

Geok Ing Ng

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.

207
papers

2,765
citations

26
h-index

41
g-index

240
ext. papers

3,237
ext. citations

2.7
avg, IF

4.84
L-index

#	Paper	IF	Citations
207	AlN/GaN MISHEMTs on Si with in-situ SiN as a gate dielectric for power amplifiers in mobile SoCs. <i>Applied Physics Express</i> , 2022 , 15, 016503	2.4	4
206	100 nm T-gate GaN-on-Si HEMTs Fabricated with CMOS-Compatible Metallization for Microwave and mm-Wave Applications 2021 ,		2
205	Phase noise reduction of a 2 μ m passively mode-locked laser through hybrid III-V/silicon integration. <i>Optica</i> , 2021 , 8, 855	8.6	3
204	GaN-on-Si HEMTs Fabricated With Si CMOS-Compatible Metallization for Power Amplifiers in Low-Power Mobile SoCs. <i>IEEE Microwave and Wireless Components Letters</i> , 2021 , 31, 141-144	2.6	4
203	Demonstration of vertically-ordered h-BN/AlGaIn/GaN metal-insulator-semiconductor high-electron-mobility transistors on Si substrate. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021 , 270, 115224	3.1	1
202	Enhancing the piezoelectric modulus of wurtzite AlN by ion beam strain engineering. <i>Applied Physics Letters</i> , 2021 , 118, 012108	3.4	4
201	On the recovery of 2DEG properties in vertically ordered h-BN deposited AlGaIn/GaN heterostructures on Si substrate. <i>Applied Physics Express</i> , 2020 , 13, 065508	2.4	4
200	High-Frequency Characteristics of InGaP/GaAs Double Heterojunction Bipolar Transistor Epitaxially Grown on 200 mm Ge/Si Wafers. <i>IEEE Journal of the Electron Devices Society</i> , 2020 , 8, 122-125	2.3	0
199	Low Static and Dynamic On-Resistance with High Figure of Merit in AlGaIn/GaN High Electron Mobility Transistors on Chemical Vapor Deposited Diamond. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020 , 217, 1900815	1.6	1
198	Vertical GaN-on-GaN Schottky Diodes as β -Particle Radiation Sensors. <i>Micromachines</i> , 2020 , 11,	3.3	4
197	Change of high-voltage conduction mechanism in vertical GaN/AlGaIn/GaN Schottky diodes at elevated temperatures. <i>Applied Physics Express</i> , 2020 , 13, 074001	2.4	2
196	CMOS-compatible GaN-on-Si HEMTs with cut-off frequency of 210 GHz and high Johnson noise figure-of-merit of 8.8 THz V. <i>Applied Physics Express</i> , 2020 , 13, 026503	2.4	11
195	Improved breakdown voltage in vertical GaN Schottky barrier diodes on free-standing GaN with Mg-compensated drift layer. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, 010906	1.4	4
194	Demonstration of AlGaIn/GaN MISHEMT on Si with Low-Temperature Epitaxy Grown AlN Dielectric Gate. <i>Electronics (Switzerland)</i> , 2020 , 9, 1858	2.6	2
193	Investigations of temperature-dependent interface traps in AlGaIn/GaN HEMT on CVD-diamond. <i>Applied Physics Express</i> , 2019 , 12, 106506	2.4	4
192	GaN drift-layer thickness effects in vertical Schottky barrier diodes on free-standing HVPE GaN substrates. <i>AIP Advances</i> , 2019 , 9, 045007	1.5	8
191	High temperature characteristics of a 2 μ m InGaSb/AlGaAsSb passively mode-locked quantum well laser. <i>Applied Physics Letters</i> , 2019 , 114, 221104	3.4	5

190	Deeply-scaled GaN-on-Si high electron mobility transistors with record cut-off frequency f_T of 310 GHz. <i>Applied Physics Express</i> , 2019 , 12, 126506	2.4	14
189	Investigation of Self-Heating Effect on DC and RF Performances in AlGaIn/GaN HEMTs on CVD-Diamond. <i>IEEE Journal of the Electron Devices Society</i> , 2019 , 7, 1264-1269	2.3	7
188	Low Voltage High-Energy β -Particle Detectors by GaN-on-GaN Schottky Diodes with Record-High Charge Collection Efficiency. <i>Sensors</i> , 2019 , 19,	3.8	6
187	InAlN/GaN HEMTs on Si With High f_T of 250 GHz. <i>IEEE Electron Device Letters</i> , 2018 , 39, 75-78	4.4	36
186	Mid-Infrared Sensor Based on a Suspended Microracetrack Resonator With Lateral Subwavelength-Grating Metamaterial Cladding. <i>IEEE Photonics Journal</i> , 2018 , 10, 1-8	1.8	8
185	Planar Nanostrip-Channel Al ₂ O ₃ /InAlN/GaN MISHEMTs on Si With Improved Linearity. <i>IEEE Electron Device Letters</i> , 2018 , 39, 947-950	4.4	20
184	Investigation of regime switching from mode locking to Q-switching in a 2 μ m InGaSb/AlGaAsSb quantum well laser. <i>Optics Express</i> , 2018 , 26, 8289-8295	3.3	7
183	Experimental Demonstration of Thermally Tunable Fano and EIT Resonances in Coupled Resonant System on SOI Platform. <i>IEEE Photonics Journal</i> , 2018 , 10, 1-8	1.8	4
182	Planar-Nanostrip-Channel InAlN/GaN HEMTs on Si With Improved g_m and f_{Tmax} Linearity. <i>IEEE Electron Device Letters</i> , 2017 , 38, 619-622	4.4	22
181	Investigation of gate leakage current mechanism in AlGaIn/GaN high-electron-mobility transistors with sputtered TiN. <i>Journal of Applied Physics</i> , 2017 , 121, 044504	2.5	16
180	Conversion between EIT and Fano spectra in a microring-Bragg grating coupled-resonator system. <i>Applied Physics Letters</i> , 2017 , 111, 081105	3.4	16
179	Improved planar device isolation in AlGaIn/GaN HEMTs on Si by ultra-heavy ¹³¹ Xe ⁺ implantation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600794	1.6	3
178	Flexible Ionic-Electronic Hybrid Oxide Synaptic TFTs with Programmable Dynamic Plasticity for Brain-Inspired Neuromorphic Computing. <i>Small</i> , 2017 , 13, 1701193	11	110
177	AlGaIn/GaN high electron mobility transistors on Si with sputtered TiN gate. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600555	1.6	8
176	Modal gain characteristics of a 2 μ m InGaSb/AlGaAsSb passively mode-locked quantum well laser. <i>Applied Physics Letters</i> , 2017 , 111, 251105	3.4	14
175	Dual-band optical filter based on a single microring resonator embedded with nanoholes 2017 ,		2
174	Compact microring resonators integrated with grating couplers working at 2 μ m wavelength on silicon-on-insulator platform. <i>Applied Optics</i> , 2017 , 56, 5444-5449	0.2	5
173	Low-Temperature Chemical Transformations for High-Performance Solution-Processed Oxide Transistors. <i>Chemistry of Materials</i> , 2016 , 28, 8305-8313	9.6	51

172	Electromagnetically induced transparency-like effect in microring-Bragg gratings based coupling resonant system. <i>Optics Express</i> , 2016 , 24, 25665-25675	3.3	16
171	(Invited) Novel Integrated Circuit Platforms Employing Monolithic Silicon CMOS + GaN Devices. <i>ECS Transactions</i> , 2016 , 75, 31-37	1	5
170	Thermally stable device isolation by inert gas heavy ion implantation in AlGaIn/GaN HEMTs on Si. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2016 , 34, 042203	1.3	15
169	A Comprehensive Compact Model for GaN HEMTs, Including Quasi-Steady-State and Transient Trap-Charge Effects. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 1478-1485	2.9	16
168	Temperature Dependent Characteristics of InAlN/GaN HEMTs for mm-Wave Applications. <i>Procedia Engineering</i> , 2016 , 141, 103-107		5
167	Role of two-dimensional electron gas (2DEG) in AlGaIn/GaN high electron mobility transistor (HEMT) ON-state degradation. <i>Microelectronics Reliability</i> , 2016 , 64, 589-593	1.2	14
166	(Invited) SiGe and III-V Materials and Devices: New HEMT and LED Elements in 0.18-Micron CMOS Process and Design. <i>ECS Transactions</i> , 2016 , 75, 439-446	1	12
165	Low k-dielectric benzocyclobutane encapsulated AlGaIn/GaN HEMTs with Improved off-state breakdown voltage. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 036504	1.4	5
164	Effect of OFF-state stress induced electric field on trapping in AlGaIn/GaN high electron mobility transistors on Si (111). <i>Applied Physics Letters</i> , 2015 , 106, 083508	3.4	12
163	Electron velocity of 6×10^7 cm/s at 300 K in stress engineered InAlN/GaN nano-channel high-electron-mobility transistors. <i>Applied Physics Letters</i> , 2015 , 106, 053502	3.4	13
162	Conduction mechanism of non-gold Ta/Si/Ti/Al/Ni/Ta ohmic contacts in AlGaIn/GaN high-electron-mobility transistors. <i>Applied Physics Express</i> , 2015 , 8, 041001	2.4	12
161	Impact of post-deposition annealing on interfacial chemical bonding states between AlGaIn and ZrO ₂ grown by atomic layer deposition. <i>Applied Physics Letters</i> , 2015 , 106, 091603	3.4	10
160	Nano-channel InAlN/GaN Fin-HEMTs for ultra-high-speed electronics 2015 ,		3
159	Record-low contact resistance for InAlN/AlN/GaN high electron mobility transistors on Si with non-gold metal. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 04DF12	1.4	15
158	Effect of surface pretreatment on interfacial chemical bonding states of atomic layer deposited ZrO ₂ on AlGaIn. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015 , 33, 05E117	1.7	1
157	Distribution of trap energy level in AlGaIn/GaN high-electron-mobility transistors on Si under ON-state stress. <i>Applied Physics Express</i> , 2015 , 8, 104101	2.4	8
156	A silicon-nanowire memory driven by optical gradient force induced bistability. <i>Applied Physics Letters</i> , 2015 , 107, 261111	3.4	9
155	Study on GaN buffer leakage current in AlGaIn/GaN high electron mobility transistor structures grown by ammonia-molecular beam epitaxy on 100-mm Si(111). <i>Journal of Applied Physics</i> , 2015 , 117, 245305	2.5	4

154	Growth and characterization of AlGa _N /Ga _N /AlGa _N double-heterojunction high-electron-mobility transistors on 100-mm Si(111) using ammonia-molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2015 , 117, 025301	2.5	11
153	GaN HEMT compact model for circuit simulation 2015 ,		1
152	Active current modeling for GaN HEMT devices. <i>Microwave and Optical Technology Letters</i> , 2015 , 57, 694-697	1.2	3
151	High Johnson's figure of merit (8.32 THz/V) in 0.15- μ m conventional T-gate AlGa _N /Ga _N HEMTs on silicon. <i>Applied Physics Express</i> , 2014 , 7, 044102	2.4	16
150	Improved device isolation in AlGa _N /Ga _N HEMTs on Si by heavy Kr ⁺ Ion implantation 2014 ,		3
149	A Compact Model for Generic MIS-HEMTs Based on the Unified 2DEG Density Expression. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 314-323	2.9	21
148	Relative Intensity Noise of Silicon Hybrid Laser. <i>IEEE Journal of Quantum Electronics</i> , 2014 , 50, 466-473	2	2
147	. <i>IEEE Electron Device Letters</i> , 2014 , 35, 992-994	4.4	22
146	In _{0.17} Al _{0.83} N/AlN/GaN Triple T-shape Fin-HEMTs with gm=646 mS/mm, ION=1.03 A/mm, IOFF=1.13 μ A/mm, SS=82 mV/dec and DIBL=28 mV/V at VD=0.5 V 2014 ,		3
145	Influence of post-deposition annealing on interfacial properties between GaN and ZrO ₂ grown by atomic layer deposition. <i>Applied Physics Letters</i> , 2014 , 105, 152104	3.4	12
144	Design of Coupled Three-Line Impedance Transformers. <i>IEEE Microwave and Wireless Components Letters</i> , 2014 , 24, 84-86	2.6	18
143	Zero voltage switching high efficiency power amplifier with parallel coupled line load. <i>Microwave and Optical Technology Letters</i> , 2014 , 56, 2926-2929	1.2	1
142	Band alignment between GaN and ZrO ₂ formed by atomic layer deposition. <i>Applied Physics Letters</i> , 2014 , 105, 022106	3.4	26
141	Improved microwave noise performance in 0.15 μ m AlGa _N /AlN/GaN HEMTs on Silicon 2014 ,		1
140	Enhanced Breakdown Voltage With High Johnson's Figure-of-Merit in 0.3- μ m T-gate AlGa _N /Ga _N HEMTs on Silicon by $(\text{NH}_4)_2\text{S}_x$ Treatment. <i>IEEE Electron Device Letters</i> , 2013 , 34, 1364-1366	4.4	42
139	Demonstration of Submicron-Gate AlGa _N /Ga _N High-Electron-Mobility Transistors on Silicon with Complementary Metal-Oxide-Semiconductor-Compatible Non-Gold Metal Stack. <i>Applied Physics Express</i> , 2013 , 6, 016501	2.4	39
138	Random-telegraph-signal noise in AlGa _N /Ga _N MIS-HEMT on silicon. <i>Electronics Letters</i> , 2013 , 49, 156-157	1.1	3
137	Atomic layer deposition of ZrO ₂ as gate dielectrics for AlGa _N /Ga _N metal-insulator-semiconductor high electron mobility transistors on silicon. <i>Applied Physics Letters</i> , 2013 , 103, 142109	3.4	54

136	High-performance modulation-doped AlGaAs/InGaAs thermopiles for uncooled infrared FPA application. <i>Infrared Physics and Technology</i> , 2013 , 59, 182-187	2.7	1
135	Low-Contact-Resistance Non-Gold Ta/Si/Ti/Al/Ni/Ta Ohmic Contacts on Undoped AlGaN/GaN High-Electron-Mobility Transistors Grown on Silicon. <i>Applied Physics Express</i> , 2013 , 6, 116501	2.4	19
134	High performance modulation doped AlGaAs/InGaAs thermopiles (H-PIEs) for uncooled IR FPA utilizing integrated HEMT-MEMS technology 2013 ,		1
133	A nanoelectromechanical systems actuator driven and controlled by Q-factor attenuation of ring resonator. <i>Applied Physics Letters</i> , 2013 , 103, 181105	3.4	19
132	AlGaN/GaN MISHEMTs on silicon using atomic layer deposited ZrO ₂ as gate dielectrics 2013 ,		1
131	Reduction of current collapse in AlGaN/GaN MISHEMT with bilayer SiN/Al ₂ O ₃ dielectric gate stack. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013 , 10, 1421-1425		17
130	2013 ,		2
129	Demonstration of AlGaN/GaN High-Electron-Mobility Transistors on 100-mm-Diameter Si(111) by Ammonia Molecular Beam Epitaxy. <i>Applied Physics Express</i> , 2012 , 5, 091003	2.4	15
128	GaN-on-Silicon integration technology 2012 ,		3
127	Direct Current and Microwave Characteristics of Sub-micron AlGaN/GaN High-Electron-Mobility Transistors on 8-Inch Si(111) Substrate. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 111001	1.4	25
126	High-Responsivity Modulation-Doped AlGaAs/InGaAs Thermopiles for Uncooled IR-FPA Utilizing Integrated HEMT/MEMS Technology. <i>IEEE Electron Device Letters</i> , 2012 , 33, 1243-1245	4.4	2
125	A modular approach to design a full three-way 8 to 18 GHz MMIC active circulator. <i>Microwave and Optical Technology Letters</i> , 2012 , 54, 2858-2861	1.2	
124	Positive Bias-Induced V_{th} Instability in Graphene Field Effect Transistors. <i>IEEE Electron Device Letters</i> , 2012 , 33, 339-341	4.4	11
123	Compact true time delay line with partially shielded coplanar waveguide transmission lines 2012 ,		1
122	AlGaN/GaN two-dimensional-electron gas heterostructures on 200 mm diameter Si(111). <i>Applied Physics Letters</i> , 2012 , 101, 082110	3.4	85
121	Effective suppression of current collapse in both E- and D-mode AlGaN/GaN HEMTs on Si by [(NH ₄) ₂ Sx] passivation 2012 ,		3
120	Direct Current and Microwave Characteristics of Sub-micron AlGaN/GaN High-Electron-Mobility Transistors on 8-Inch Si(111) Substrate. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 111001	1.4	36
119	High-Performance Modulation-Doped Heterostructure-Thermopiles for Uncooled Infrared Image-Sensor Application. <i>IEICE Transactions on Electronics</i> , 2012 , E95.C, 1354-1362	0.4	1

118	Integration of RF MEMS switches with pHEMT MMICs on GaAs 2011 ,		2
117	Temperature-dependent forward gate current transport in atomic-layer-deposited Al ₂ O ₃ /AlGa _N /Ga _N metal-insulator-semiconductor high electron mobility transistor. <i>Applied Physics Letters</i> , 2011 , 98, 163501	3-4	49
116	Reduced surface leakage current and trapping effects in AlGa _N /Ga _N high electron mobility transistors on silicon with Si _N /Al ₂ O ₃ passivation. <i>Applied Physics Letters</i> , 2011 , 98, 113506	3-4	81
115	Side-gate effects on the direct current and radio frequency characteristics of AlGa _N /Ga _N high-electron-mobility transistor on Si. <i>Applied Physics Letters</i> , 2011 , 99, 163505	3-4	1
114	Temperature-Dependent Microwave Noise Characteristics in ALD Al ₂ O ₃ /AlGa _N /Ga _N MISHEMTs on Silicon Substrate. <i>IEEE Electron Device Letters</i> , 2011 , 32, 318-320	4-4	6
113	Comprehensive Study on the Bias-Dependent Equivalent-Circuit Elements Affected by PECVD Si _N Passivation in AlGa _N /Ga _N HEMTs. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 473-479	2-9	6
112	High vertical breakdown strength in with low specific on-resistance AlGa _N /Al _N /Ga _N HEMTs on silicon. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011 , 5, 37-39	2-5	9
111	Improved Device Performance by Post-Oxide Annealing in Atomic-Layer-Deposited Al ₂ O ₃ /AlGa _N /Ga _N Metal Insulator Semiconductor High Electron Mobility Transistor on Si. <i>Applied Physics Express</i> , 2011 , 4, 104102	2-4	16
110	Improved Power Device Figure-of-Merit ($4.0 \times 10^8 \text{ V}^2 \text{ s}^{-1} \text{ cm}^{-2}$) in AlGa _N /Ga _N High-Electron-Mobility Transistors on High-Resistivity 4-in. Si. <i>Applied Physics Express</i> , 2011 , 4, 084101	2-4	43
109	Structural and Electrical Characterization of Al _x Ga _{1-x} N/Ga _N Interfaces for UV Photodetectors. <i>Electrochemical and Solid-State Letters</i> , 2010 , 13, H301		3
108	Low Specific On-Resistance AlGa _N /Al _N /Ga _N High Electron Mobility Transistors on High Resistivity Silicon Substrate. <i>Electrochemical and Solid-State Letters</i> , 2010 , 13, H169		12
107	Demonstration of AlGa _N /Ga _N high-electron-mobility transistors on 100 mm diameter Si(111) by plasma-assisted molecular beam epitaxy. <i>Applied Physics Letters</i> , 2010 , 97, 232107	3-4	25
106	Improved Linearity for Low-Noise Applications in 0.25- μm Ga _N MISHEMTs Using ALD Al ₂ O ₃ as Gate Dielectric. <i>IEEE Electron Device Letters</i> , 2010 , 31, 803-805	4-4	43
105	High Microwave-Noise Performance of AlGa _N /Ga _N MISHEMTs on Silicon With Al ₂ O ₃ Gate Insulator Grown by ALD. <i>IEEE Electron Device Letters</i> , 2010 , 31, 96-98	4-4	44
104	Accurate large-signal FET model tailored for switching-mode power amplifier design. <i>IEICE Electronics Express</i> , 2010 , 7, 1672-1678		0-5
103	Analytical Modeling of High-Frequency Noise Including Temperature Effects in Ga _N HEMTs on High-Resistivity Si Substrates. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 1485-1491	2-9	14
102	Study on the Temperature Dependence of the Microwave-Noise Characteristics in AlGa _N /Ga _N HEMTs. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 2353-2357	2-9	3
101	Study of current collapse by quiescent-bias-stresses in rf-plasma assisted MBE grown AlGa _N /Ga _N high-electron-mobility transistors. <i>Solid-State Electronics</i> , 2010 , 54, 1430-1433	1-7	7

100	Improved recess-ohmics in AlGaIn/GaN high-electron-mobility transistors with AlN spacer layer on silicon substrate. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, 2412-2414		18
99	Electrothermal large-signal model of III-V FETs accounting for frequency dispersion and charge conservation 2009 ,		6
98	Temperature dependent microwave noise parameters and modeling of AlGaIn/GaN HEMTs on Si substrate 2009 ,		9
97	Analytical modeling of the temperature dependent microwave noise in AlGaIn/GaN HEMTs 2009 ,		1
96	Electrothermal Large-Signal Model of III-V FETs Including Frequency Dispersion and Charge Conservation. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2009 , 57, 3106-3117	4-1	32
95	Temperature dependence of Ohmic contact characteristics in AlGaIn/GaN high electron mobility transistors from 80 to 200 °C. <i>Applied Physics Letters</i> , 2009 , 94, 142105	3-4	53
94	Improved Microwave Noise Performance by SiN Passivation in AlGaIn/GaN HEMTs on Si. <i>IEEE Microwave and Wireless Components Letters</i> , 2009 , 19, 383-385	2.6	12
93	Mechanism of Increased High-Frequency Channel Noise With PECVD SiN Passivation in AlGaIn/GaN HEMTs. <i>IEEE Electron Device Letters</i> , 2009 , 30, 1122-1124	4-4	6
92	Improved two-dimensional electron gas transport characteristics in AlGaIn/GaN metal-insulator-semiconductor high electron mobility transistor with atomic layer-deposited Al ₂ O ₃ as gate insulator. <i>Applied Physics Letters</i> , 2009 , 95, 223501	3-4	85
91	Influence of Ammonia in the Deposition Process of SiN on the Performance of SiN/AlGaIn/GaN Metal-Insulator-Semiconductor High-Electron-Mobility Transistors on 4-in. Si(111). <i>Applied Physics Express</i> , 2009 , 2, 031001	2-4	20
90	Sheet carrier density enhancement by Si ₃ N ₄ passivation on nonpolar a-plane (112̄0) sapphire grown AlGaIn/GaN heterostructures. <i>Applied Physics Letters</i> , 2008 , 92, 092116	3-4	10
89	Temperature dependent microwave performance of AlGaIn/GaN high-electron-mobility transistors on high-resistivity silicon substrate. <i>Thin Solid Films</i> , 2007 , 515, 4517-4521	2.2	46
88	Effect of gate-source and gate-drain Si ₃ N ₄ passivation on current collapse in AlGaIn/GaN high-electron-mobility transistors on silicon. <i>Applied Physics Letters</i> , 2007 , 90, 173504	3-4	41
87	High temperature power performance of AlGaIn/GaN high-electron-mobility transistors on high-resistivity silicon. <i>Applied Physics Letters</i> , 2007 , 91, 083516	3-4	24
86	Enhancement of both direct-current and microwave characteristics of AlGaIn/GaN high-electron-mobility transistors by furnace annealing. <i>Applied Physics Letters</i> , 2006 , 88, 023502	3-4	12
85	Microwave noise characteristics of AlGaIn/GaN HEMTs on high-resistivity silicon substrate 2005 ,		1
84	A novel technology to form self-aligned emitter ledge for heterojunction bipolar transistors. <i>IEEE Electron Device Letters</i> , 2003 , 24, 628-630	4-4	8
83	A fast noise and Z-parameter transformations between common emitter and common base InP DHBT. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2002 , 50, 1109-1113	4-1	

82	Scaling of microwave noise and small-signal parameters of InP/InGaAs DHBT with high DC current gain. <i>IEEE Transactions on Electron Devices</i> , 2002 , 49, 1308-1311	2.9	2
81	Microwave noise performance of metamorphic InP/In _{0.53} Ga _{0.47} As/InP DHBT on GaAs substrates. <i>Microwave and Optical Technology Letters</i> , 2002 , 33, 306-308	1.2	
80	DC Characterization of Metamorphic InP/InGaAs Heterojunction Bipolar Transistors at Elevated Temperature. <i>Japanese Journal of Applied Physics</i> , 2002 , 41, 1136-1138	1.4	2
79	Studies on the Degradation of InP/InGaAs/InP Double Heterojunction Bipolar Transistors Induced by Silicon Nitride Passivation. <i>Japanese Journal of Applied Physics</i> , 2002 , 41, 1059-1061	1.4	12
78	Through wafer via hole by reactive ion etching of GaAs 2002 ,		2
77	Characterization of linearly graded metamorphic InGaP buffer layers on GaAs using high-resolution X-ray diffraction. <i>Thin Solid Films</i> , 2001 , 391, 36-41	2.2	19
76	High-frequency performance of metamorphic InP/In _{0.53} Ga _{0.47} As/InP DHBT in common base configuration on GaAs substrates. <i>Materials Science in Semiconductor Processing</i> , 2001 , 4, 647-649	4.3	
75	. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 1492-1497	2.9	16
74	. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 2192-2197	2.9	12
73	Investigation of the degradation of InGaAs/InP double HBTs under reverse base-collector bias stress. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 2647-2654	2.9	8
72	Metamorphic InP/InGaAs heterojunction bipolar transistors on GaAs substrate: DC and microwave performances. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 2671-2676	2.9	9
71	Microwave noise and power performance of metamorphic InP heterojunction bipolar transistors. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2001 , 49, 2408-2412	4.1	2
70	Single-step fabrication of surface relief diffractive optical elements on hybrid sol-gel glass. <i>Optical Engineering</i> , 2001 , 40, 2017	1.1	4
69	Optimization of In _x Ga _{1-x} As/In _y Al _{1-y} As high electron mobility transistor structures grown by solid-source molecular beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2001 , 19, 490		1
68	Metamorphic In _{0.52} Al _{0.48} As/In _{0.53} Ga _{0.47} As high electron mobility transistors on GaAs with In _x Ga _{1-x} P graded buffer. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2001 , 19, 2119		8
67	Growth optimization of InGaP layers by solid source molecular beam epitaxy for the application of InGaP/In _{0.2} Ga _{0.8} As/GaAs high electron mobility transistor structures. <i>Journal of Crystal Growth</i> , 2000 , 216, 51-56	1.6	8
66	The influence of different isolation processes on the performance of AlGaAs/GaAs heterojunction bipolar transistors for power applications. <i>Solid-State Electronics</i> , 2000 , 44, 1989-1995	1.7	
65	Band gap narrowing effect in Be-doped Al _x Ga _{1-x} As studied by photoluminescence spectroscopy. <i>Solid-State Electronics</i> , 2000 , 44, 37-40	1.7	6

64	Optimization of In _x Ga _{1-x} P/In _{0.2} Ga _{0.8} As/GaAs high electron mobility transistor structures grown by solid source molecular beam epitaxy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2000 , 75, 110-114	3.1	1
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62	Electron cyclotron resonance etching of GaAs vias for monolithic microwave integrated circuits. <i>Optical Materials</i> , 2000 , 14, 223-227	3.3	1
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59	Electrical and optical characterization of regrown PHEMT layer structures on etched GaAs surfaces. <i>Journal of Materials Science: Materials in Electronics</i> , 2000 , 11, 379-382	2.1	1
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57	Avalanche multiplication and ionization coefficient in AlGaAs/InGaAs p-n-p heterojunction bipolar transistors. <i>Applied Physics Letters</i> , 2000 , 77, 4217-4219	3.4	
56	Preparation and characterization of rf-sputtered SrTiO ₃ thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000 , 18, 1638-1641	2.9	16
55	Metamorphic InP/InGaAs double-heterojunction bipolar transistors on GaAs grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2000 , 77, 869-871	3.4	38
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53	Electrical and optical properties of Si-doped InP grown by solid source molecular beam epitaxy using a valved phosphorus cracker cell. <i>Journal of Applied Physics</i> , 2000 , 87, 7988-7993	2.5	17
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50	A comprehensive study of AlGaAs/GaAs beryllium- and carbon-doped base heterojunction bipolar transistor structures subjected to rapid thermal processing. <i>Journal of Applied Physics</i> , 1999 , 86, 6468-6473	2.5	6
49	Nondestructive determination of beryllium outdiffusion in AlGaAs/GaAs heterojunction bipolar transistor structures by low-temperature photoluminescence. <i>Journal of Applied Physics</i> , 1999 , 86, 4267-4272	2.5	1
48	Molecular Beam Epitaxial Growth of InP Using a Valved Phosphorus Cracker Cell: Optimization of Electrical, Optical and Surface Morphology Characteristics. <i>Japanese Journal of Applied Physics</i> , 1999 , 38, 981-984	1.4	4
47	Improved transport properties of In _x Ga _{1-x} P/In _{0.2} Ga _{0.8} As/GaAs pseudomorphic high electron mobility transistor structures. <i>Solid State Communications</i> , 1999 , 112, 661-664	1.6	2

46	0.25- μm gate In _{0.48} Ga _{0.52} P/In _{0.20} Ga _{0.80} As/GaAs pseudomorphic high electron mobility transistors grown by solid-source molecular beam epitaxy. <i>Solid-State Electronics</i> , 1999 , 43, 785-789	1.7	5
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5	Device performance and transport properties of high gain metamorphic InP/InGaAs heterojunction bipolar transistors at elevated temperature		1
4	Hot-carrier induced degradation in InP/InGaAs/InP double heterojunction bipolar transistors		4
3	MMIC-based W-band Dicke switched direct-detection receiver		4
2			5
1	A miniaturized W-band monolithic dual-gate InAlAs/InGaAs HEMT mixer		3