heterojunction.. *Science Advances*, **2021**, 7, eabi5833	14.3	3
263	Molecular beam homoepitaxy on bulk AlN enabled by aluminum-assisted surface cleaning. *Applied Physics Letters*, **2020**, 116, 172106	3.4	17
262	Near-ideal reverse leakage current and practical maximum electric field in �Ga2O3 Schottky barrier diodes. *Applied Physics Letters*, **2020**, 116, 192101	3.4	42
261	Spin�rbit torque field-effect transistor (SOTFET): Proposal for a magnetoelectric memory. *Applied Physics Letters*, **2020**, 116, 242405	3.4	4
260	. *IEEE Transactions on Electron Devices*, **2020**, 67, 3978-3982	2.9	1
259	Fighting Broken Symmetry with Doping: Toward Polar Resonant Tunneling Diodes with Symmetric Characteristics. *Physical Review Applied*, **2020**, 13,	4.3	8
258	GaN HEMTs on Si With Regrown Contacts and Cutoff/Maximum Oscillation Frequencies of 250/204 GHz. *IEEE Electron Device Letters*, **2020**, 41, 689-692	4.4	29
257	All-Epitaxial Bulk Acoustic Wave Resonators. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900786	1.6	8
256	Multiferroic LuFeO3 on GaN by molecular-beam epitaxy. *Applied Physics Letters*, **2020**, 116, 102901	3.4	5
255	Surface control and MBE growth diagram for homoepitaxy on single-crystal AlN substrates. *Applied Physics Letters*, **2020**, 116, 262102	3.4	17
254	Magnetic properties of MBE grown Mn4N on MgO, SiC, GaN and Al2O3 substrates. *AIP Advances*, **2020**, 10, 015238	1.5	3
253	Gallium nitride tunneling field-effect transistors exploiting polarization fields. *Applied Physics Letters*, **2020**, 116, 073502	3.4	2
252	Fully transparent field-effect transistor with high drain current and on-off ratio. *APL Materials*, **2020** , 8, 011110	5.7	16
251	Layered two-dimensional selenides and tellurides grown by molecular beam epitaxy **2020**, 235-269		1
250	GaN/AlN p-channel HFETs with Imax >420 mA/mm and ~20 GHz fT / fMAX **2020**,		6
249	Monolithically p-down nitride laser diodes and LEDs obtained by MBE using buried tunnel junction design **2020**,		2
248	Enhanced injection efficiency and light output in bottom tunnel-junction light-emitting diodes. *Optics Express*, **2020**, 28, 4489-4500	3.3	12
247	Distributed-feedback blue laser diode utilizing a tunnel junction grown by plasma-assisted molecular beam epitaxy. *Optics Express*, **2020**, 28, 35321-35329	3.3	3

246	GaN/AlGaN 2DEGs in the quantum regime: Magneto-transport and photoluminescence to 60 tesla. *Applied Physics Letters*, **2020**, 117, 262105	3.4	1
245	Field-Effect Transistors 5. *Springer Series in Materials Science*, **2020**, 639-660	0.9	
244	Resonant Tunneling Transport in Polar III-Nitride Heterostructures **2020**, 215-247		1
243	Degradation Mechanisms of GaN-Based Vertical Devices: A Review. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900750	1.6	3
242	Oxygen Incorporation in the Molecular Beam Epitaxy Growth of ScxGa1□N and ScxAl1□N. *Physica Status Solidi (B): Basic Research*, **2020**, 257, 1900612	1.3	19
241	Molecular Beam Epitaxy Growth of Large-Area GaN/AlN 2D Hole Gas Heterostructures. *Physica Status Solidi (B): Basic Research*, **2020**, 257, 1900567	1.3	9
240	Nitride LEDs and Lasers with Buried Tunnel Junctions. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 015018	2	5
239	Field-Plated Ga2O3 Trench Schottky Barrier Diodes With a BV2/ $R_{text{on,sp}}$ of up to 0.95 GW/cm2. *IEEE Electron Device Letters*, **2020**, 41, 107-110	4.4	97
238	Molecular Beam Epitaxy of Transition Metal Nitrides for Superconducting Device Applications. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900675	1.6	11
237	Epitaxial niobium nitride superconducting nanowire single-photon detectors. *Applied Physics Letters*, **2020**, 117, 132601	3.4	12
236	N-polar GaN/AlN resonant tunneling diodes. *Applied Physics Letters*, **2020**, 117, 143501	3.4	5
235	Guiding Principles for Trench Schottky Barrier Diodes Based on Ultrawide Bandgap Semiconductors: A Case Study in Ga□□. *IEEE Transactions on Electron Devices*, **2020**, 67, 3938-3947	2.9	26
234	Thermionic emission or tunneling? The universal transition electric field for ideal Schottky reverse leakage current: A case study in □Ga2O3. *Applied Physics Letters*, **2020**, 117, 222104	3.4	14
233	Prospects for Wide Bandgap and Ultrawide Bandgap CMOS Devices. *IEEE Transactions on Electron Devices*, **2020**, 67, 4010-4020	2.9	38
232	Bottom tunnel junction blue light-emitting field-effect transistors. *Applied Physics Letters*, **2020**, 117, 031107	3.4	2
231	Very High Parallel-Plane Surface Electric Field of 4.3 MV/cm in Ga2O3 Schottky Barrier Diodes with PtOx Contacts **2020**,		4
230	Light-emitting diodes with AlN polarization-induced buried tunnel junctions: A second look. *Applied Physics Letters*, **2020**, 117, 061104	3.4	5
229	Structural and piezoelectric properties of ultra-thin ScxAl1□N films grown on GaN by molecular beam epitaxy. *Applied Physics Letters*, **2020**, 117, 112101	3.4	15

228	. *IEEE Transactions on Electron Devices*, **2020**, 67, 3954-3959	2.9	12
227	Intra- and inter-conduction band optical absorption processes in Ga2O3. *Applied Physics Letters*, **2020**, 117, 072103	3.4	8
226	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	2.4	6
225	Significantly reduced thermal conductivity in (Al0.1Ga0.9)2O3/Ga2O3 superlattices. *Applied Physics Letters*, **2019**, 115, 092105	3.4	17
224	Magnetotransport and superconductivity in InBi films grown on Si(111) by molecular beam epitaxy. *Journal of Applied Physics*, **2019**, 126, 103901	2.5	1
223	A polarization-induced 2D hole gas in undoped gallium nitride quantum wells. *Science*, **2019**, 365, 1454-1457	33.3	57
222	Wurtzite phonons and the mobility of a GaN/AlN 2D hole gas. *Applied Physics Letters*, **2019**, 114, 253501	3.4	14
221	Polarization control in nitride quantum well light emitters enabled by bottom tunnel-junctions. *Journal of Applied Physics*, **2019**, 125, 203104	2.5	14
220	Realization of GaN PolarMOS using selective-area regrowth by MBE and its breakdown mechanisms. *Japanese Journal of Applied Physics*, **2019**, 58, SCCD15	1.4	12
219	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	1.4	43
218	Fiber Reinforced Layered Dielectric Nanocomposite. *Advanced Functional Materials*, **2019**, 29, 1900056	15.6	36
217	Blue (In,Ga)N light-emitting diodes with buried n +p + tunnel junctions by plasma-assisted molecular beam epitaxy. *Japanese Journal of Applied Physics*, **2019**, 58, 060914	1.4	3
216	Fin-channel orientation dependence of forward conduction in kV-class Ga2O3 trench Schottky barrier diodes. *Applied Physics Express*, **2019**, 12, 061007	2.4	29
215	Bandgap narrowing and Mott transition in Si-doped Al0.7Ga0.3N. *Applied Physics Letters*, **2019**, 114, 113501	3.4	6
214	Electronic structure of SnSe2 films grown by molecular beam epitaxy. *Applied Physics Letters*, **2019**, 114, 091602	3.4	8
213	Broken Symmetry Effects due to Polarization on Resonant Tunneling Transport in Double-Barrier Nitride Heterostructures. *Physical Review Applied*, **2019**, 11,	4.3	17
212	Self-assembly and properties of domain walls in BiFeO3 layers grown via molecular-beam epitaxy. *APL Materials*, **2019**, 7, 071101	5.7	7
211	1.6 kV Vertical Ga2O3 FinFETs With Source-Connected Field Plates and Normally-off Operation **2019**,		19

210	Band Structure Engineering of Layered WSe One-Step Chemical Functionalization. *ACS Nano*, **2019**, 13, 7545-7555	16.7	14
209	High Breakdown Voltage in RF AlN/GaN/AlN Quantum Well HEMTs. *IEEE Electron Device Letters*, **2019**, 40, 1293-1296	4.4	46
208	Molecular beam epitaxial growth of scandium nitride on hexagonal SiC, GaN, and AlN. *Applied Physics Letters*, **2019**, 115, 172101	3.4	14
207	. *IEEE Transactions on Electron Devices*, **2019**, 66, 4597-4603	2.9	8
206	Room-Temperature Graphene-Nanoribbon Tunneling Field-Effect Transistors. *Npj 2D Materials and Applications*, **2019**, 3,	8.8	18
205	Rotationally aligned hexagonal boron nitride on sapphire by high-temperature molecular beam epitaxy. *Physical Review Materials*, **2019**, 3,	3.2	15
204	Materials Relevant to Realizing a Field-Effect Transistor Based on SpinOrbit Torques. *IEEE Journal on Exploratory Solid-State Computational Devices and Circuits*, **2019**, 5, 158-165	2.4	1
203	**2019**,		23
202	GaN/AlN Schottky-gate p-channel HFETs with InGaN contacts and 100 mA/mm on-current **2019**,		17
201	Thermal conductivity of crystalline AlN and the influence of atomic-scale defects. *Journal of Applied Physics*, **2019**, 126, 185105	2.5	42
200	Modeling and Circuit Design of Associative Memories With SpinOrbit Torque FETs. *IEEE Journal on Exploratory Solid-State Computational Devices and Circuits*, **2019**, 5, 197-205	2.4	4
199	GaN/NbN epitaxial semiconductor/superconductor heterostructures. *Nature*, **2018**, 555, 183-189	50.4	83
198	Steep Sub-Boltzmann Switching in AlGaN/GaN Phase-FETs With ALD VO2. *IEEE Transactions on Electron Devices*, **2018**, 65, 945-949	2.9	11
197	Band offset and electron affinity of MBE-grown SnSe2. *Applied Physics Letters*, **2018**, 112, 042108	3.4	9
196	234 nm and 246 nm AlN-Delta-GaN quantum well deep ultraviolet light-emitting diodes. *Applied Physics Letters*, **2018**, 112, 011101	3.4	42
195	Development of GaN Vertical Trench-MOSFET With MBE Regrown Channel. *IEEE Transactions on Electron Devices*, **2018**, 65, 2558-2564	2.9	32
194	Enhancement-Mode Ga2O3 Vertical Transistors With Breakdown Voltage >1 kV. *IEEE Electron Device Letters*, **2018**, 39, 869-872	4.4	166
193	Room temperature microwave oscillations in GaN/AlN resonant tunneling diodes with peak current densities up to 220 kA/cm2. *Applied Physics Letters*, **2018**, 112, 103101	3.4	38

192	MBE growth of few-layer 2H-MoTe2 on 3D substrates. *Journal of Crystal Growth*, **2018**, 482, 61-69	1.6	30
191	Challenges and Opportunities in Molecular Beam Epitaxy Growth of 2D Crystals **2018**, 443-485		3
190	Activation of buried p-GaN in MOCVD-regrown vertical structures. *Applied Physics Letters*, **2018**, 113, 062105	3.4	25
189	Demonstration of AlGaN-delta-GaN QW by plasma-assisted molecular beam epitaxy for 260-nm ultraviolet light emitting diodes **2018**,		1
188	2.44 kV Ga2O3 vertical trench Schottky barrier diodes with very low reverse leakage current **2018**,		23
187	1230 V Ga2O3 trench Schottky barrier diodes with an ultra-low leakage current of . *Applied Physics Letters*, **2018**, 113, 202101	3.4	61
186	Measurement of ultrafast dynamics of photoexcited carriers in Ga2O3 by two-color optical pump-probe spectroscopy. *Applied Physics Letters*, **2018**, 113, 252102	3.4	14
185	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	4.4	46
184	Comparison of unit cell coupling for grating-gate and high electron mobility transistor array THz resonant absorbers. *Journal of Applied Physics*, **2018**, 124, 093101	2.5	4
183	Breakdown mechanism in 1 kA/cm2 and 960 V E-mode Ga2O3 vertical transistors. *Applied Physics Letters*, **2018**, 113, 122103	3.4	91
182	1.5 kV Vertical Ga2O3 Trench-MIS Schottky Barrier Diodes **2018**,		9
181	. *IEEE Transactions on Electron Devices*, **2017**, 64, 1635-1641	2.9	58
180	Inductively-coupled-plasma reactive ion etching of single-crystal Ga2O3. *Japanese Journal of Applied Physics*, **2017**, 56, 030304	1.4	34
179	Physics and polarization characteristics of 298 nm AlN-delta-GaN quantum well ultraviolet light-emitting diodes. *Applied Physics Letters*, **2017**, 110, 071103	3.4	37
178	Strained GaN quantum-well FETs on single crystal bulk AlN substrates. *Applied Physics Letters*, **2017**, 110, 063501	3.4	34
177	MBE-grown 23270 nm deep-UV LEDs using monolayer thin binary GaN/AlN quantum heterostructures. *Applied Physics Letters*, **2017**, 110, 041108	3.4	85
176	Single-crystal N-polar GaN p-n diodes by plasma-assisted molecular beam epitaxy. *Applied Physics Letters*, **2017**, 110, 253506	3.4	12
175	Electron mobility in polarization-doped Al0-0.2GaN with a low concentration near 1017 cm. *Applied Physics Letters*, **2017**, 110, 182102	3.4	8

No.	Publication	IF	Citations
174	Electronic Structure of the Metastable Epitaxial Rock-Salt SnSe {111} Topological Crystalline Insulator. *Physical Review X*, **2017**, 7,	9.1	8
173	New Tunneling Features in Polar III-Nitride Resonant Tunneling Diodes. *Physical Review X*, **2017**, 7,	9.1	34
172	Terahertz spectroscopy of an electron-hole bilayer system in AlN/GaN/AlN quantum wells. *Applied Physics Letters*, **2017**, 111, 073102	3.4	8
171	Deep-UV emission at 219 nm from ultrathin MBE GaN/AlN quantum heterostructures. *Applied Physics Letters*, **2017**, 111, 091104	3.4	42
170	GaN vertical nanowire and fin power MISFETs **2017**,		5
169	Selective Chemical Response of Transition Metal Dichalcogenides and Metal Dichalcogenides in Ambient Conditions. *ACS Applied Materials & Interfaces*, **2017**, 9, 29255-29264	9.5	17
168	600 V GaN vertical V-trench MOSFET with MBE regrown channel **2017**,		10
167	1.1-kV Vertical GaN p-n Diodes With p-GaN Regrown by Molecular Beam Epitaxy. *IEEE Electron Device Letters*, **2017**, 38, 1071-1074	4.4	50
166	Wide-bandgap Gallium Nitride p-channel MISFETs with enhanced performance at high temperature **2017**,		2
165	S-shaped negative differential resistance in III-Nitride blue quantum-well laser diodes grown by plasma-assisted MBE **2017**,		1
164	Extended Defect Propagation in Highly Tensile-Strained Ge Waveguides. *Crystals*, **2017**, 7, 157	2.3	2
163	Demonstration of GaN HyperFETs with ALD VO2 **2016**,		2
162	Controllable growth of layered selenide and telluride heterostructures and superlattices using molecular beam epitaxy. *Journal of Materials Research*, **2016**, 31, 900-910	2.5	65
161	Layered transition metal dichalcogenides: promising near-lattice-matched substrates for GaN growth. *Scientific Reports*, **2016**, 6, 23708	4.9	58
160	First demonstration of strained AlN/GaN/AlN quantum well FETs on SiC **2016**,		4
159	Ultralow-Leakage AlGaN/GaN High Electron Mobility Transistors on Si With Non-Alloyed Regrown Ohmic Contacts. *IEEE Electron Device Letters*, **2016**, 37, 16-19	4.4	26
158	1.7-kV and 0.55- $text{m}Omega cdot text {cm}^{2}$ GaN p-n Diodes on Bulk GaN Substrates With Avalanche Capability. *IEEE Electron Device Letters*, **2016**, 37, 161-164	4.4	125
157	Scanning Tunneling Microscopy and Spectroscopy of Air Exposure Effects on Molecular Beam Epitaxy Grown WSe2 Monolayers and Bilayers. *ACS Nano*, **2016**, 10, 4258-67	16.7	62

156	Exceptional Terahertz Wave Modulation in Graphene Enhanced by Frequency Selective Surfaces. *ACS Photonics*, **2016**, 3, 315-323	6.3	45
155	Atomic Layer Deposition of Al2O3 on WSe2 Functionalized by Titanyl Phthalocyanine. *ACS Nano*, **2016**, 10, 6888-96	16.7	48
154	Room temperature weak ferromagnetism in Sn1�MnxSe2 2D films grown by molecular beam epitaxy. *APL Materials*, **2016**, 4, 032601	5.7	25
153	Terahertz amplification in RTD-gated HEMTs with a grating-gate wave coupling topology. *Applied Physics Letters*, **2016**, 109, 063111	3.4	12
152	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	1.4	23
151	Intrinsic electron mobility limits in �Ga2O3. *Applied Physics Letters*, **2016**, 109, 212101	3.4	223
150	Physics-Inspired Neural Networks for Efficient Device Compact Modeling. *IEEE Journal on Exploratory Solid-State Computational Devices and Circuits*, **2016**, 2, 44-49	2.4	19
149	Two-dimensional heterojunction interlayer tunnel FET (Thin-TFET): From theory to applications **2016**,		13
148	Comparing buffer leakage in PolarMOSH on SiC and free-standing GaN substrates **2016**,		1
147	Self-assembled Ge QDs Formed by High-Temperature Annealing on Al(Ga)As (001). *Journal of Electronic Materials*, **2015**, 44, 1338-1343	1.9	2
146	Low temperature AlN growth by MBE and its application in HEMTs. *Journal of Crystal Growth*, **2015**, 425, 133-137	1.6	18
145	Two-Dimensional Heterojunction Interlayer Tunneling Field Effect Transistors (Thin-TFETs). *IEEE Journal of the Electron Devices Society*, **2015**, 3, 200-207	2.3	86
144	Comprehensive structural and optical characterization of MBE grown MoSe 2 on graphite, CaF 2 and graphene. *2D Materials*, **2015**, 2, 024007	5.9	104
143	High-voltage polarization-induced vertical heterostructure p-n junction diodes on bulk GaN substrates **2015**,		3
142	Dual optical marker Raman characterization of strained GaN-channels on AlN using AlN/GaN/AlN quantum wells and 15N isotopes. *Applied Physics Letters*, **2015**, 106, 041906	3.4	10
141	Unique opportunity to harness polarization in GaN to override the conventional power electronics figure-of-merits **2015**,		5
140	Lens-coupled folded-dipole antennas for terahertz detection and imaging. *IET Microwaves, Antennas and Propagation*, **2015**, 9, 1213-1220	1.6	8
139	Full-wave hydrodynamic model for predicting THz emission from grating-gate RTD-gated plasma wave HEMTs **2015**,		2

138	Esaki Diodes in van der Waals Heterojunctions with Broken-Gap Energy Band Alignment. *Nano Letters*, **2015**, 15, 5791-8	11.5	237
137	Deep-UV LEDs using polarization-induced doping: Electroluminescence at cryogenic temperatures **2015**,		1
136	Near unity ideality factor and Shockley-Read-Hall lifetime in GaN-on-GaN p-n diodes with avalanche breakdown. *Applied Physics Letters*, **2015**, 107, 243501	3.4	117
135	High breakdown single-crystal GaN p-n diodes by molecular beam epitaxy. *Applied Physics Letters*, **2015**, 107, 232101	3.4	44
134	Polarization-induced Zener tunnel diodes in GaN/InGaN/GaN heterojunctions. *Applied Physics Letters*, **2015**, 107, 163504	3.4	27
133	. *IEEE Electron Device Letters*, **2015**, 36, 375-377	4.4	126
132	**2015**,		16
131	Graphene nanoribbon field-effect transistors on wafer-scale epitaxial graphene on SiC substrates a. *APL Materials*, **2015**, 3, 011101	5.7	63
130	Chemical mechanical planarization of gold. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2014**, 32, 021402	2.9	2
129	Electronic transport properties of top-gated epitaxial-graphene nanoribbon field-effect transistors on SiC wafers. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2014**, 32, 012202	1.3	4
128	Thermal conductivity of monolayer molybdenum disulfide obtained from temperature-dependent Raman spectroscopy. *ACS Nano*, **2014**, 8, 986-93	16.7	526
127	AlGaN/GaN HEMTs on Si by MBE with regrown contacts and fT = 153 GHz. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 887-889		8
126	Faceted sidewall etching of n-GaN on sapphire by photoelectrochemical wet processing. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2014**, 32, 061201	1.3	6
125	Two-dimensional electron gases in strained quantum wells for AlN/GaN/AlN double heterostructure field-effect transistors on AlN. *Applied Physics Letters*, **2014**, 104, 193506	3.4	35
124	GaN lateral PolarSJs: Polarization-doped super junctions **2014**,		2
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