

# Umesh K Mishra

## 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.

217  
papers

6,910  
citations

38  
h-index

75  
g-index

231  
ext. papers

7,851  
ext. citations

3.3  
avg, IF

5.79  
L-index

#	Paper	IF	Citations
217	Acceptor traps as the source of holes in p-type N-polar GaN/(AlN/AlGaN) superlattices. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 132104	3.4	2
216	Demonstration of Acceptor-Like Traps at Positive Polarization Interfaces in Ga-Polar P-type (AlGa <sub>N</sub> /AlN)/GaN Superlattices. <i>Crystals</i> , <b>2022</b> , 12, 784	2.3	1
215	Metal Organic Vapor Phase Epitaxy of Thick N-Polar InGa <sub>N</sub> Films. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 1182.6		3
214	6.2 W/Mm and Record 33.8% PAE at 94 GHz From N-Polar GaN Deep Recess MIS-HEMTs With ALD Ru Gates. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2021</b> , 31, 748-751	2.6	13
213	pH-Dependent surface charge at the interfaces between aluminum gallium nitride (AlGa <sub>N</sub> ) and aqueous solution revealed by surfactant adsorption. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 583, 331-339	9.3	1
212	Investigation and optimization of HfO <sub>2</sub> gate dielectric on N-polar GaN: Impact of surface treatments, deposition, and annealing conditions. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 042901	3.4	1
211	Evaluation of linearity at 30 GHz for N-polar GaN deep recess transistors with 10.3 W/mm of output power and 47.4% PAE. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 072105	3.4	3
210	Effects of surface oxidation on the pH-dependent surface charge of oxidized aluminum gallium nitride. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 603, 604-614	9.3	1
209	Improved operation stability of in situ AlSiO dielectric grown on (000 $\bar{1}$ ) N-polar GaN by MOCVD. <i>Applied Physics Express</i> , <b>2020</b> , 13, 061010	2.4	5
208	Growth of strain-relaxed InGa <sub>N</sub> on micrometer-sized patterned compliant GaN pseudo-substrates. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 111101	3.4	23
207	Bias-Dependent Electron Velocity Extracted From N-Polar GaN Deep Recess HEMTs. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 1542-1546	2.9	6
206	High Linearity and High Gain Performance of N-Polar GaN MIS-HEMT at 30 GHz. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 681-684	4.4	17
205	Observation of ID-VD Kink in N-Polar GaN MIS-HEMTs at Cryogenic Temperatures. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 345-348	4.4	5
204	W-Band Power Performance of SiN-Passivated N-Polar GaN Deep Recess HEMTs. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 349-352	4.4	42
203	An improved methodology for extracting interface state density at Si <sub>3</sub> N <sub>4</sub> /GaN. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 022104	3.4	13
202	Interfacial N Vacancies in GaN/(Al,Ga)N/GaN Heterostructures. <i>Physical Review Applied</i> , <b>2020</b> , 13,	4.3	12
201	High-electron-mobility transistors with metal-organic chemical vapor deposition-regrown contacts for high voltage applications. <i>Semiconductor Science and Technology</i> , <b>2020</b> , 35, 124004	1.8	2

200	Compliant Micron-Sized Patterned InGaN Pseudo-Substrates Utilizing Porous GaN. <i>Materials</i> , <b>2020</b> , 13,	3.5	15
199	Characterization of AlSiO dielectrics with varying silicon composition for N-polar GaN-based devices. <i>Semiconductor Science and Technology</i> , <b>2020</b> , 35, 095027	1.8	7
198	Demonstration of a GaN/AlGaIn Superlattice-Based p-Channel FinFET With High ON-Current. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 220-223	4.4	27
197	Optimization of Digital Growth of Thick N-Polar InGaIn by MOCVD. <i>Journal of Electronic Materials</i> , <b>2020</b> , 49, 3450-3454	1.9	2
196	AlGaIn/GaN Superlattice-Based p-Type Field-Effect Transistor with Tetramethylammonium Hydroxide Treatment. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900692	1.6	13
195	A Novel Concept using Derivative Superposition at the Device-Level to Reduce Linearity Sensitivity to Bias in N-polar GaN MISHEMT <b>2020</b> ,		2
194	. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1468-1471	4.4	3
193	Proposed existence of acceptor-like traps at positive polarization interfaces in p-type III-nitride semiconductors. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 042104	3.4	8
192	Color-tunable . <i>Applied Physics Letters</i> , <b>2020</b> , 117, 061105	3.4	19
191	Method of growing elastically relaxed crack-free AlGaIn on GaN as substrates for ultra-wide bandgap devices using porous GaN. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 062102	3.4	8
190	N-Polar GaN-on-Sapphire Deep Recess HEMTs With High W-Band Power Density. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1633-1636	4.4	12
189	A systematic and quantitative analysis of the bulk and interfacial properties of the AlSiO dielectric on N-polar GaN using capacitance-voltage methods. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 074101	2.5	3
188	Infrared luminescence from N-polar InN quantum dots and thin films grown by metal organic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 241103	3.4	12
187	First demonstration of improvement in hole conductivity inc-plane III-Nitrides through application of uniaxial strain. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, 030908	1.4	12
186	Net negative fixed interface charge for Si <sub>3</sub> N <sub>4</sub> and SiO <sub>2</sub> grown in situ on 000-1 N-polar GaN. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 032103	3.4	11
185	Investigation of nitrogen polar p-type doped GaN/Al <sub>x</sub> Ga <sub>(1-x)</sub> N superlattices for applications in wide-bandgap p-type field effect transistors. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 172105	3.4	15
184	Electrical properties and interface abruptness of AlSiO gate dielectric grown on 000 1 $\square$ N-polar and (0001) Ga-polar GaN. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 172104	3.4	7
183	pH-dependent surface properties of the gallium nitride - Solution interface mapped by surfactant adsorption. <i>Journal of Colloid and Interface Science</i> , <b>2019</b> , 556, 680-688	9.3	3

182	Virtual-Source Modeling of N-polar GaN MISHEMTS <b>2019</b> ,		1
181	Enhanced mobility in vertically scaled N-polar high-electron-mobility transistors using GaN/InGaN composite channels. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 073501	3-4	5
180	Analysis of MOCVD SiNx Passivated N-Polar GaN MIS-HEMTs on Sapphire With High $f_{\text{max}} \cdot V_{\text{DS,Q}}$ . <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 409-412	4-4	13
179	Metal-organic chemical vapor deposition of N-polar InN quantum dots and thin films on vicinal GaN. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 055702	2-5	13
178	Demonstration of Constant 8 W/mm Power Density at 10, 30, and 94 GHz in State-of-the-Art Millimeter-Wave N-Polar GaN MISHEMTs. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 45-50	2-9	98
177	Corrections to In Situ Oxide, GaN Interlayer-Based Vertical Trench MOSFET (OG-FET) on Bulk GaN Substrates [Mar 17 353-355]. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 316-316	4-4	3
176	Large-Area In-Situ Oxide, GaN Interlayer-Based Vertical Trench MOSFET (OG-FET). <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 711-714	4-4	33
175	Observation of Hot Electron and Impact Ionization in N-Polar GaN MIS-HEMTs. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 1007-1010	4-4	12
174	Improved Dynamic RON of GaN Vertical Trench MOSFETs (OG-FETs) Using TMAH Wet Etch. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 1030-1033	4-4	16
173	N-Polar GaN HEMTs Exhibiting Record Breakdown Voltage Over 2000 V and Low Dynamic On-Resistance. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 1014-1017	4-4	50
172	N-Polar GaN Cap MISHEMT With Record Power Density Exceeding 6.5 W/mm at 94 GHz. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 359-362	4-4	56
171	Suppression of Mg propagation into subsequent layers grown by MOCVD. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 025106	2-5	20
170	In Situ Oxide, GaN Interlayer-Based Vertical Trench MOSFET (OG-FET) on Bulk GaN substrates. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 353-355	4-4	99
169	Indium segregation in N-polar InGaN quantum wells evidenced by energy dispersive X-ray spectroscopy and atom probe tomography. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 143101	3-4	29
168	Metal-organic chemical vapor deposition of high quality, high indium composition N-polar InGaN layers for tunnel devices. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 185707	2-5	16
167	Vertical transport in isotype InAlN/GaN dipole induced diodes grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 205702	2-5	2
166	Ca detection utilising AlGaIn/GaN transistors with ion-selective polymer membranes. <i>Analytica Chimica Acta</i> , <b>2017</b> , 987, 105-110	6-6	27
165	Atom Probe Tomography Quantification of Alloy Fluctuations in (Al,In,Ga)N. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 716-717	0-5	1

164	Maskless regrowth of GaN for trenced devices by MOCVD. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 233507	3.4	3
163	Impact of oxygen precursor flow on the forward bias behavior of MOCVD-Al <sub>2</sub> O <sub>3</sub> dielectrics grown on GaN. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 174101	2.5	3
162	Lateral GaN Devices for Power Applications (from kHz to GHz). <i>Power Electronics and Power Systems</i> , <b>2017</b> , 69-99	0.3	5
161	High Spatial Resolution Energy Dispersive X-ray Spectroscopy and Atom Probe Tomography study of Indium segregation in N-polar InGaN Quantum Wells. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 1448-1449	0.5	1
160	Demonstrating >1.4 kV OG-FET performance with a novel double field-plated geometry and the successful scaling of large-area devices <b>2017</b> ,		39
159	Small-signal model extraction of mm-wave N-polar GaN MISHEMT exhibiting record performance: Analysis of gain and validation by 94 GHz loadpull <b>2016</b> ,		15
158	mm-Wave N-polar GaN MISHEMT with a self-aligned recessed gate exhibiting record 4.2 W/mm at 94 GHz on Sapphire <b>2016</b> ,		8
157	High frequency N-polar GaN planar MIS-HEMTs on sapphire with high breakdown and low dispersion <b>2016</b> ,		10
156	N-Polar GaN MIS-HEMTs on Sapphire With High Combination of Power Gain Cutoff Frequency and Three-Terminal Breakdown Voltage. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 77-80	4.4	27
155	Plasma-assisted molecular beam epitaxy growth diagram of InGaN on (0001)GaN for the optimized synthesis of InGaN compositional grades. <i>Physica Status Solidi (B): Basic Research</i> , <b>2016</b> , 253, 626-629	1.3	11
154	Plasma-assisted molecular beam epitaxy growth diagram of InGaN on (0001)GaN for the optimized synthesis of InGaN compositional grades (Phys. Status Solidi B 4/2016). <i>Physica Status Solidi (B): Basic Research</i> , <b>2016</b> , 253, 792-792	1.3	
153	Optimization of a chlorine-based deep vertical etch of GaN demonstrating low damage and low roughness. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2016</b> , 34, 031303	2.9	11
152	W-band passive load pull system for on-wafer characterization of high power density N-polar GaN devices based on output match and drive power requirements vs. gate width <b>2016</b> ,		8
151	Barrier height inhomogeneity and its impact on (Al,In,Ga)N Schottky diodes. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 064501	2.5	25
150	Model to explain the behavior of 2DEG mobility with respect to charge density in N-polar and Ga-polar AlGa <sub>x</sub> GaN heterostructures. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 115302	2.5	26
149	N-Polar Deep Recess MISHEMTs With Record 2.9 W/mm at 94 GHz. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 1-1	4.4	18
148	OG-FET: An In-Situ $\text{O}_2$ xide, $\text{GaN}$ Interlayer-Based Vertical Trench MOSFET. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 1601-1604	4.4	49
147	Design Space of III-N Hot Electron Transistors Using AlGa <sub>x</sub> N and InGa <sub>x</sub> N Polarization-Dipole Barriers. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 23-25	4.4	4

146	Common Emitter Current Gain >1 in III-N Hot Electron Transistors With 7-nm GaN/InGaN Base. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 439-441	4.4	9
145	Barrier reduction via implementation of InGaN interlayer in wafer-bonded current aperture vertical electron transistors consisting of InGaAs channel and N-polar GaN drain. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 023506	3.4	2
144	Method to Predict and Optimize Charge Sensitivity of Ungated AlGaN/GaN HEMT-Based Ion Sensor Without Use of Reference Electrode. <i>IEEE Sensors Journal</i> , <b>2015</b> , 15, 5320-5326	4	9
143	The Role of the Base Stack on the AC Performance of GaN Hot Electron Transistor. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 669-671	4.4	2
142	Vertical electron transistors with In <sub>0.53</sub> Ga <sub>0.47</sub> As channel and N-polar In <sub>0.1</sub> Ga <sub>0.9</sub> N/GaN drain achieved by direct wafer-bonding <b>2014</b> ,		1
141	Common emitter operation of III-N HETs using AlGaN and InGaN polarization-dipole induced barriers <b>2014</b> ,		1
140	Elimination of columnar microstructure in N-face InAlN, lattice-matched to GaN, grown by plasma-assisted molecular beam epitaxy in the N-rich regime. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 072107	3.4	18
139	Design of polarization-dipole-induced isotype heterojunction diodes for use in III-N hot electron transistors. <i>Applied Physics Express</i> , <b>2014</b> , 7, 014102	2.4	10
138	Low ON-resistance and high current GaN Vertical Electron Transistors with buried p-GaN layers <b>2014</b> ,		4
137	Engineering the (In, Al, Ga)N back-barrier to achieve high channel-conductivity for extremely scaled channel-thicknesses in N-polar GaN high-electron-mobility-transistors. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 092107	3.4	18
136	Recent progress in metal-organic chemical vapor deposition of $\bar{\text{N}}$ N-polar group-III nitrides. <i>Semiconductor Science and Technology</i> , <b>2014</b> , 29, 113001	1.8	129
135	Dielectric stress tests and capacitance-voltage analysis to evaluate the effect of post deposition annealing on Al <sub>2</sub> O <sub>3</sub> films deposited on GaN. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 222905	3.4	10
134	A donor-like trap at the InGaN/GaN interface with net negative polarization and its possible consequence on internal quantum efficiency. <i>Semiconductor Science and Technology</i> , <b>2013</b> , 28, 105021	1.8	9
133	Capacitance-voltage characterization of interfaces between positive valence band offset dielectrics and wide bandgap semiconductors. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 083718	2.5	34
132	Effects of H <sub>2</sub> O Pretreatment on the Capacitance-Voltage Characteristics of Atomic-Layer-Deposited Al <sub>2</sub> O <sub>3</sub> on Ga-Face GaN Metal-Oxide-Semiconductor Capacitors. <i>Journal of Electronic Materials</i> , <b>2013</b> , 42, 33-39	1.9	32
131	Atom probe analysis of AlN interlayers in AlGaN/AlN/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 111603	3.4	55
130	N-polar GaN epitaxy and high electron mobility transistors. <i>Semiconductor Science and Technology</i> , <b>2013</b> , 28, 074009	1.8	124
129	Neutron irradiation effects on gallium nitride-based Schottky diodes. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 162106	3.4	18

128	Very high channel conductivity in ultra-thin channel N-polar GaN/(AlN, InAlN, AlGaIn) high electron mobility hetero-junctions grown by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 232104	3.4	19
127	Wafer-Bonded p-n Heterojunction of GaAs and Chemomechanically Polished N-Polar GaN. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 42-44	4.4	11
126	Strain and Temperature Dependence of Defect Formation at AlGaIn/GaN High-Electron-Mobility Transistors on a Nanometer Scale. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 2667-2674	2.9	13
125	Impact of Moisture and Fluorocarbon Passivation on the Current Collapse of AlGaIn/GaN HEMTs. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 1378-1380	4.4	29
124	Effect of dislocations on electron mobility in AlGaIn/GaN and AlGaIn/AlN/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 262102	3.4	51
123	CAVET on Bulk GaN Substrates Achieved With MBE-Regrown AlGaIn/GaN Layers to Suppress Dispersion. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 41-43	4.4	118
122	Enhancement-Mode N-Polar GaN MOS-HFET With 5-nm GaN Channel, 510-mS/mm $\mu_{\text{eff}}$ , and 0.66- $\Omega\text{cm}^2$ $R_{\text{on}}$ . <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 26-28	4.4	25
121	Microwave Power Performance N-Polar GaN MISHEMTs Grown by MOCVD on SiC Substrates Using an $\text{Al}_2\text{O}_3$ Etch-Stop Technology. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 44-46	4.4	30
120	Interface states at the SiN/AlGaIn interface on GaN heterojunctions for Ga and N-polar material. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 043718	2.5	23
119	Scaled Self-Aligned N-Polar GaN/AlGaIn MIS-HEMTs With $f_{\text{T}}$ of 275 GHz. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 961-963	4.4	19
118	Effects of gate shaping and consequent process changes on AlGaIn/GaN HEMT reliability. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 2646-2652	1.6	8
117	Anomalous Output Conductance in N-Polar GaN High Electron Mobility Transistors. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 2988-2995	2.9	15
116	Design of High-Aspect-Ratio T-Gates on N-Polar GaN/AlGaIn MIS-HEMTs for High $f_{\text{max}}$ . <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 785-787	4.4	40
115	Self-Aligned N-Polar GaN/InAlN MIS-HEMTs With Record Extrinsic Transconductance of 1105 mS/mm. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 794-796	4.4	24
114	Correlation between threading dislocation density and sheet resistance of AlGaIn/AlN/GaN heterostructures grown by plasma-assisted molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 262102	3.4	28
113	Capacitance-voltage profiling on polar III-nitride heterostructures. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 083704	2.5	8
112	InGaN solar cell requirements for high-efficiency integrated III-nitride/non-III-nitride tandem photovoltaic devices. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 114505	2.5	18
111	A High-Efficiency Class F MMIC Power Amplifier at 4.0 GHz Using AlGaIn/GaN HEMT Technology <b>2012</b> ,		2

110	Effect of indium on the conductivity of poly-crystalline GaN grown on high purity fused silica. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 431-433	1.6	3
109	AlGaIn/GaN heterojunction bipolar transistors by ammonia molecular beam epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 216-220	1.6	9
108	Enhancement-mode m-plane AlGaIn/GaN HFETs with regrown n+-GaIn contact layer. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 891-893		3
107	InGaAs-InGaIn Wafer-Bonded Current Aperture Vertical Electron Transistors (BAVETs). <i>Journal of Electronic Materials</i> , <b>2012</b> , 41, 857-864	1.9	6
106	Design of integrated III-nitride/non-III-nitride tandem photovoltaic devices. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 054503	2.5	24
105	Effect of quantum well cap layer thickness on the microstructure and performance of InGaIn/GaN solar cells. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 161101	3.4	47
104	Molecular beam epitaxy of InAlN lattice-matched to GaIn with homogeneous composition using ammonia as nitrogen source. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 072107	3.4	24
103	High internal and external quantum efficiency InGaIn/GaN solar cells. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 021102	3.4	155
102	Self-Aligned Technology for N-Polar GaIn/Al(Ga)In MIS-HEMTs. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 33-35	4.4	14
101	Two-Stage High-Gain High-Power Distributed Amplifier Using Dual-Gate GaIn HEMTs. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2011</b> , 59, 2059-2063	4.1	28
100	Growth and characterization of N-polar GaIn and AlGaIn/GaN HEMTs on (111) silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2086-2088		5
99	Anomalous output conductance in N-polar GaIn-based MIS-HEMTs <b>2011</b> ,		3
98	Enhancement-Mode m-plane AlGaIn/GaN Heterojunction Field-Effect Transistors with +3 V of Threshold Voltage Using Al <sub>2</sub> O <sub>3</sub> Deposited by Atomic Layer Deposition. <i>Applied Physics Express</i> , <b>2011</b> , 4, 096501	2.4	17
97	Effect of doping and polarization on carrier collection in InGaIn quantum well solar cells. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 243507	3.4	55
96	N-Polar GaIn MIS-HEMTs With a 12.1-W/mm Continuous-Wave Output Power Density at 4 GHz on Sapphire Substrate. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 635-637	4.4	26
95	RF Performance of Deep-Recessed N-Polar GaIn MIS-HEMTs Using a Selective Etch Technology Without Ex Situ Surface Passivation. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 134-136	4.4	10
94	Experimental Demonstration of III-Nitride Hot-Electron Transistor With GaIn Base. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 1212-1214	4.4	19
93	Observation of positive thermal power coefficient in InGaIn/GaN quantum well solar cells. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 071104	3.4	16



92	Optimization of the p-GaN window layer for InGaN/GaN solar cells <b>2010</b> ,		3
91	Effects of oxidation on surface chemical states and barrier height of AlGaIn/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 222104	3-4	61
90	N-polar GaN-based MIS-HEMTs for mixed signal applications <b>2010</b> ,		1
89	Growth and characterization of In-polar and N-polar InAlN by metal organic chemical vapor deposition. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 033509	2.5	26
88	High-efficiency class E MMIC power amplifiers at 4.0 GHz using AlGaIn/GaN HEMT technology <b>2010</b> ,		1
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