

Jesus A Del Alamo

List of Publications by Year in descending order

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223
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#	ARTICLE	IF	CITATIONS
1	Nucleation-Limited Switching Dynamics Model for Efficient Ferroelectrics Circuit Simulation. IEEE Transactions on Electron Devices, 2022, 69, 395-399.	3.0	6
2	Scaling of GaSb/InAs Vertical Nanowire Esaki Diodes Down to Sub-10-nm Diameter. IEEE Transactions on Electron Devices, 2022, 69, 2188-2195.	3.0	6
3	Gate-geometry dependence of electrical characteristics of p-GaN gate HEMTs. Applied Physics Letters, 2022, 120, .	3.3	4
4	WO ₃ Passivation of Access Regions in Diamond MOSFETs. IEEE Transactions on Electron Devices, 2022, 69, 3334-3340.	3.0	0
5	Sub-10-nm Diameter Vertical Nanowire p-Type GaSb/InAsSb Tunnel FETs. IEEE Electron Device Letters, 2022, 43, 846-849.	3.9	15
6	Impact of Gate Offset on PBTI of p-GaN Gate HEMTs. , 2022, , .		3
7	Neural Network Training With Asymmetric Crosspoint Elements. Frontiers in Artificial Intelligence, 2022, 5, .	3.4	9
8	Switching Dynamics in Metal-ferroelectric HfZrO ₂ -Metal Structures. IEEE Transactions on Electron Devices, 2022, 69, 4016-4021.	3.0	2
9	Gate-geometry dependence of dynamic V _t in p-GaN gate HEMTs. , 2022, , .		1
10	CMOS-Compatible Protonic Programmable Resistor Based on Phosphosilicate Glass Electrolyte for Analog Deep Learning. Nano Letters, 2021, 21, 6111-6116.	9.1	25
11	Editorial 2020 Electron Devices Society George E. Smith Award. IEEE Electron Device Letters, 2021, 42, 1108-1108.	3.9	0
12	Analysis of Mo Sidewall Ohmic Contacts to InGaAs Fins. IEEE Transactions on Electron Devices, 2021, 68, 4847-4853.	3.0	1
13	Kudos to Our Golden Reviewers. IEEE Electron Device Letters, 2021, 42, 1692-1692.	3.9	0
14	Nanoscale InGaAs FinFETs: Band-to-Band Tunneling and Ballistic Transport. , 2021, , .		1
15	Sub-10-nm Diameter GaSb/InAs Vertical Nanowire Esaki Diodes with Ideal Scaling Behavior: Experiments and Simulations. , 2021, , .		2
16	A New Technique for Mobility Extraction in MOSFETs in the Presence of Prominent Gate Oxide Trapping: Application to InGaAs MOSFETs. IEEE Transactions on Electron Devices, 2020, 67, 3075-3081.	3.0	9
17	Refractory W Ohmic Contacts to H-Terminated Diamond. IEEE Transactions on Electron Devices, 2020, 67, 3516-3521.	3.0	6
18	Protonic solid-state electrochemical synapse for physical neural networks. Nature Communications, 2020, 11, 3134.	12.8	82

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19	Dynamics of HfZrO ₂ Ferroelectric Structures: Experiments and Models. , 2020, , .		11
20	Editorial Kudos to Our Golden Reviewers. IEEE Electron Device Letters, 2020, 41, 1714-1714.	3.9	0
21	In Situ Thermal Atomic Layer Etching for Sub-5 nm InGaAs Multigate MOSFETs. Nano Letters, 2019, 19, 5159-5166.	9.1	32
22	Asymmetric gating for reducing leakage current in carbon nanotube field-effect transistors. Applied Physics Letters, 2019, 115, .	3.3	19
23	Stability and Reliability of Lateral GaN Power Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 4578-4590.	3.0	75
24	Time-Dependent Dielectric Breakdown Under AC Stress in GaN MIS-HEMTs. , 2019, , .		4
25	Fin-Width Scaling of Highly Doped InGaAs Fins. IEEE Transactions on Electron Devices, 2019, 66, 2563-2568.	3.0	3
26	A Scaling Study of Excess OFF-State Current in InGaAs Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 1208-1212.	3.0	6
27	X3D: Heterogeneous Monolithic 3D Integration of α -Si (Arbitrary) Nanowires: Silicon, III ^V , and Carbon Nanotubes. IEEE Nanotechnology Magazine, 2019, 18, 270-273.	2.0	6
28	Excess OFF-State Current in InGaAs FinFETs: Physics of the Parasitic Bipolar Effect. IEEE Transactions on Electron Devices, 2019, 66, 2113-2118.	3.0	2
29	Reassessing InGaAs for Logic: Mobility Extraction in sub-10nm Fin-Width FinFETs. , 2019, , .		7
30	Investigation of Source Starvation in High-Transconductance III ^V Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 4698-4705.	3.0	3
31	Pulsed Laser-Induced Single-Event Transients in InGaAs FinFETs with sub-10-nm Fin Widths. , 2019, , .		1
32	A Diamond:HfWO ₃ Metal ² Oxide ² Semiconductor Field-Effect Transistor. IEEE Electron Device Letters, 2018, 39, 540-543.	3.9	27
33	Comprehensive dynamic on-resistance assessments in GaN-on-Si MIS-HEMTs for power switching applications. Semiconductor Science and Technology, 2018, 33, 055012.	2.0	11
34	Scaling Effects on Single-Event Transients in InGaAs FinFETs. IEEE Transactions on Nuclear Science, 2018, 65, 296-303.	2.0	18
35	Excess Off-State Current in InGaAs FinFETs. IEEE Electron Device Letters, 2018, 39, 476-479.	3.9	15
36	First Transistor Demonstration of Thermal Atomic Layer Etching: InGaAs FinFETs with sub-5 nm Fin-width Featuring in situ ALE-ALD. , 2018, , .		24

#	ARTICLE	IF	CITATIONS
37	Dislocations behavior in highly mismatched III-Sb growth and their impact on the fabrication of top-down InAs/p-GaSb nanowire tunneling devices. Journal of Applied Physics, 2018, 124, .	2.5	0
38	Enhanced transport in transistor by tuning transition-metal oxide electronic states interfaced with diamond. Science Advances, 2018, 4, eaau0480.	10.3	42
39	High hole mobility in strained In _{0.25} Ga _{0.75} Sb quantum well with high quality Al _{0.95} Ga _{0.05} Sb buffer layer. Applied Physics Letters, 2018, 113, 093501.	3.3	3
40	Sub-10-nm-Diameter InGaAs Vertical Nanowire MOSFETs: Ni Versus Mo Contacts. IEEE Transactions on Electron Devices, 2018, 65, 3762-3768.	3.0	11
41	Optimized Toroidal Inductors Versus Planar Spiral Inductors in Multilayered Technologies. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 423-431.	4.6	20
42	Unified Mechanism for Positive- and Negative-Bias Temperature Instability in GaN MOSFETs. IEEE Transactions on Electron Devices, 2017, 64, 2142-2147.	3.0	46
43	Sub-Thermal Subthreshold Characteristics in Top-Down InGaAs/InAs Heterojunction Vertical Nanowire Tunnel FETs. IEEE Electron Device Letters, 2017, 38, 855-858.	3.9	43
44	Alcohol-Based Digital Etch for III-V Vertical Nanowires With Sub-10 nm Diameter. IEEE Electron Device Letters, 2017, 38, 548-551.	3.9	25
45	Source/Drain Asymmetry in InGaAs Vertical Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2017, 64, 2161-2165.	3.0	10
46	A Si-Compatible Fabrication Process for Scaled Self-Aligned InGaAs FinFETs. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 468-474.	1.7	9
47	Anomalous Source-Side Degradation of InAlN/GaN HEMTs Under High-Power Electrical Stress. IEEE Transactions on Electron Devices, 2017, 64, 4435-4441.	3.0	4
48	Gate dielectric reliability and instability in GaN metal-insulator-semiconductor high-electron-mobility transistors for power electronics. Journal of Materials Research, 2017, 32, 3458-3468.	2.6	16
49	The Importance of Ballistic Resistance in the Modeling of Nanoscale InGaAs MOSFETs. IEEE Electron Device Letters, 2017, 38, 851-854.	3.9	2
50	OFF-state TDDB in high-voltage GaN MIS-HEMTs. , 2017, , .		13
51	Time-Dependent Dielectric Breakdown in High-Voltage GaN MIS-HEMTs: The Role of Temperature. IEEE Transactions on Electron Devices, 2017, 64, 3132-3138.	3.0	12
52	Gate Bias and Geometry Dependence of Total-Ionizing-Dose Effects in InGaAs Quantum-Well MOSFETs. IEEE Transactions on Nuclear Science, 2017, 64, 239-244.	2.0	17
53	Neutral beam etching for device isolation in AlGaIn/GaN HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600617.	1.8	5
54	Self-aligned InGaAs FinFETs with 5-nm fin-width and 5-nm gate-contact separation. , 2017, , .		14

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55	Towards sub-10 nm diameter InGaAs vertical nanowire MOSFETs and TFETs. , 2017, , .		0
56	CMOS beyond Si: Nanometer-Scale III-V MOSFETs. , 2017, , .		5
57	10-nm Fin-width InGaSb p-channel self-aligned FinFETs using antimonide-compatible digital etch. , 2017, , .		15
58	Evaluation and Reliability Assessment of GaN-on-Si MIS-HEMT for Power Switching Applications. Energies, 2017, 10, 233.	3.1	19
59	Sub-10 nm diameter InGaAs vertical nanowire MOSFETs. , 2017, , .		15
60	Nanometer-Scale III-V MOSFETs. IEEE Journal of the Electron Devices Society, 2016, 4, 205-214.	2.1	59
61	The effect of neutral beam etching on device isolation in AlGaIn/GaN HEMTs. , 2016, , .		0
62	Experiment lab server architecture: A web services approach to supporting interactive LabVIEW-based remote experiments under MIT's iLab shared architecture. , 2016, , .		6
63	Sub-10-nm Fin-Width Self-Aligned InGaAs FinFETs. IEEE Electron Device Letters, 2016, 37, 1104-1107.	3.9	41
64	High aspect ratio InGaAs FinFETs with sub-20 nm fin width. , 2016, , .		9
65	Electrical Degradation of InAlN/GaN HEMTs Operating Under ON Conditions. IEEE Transactions on Electron Devices, 2016, 63, 3487-3492.	3.0	11
66	Negative-bias temperature instability of GaN MOSFETs. , 2016, , .		28
67	Progressive breakdown in high-voltage GaN MIS-HEMTs. , 2016, , .		15
68	Ultrathin Body InGaAs MOSFETs on III-V-On-Insulator Integrated With Silicon Active Substrate (III-V-OIAS). IEEE Transactions on Electron Devices, 2016, , 1-8.	3.0	5
69	Record Maximum Transconductance of 3.45 mS/ for III-V FETs. IEEE Electron Device Letters, 2016, 37, 381-384.	3.9	54
70	InGaAs Quantum-Well MOSFET Arrays for Nanometer-Scale Ohmic Contact Characterization. IEEE Transactions on Electron Devices, 2016, 63, 1020-1026.	3.0	12
71	Analysis of Resistance and Mobility in InGaAs Quantum-Well MOSFETs From Ballistic to Diffusive Regimes. IEEE Transactions on Electron Devices, 2016, 63, 1464-1470.	3.0	22
72	Quantum-size effects in sub 10-nm fin width InGaAs FinFETs. , 2015, , .		16

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73	An InGaSb p-channel FinFET. , 2015, , .		14
74	Ultralow Resistance Ohmic Contacts for p-Channel InGaSb Field-Effect Transistors. IEEE Electron Device Letters, 2015, 36, 546-548.	3.9	14
75	III-V MOSFETs for Future CMOS. , 2015, , .		13
76	Electrical and structural degradation of GaN high electron mobility transistors under high-power and high-temperature Direct Current stress. Journal of Applied Physics, 2015, 117, .	2.5	33
77	Physics and Mitigation of Excess OFF-State Current in InGaAs Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 1448-1455.	3.0	20
78	Nanoscale Mo Ohmic Contacts to III-V Fins. IEEE Electron Device Letters, 2015, 36, 126-128.	3.9	11
79	Impact of Intrinsic Channel Scaling on InGaAs Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 3470-3476.	3.0	35
80	Positive-bias temperature instability (PBTI) of GaN MOSFETs. , 2015, , .		33
81	Single-Event Transient Response of InGaAs MOSFETs. IEEE Transactions on Nuclear Science, 2014, 61, 3550-3556.	2.0	20
82	A Diamond:H/MoO ₃ MOSFET. IEEE Electron Device Letters, 2014, 35, 1320-1322.	3.9	36
83	Enhancing p-channel InGaSb QW-FETs via Process-Induced Compressive Uniaxial Strain. IEEE Electron Device Letters, 2014, 35, 1088-1090.	3.9	12
84	InGaAs/InAs heterojunction vertical nanowire tunnel fets fabricated by a top-down approach. , 2014, , .		29
85	Off-State Leakage Induced by Band-to-Band Tunneling and Floating-Body Bipolar Effect in InGaAs Quantum-Well MOSFETs. IEEE Electron Device Letters, 2014, 35, 1203-1205.	3.9	43
86	Activation energy of drain-current degradation in GaN HEMTs under high-power DC stress. Microelectronics Reliability, 2014, 54, 2668-2674.	1.7	14
87	Novel intrinsic and extrinsic engineering for high-performance high-density self-aligned InGaAs MOSFETs: Precise channel thickness control and sub-40-nm metal contacts. , 2014, , .		29
88	III-V compound semiconductor transistors from planar to nanowire structures. MRS Bulletin, 2014, 39, 668-677.	3.5	251
89	A Test Structure to Characterize Nano-Scale Ohmic Contacts in III-V MOSFETs. IEEE Electron Device Letters, 2014, 35, 178-180.	3.9	43
90	Ultra-thin-body self-aligned InGaAs MOSFETs on insulator (III-V-O-I) by a tight-pitch process. , 2014, , .		3

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91	A Novel Digital Etch Technique for Deeply Scaled III-V MOSFETs. IEEE Electron Device Letters, 2014, 35, 440-442.	3.9	54
92	Impact of Water-Assisted Electrochemical Reactions on the OFF-State Degradation of AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 437-444.	3.0	58
93	Nanometer-Scale Vertical-Sidewall Reactive Ion Etching of InGaAs for 3-D III-V MOSFETs. IEEE Electron Device Letters, 2014, 35, 521-523.	3.9	66
94	InGaAs Double-gate fin-sidewall MOSFET. , 2014, , .		5
95	Methodology for the Study of Dynamic ON-Resistance in High-Voltage GaN Field-Effect Transistors. IEEE Transactions on Electron Devices, 2013, 60, 3190-3196.	3.0	111
96	Vertical nanowire InGaAs MOSFETs fabricated by a top-down approach. , 2013, , .		36
97	InGaAs MOSFETs for CMOS: Recent advances in process technology. , 2013, , .		32
98	Nanometer-scale InGaAs Field-Effect Transistors for THz and CMOS technologies. , 2013, , .		1
99	A new self-aligned quantum-well MOSFET architecture fabricated by a scalable tight-pitch process. , 2013, , .		41
100	Total current collapse in high-voltage GaN MIS-HEMTs induced by Zener trapping. , 2013, , .		18
101	High-Speed E-Mode InAs QW MOSFETs With Al_2O_3 Insulator for Future RF Applications. IEEE Electron Device Letters, 2013, 34, 196-198.	3.9	16
102	Design and modeling of Faraday cages for substrate noise isolation. Solid-State Electronics, 2013, 85, 6-11.	1.4	6
103	InGaAs nanoelectronics: from THz to CMOS. , 2013, , .		0
104	Nanometer-scale InGaAs field-effect transistors for THz and CMOS technologies. , 2013, , .		4
105	ETB-QW InAs MOSFET with scaled body for improved electrostatics. , 2012, , .		22
106	A Self-Aligned InGaAs Quantum-Well Metal-Oxide-Semiconductor Field-Effect Transistor Fabricated through a Lift-Off-Free Front-End Process. Applied Physics Express, 2012, 5, 064002.	2.4	38
107	Strain and Temperature Dependence of Defect Formation at AlGaIn/GaN High-Electron-Mobility Transistors on a Nanometer Scale. IEEE Transactions on Electron Devices, 2012, 59, 2667-2674.	3.0	14
108	60-nm recessed In _{0.7} Ga _{0.3} As metal-oxide-semiconductor field-effect transistors with Al ₂ O ₃ insulator. Applied Physics Letters, 2012, 101, .	3.3	26

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109	Spatial distribution of structural degradation under high-power stress in AlGa _N /Ga _N high electron mobility transistors. Applied Physics Letters, 2012, 100, 172109.	3.3	26
110	InAs quantum-well MOSFET ($L_{\text{gate}} = 100$ nm) with record high f_{Tmax} and f_{max} , 2012, .		7
111	Issues Faced in a Remote Instrumentation Laboratory. , 2012, , .		4
112	Impact of high-power stress on dynamic ON-resistance of high-voltage GaN HEMTs. Microelectronics Reliability, 2012, 52, 2875-2879.	1.7	24
113	Sub-30 nm InAs Quantum-Well MOSFETs with self-aligned metal contacts and Sub-1 nm EOT HfO ₂ insulator. , 2012, , .		18
114	Mechanisms responsible for dynamic ON-resistance in GaN high-voltage HEMTs. , 2012, , .		74
115	Impact of gate placement on RF power degradation in GaN high electron mobility transistors. Microelectronics Reliability, 2012, 52, 33-38.	1.7	10
116	Nanometre-scale electronics with III-V compound semiconductors. Nature, 2011, 479, 317-323.	27.8	1,515
117	A Current-Transient Methodology for Trap Analysis for GaN High Electron Mobility Transistors. IEEE Transactions on Electron Devices, 2011, 58, 132-140.	3.0	394
118	Multiscale Metrology and Optimization of Ultra-Scaled InAs Quantum Well FETs. IEEE Transactions on Electron Devices, 2011, 58, 1963-1971.	3.0	16
119	Experimental Study of $\langle 110 \rangle$ Uniaxial Stress Effects on p-Channel GaAs Quantum-Well FETs. IEEE Transactions on Electron Devices, 2011, 58, 2597-2603.	3.0	6
120	Traps and defects in pre- and post-stressed AlGa _N /Ga _N high electron mobility transistors. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1611-1613.	1.8	16
121	Role of stress voltage on structural degradation of GaN high-electron-mobility transistors. Microelectronics Reliability, 2011, 51, 201-206.	1.7	42
122	$f_{\text{T}} = 688$ GHz and $f_{\text{max}} = 800$ GHz in $L_{\text{gate}} = 40$ nm In _{0.7} Ga _{0.3} As MHEMTs with $g_{\text{m,max}} \approx 2.7$ mS/ μm . , 2011, , .		24
123	Time evolution of electrical degradation under high-voltage stress in GaN high electron mobility transistors. , 2011, , .		19
124	Performance enhancement of p-channel InGaAs quantum-well FETs by superposition of process-induced uniaxial strain and epitaxially-grown biaxial strain. , 2011, , .		5
125	Hole mobility enhancement in In _{0.41} Ga _{0.59} Sb quantum-well field-effect transistors. Applied Physics Letters, 2011, 98, 053505.	3.3	26
126	Simultaneous achievement of high performance and high reliability in a 38/77GHz InGaAs/AlGaAs PHEMT MMIC. IEICE Electronics Express, 2010, 7, 558-562.	0.8	1

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127	Effect of Substrate Contact Shape and Placement on RF Characteristics of 45 nm Low Power CMOS Devices. IEEE Journal of Solid-State Circuits, 2010, 45, 998-1006.	5.4	15
128	A model for the critical voltage for electrical degradation of GaN high electron mobility transistors. Microelectronics Reliability, 2010, 50, 767-773.	1.7	89
129	A Self-Aligned InGaAs HEMT Architecture for Logic Applications. IEEE Transactions on Electron Devices, 2010, 57, 297-304.	3.0	54
130	Fabrication and Characterization of Through-Substrate Interconnects. IEEE Transactions on Electron Devices, 2010, 57, 1261-1268.	3.0	19
131	Scalability of Sub-100 nm InAs HEMTs on InP Substrate for Future Logic Applications. IEEE Transactions on Electron Devices, 2010, 57, 1504-1511.	3.0	54
132	High voltage degradation of GaN High Electron Mobility Transistors on silicon substrate. Microelectronics Reliability, 2010, 50, 758-762.	1.7	37
133	Enabling Remote Design and Troubleshooting Experiments Using the iLab Shared Architecture. , 2010, , .		4
134	Mobility enhancement in indium-rich N-channel In _x Ga _{1-x} As HEMTs by application of uniaxial strain. , 2010, , .		0
135	Evolution of structural defects associated with electrical degradation in AlGaIn/GaN high electron mobility transistors. Applied Physics Letters, 2010, 96, .	3.3	146
136	RF power potential of 45 nm CMOS technology. , 2010, , .		22
137	60 nm self-aligned-gate InGaAs HEMTs with record high-frequency characteristics. , 2010, , .		20
138	InGaAs Heterostructure FETs (HFETs) for Beyond-Roadmap CMOS. ECS Transactions, 2010, 28, 203-206.	0.5	0
139	50-nm E-mode In _{0.7} Ga _{0.3} As PHEMTs on 100-mm InP substrate with f_{\max} ; 1 THz. , 2010, , .		13
140	Effect of trapping on the critical voltage for degradation in GaN high electron mobility transistors. , 2010, , .		12
141	30-nm InAs PHEMTs With $f_T = 644$ GHz and $f_{\max} = 681$ GHz. IEEE Electron Device Letters, 2010, 31, 806-808.	3.9	137
142	Logic characteristics of 40 nm thin-channel InAs HEMTs. , 2010, , .		14
143	RF power degradation of GaN High Electron Mobility Transistors. , 2010, , .		25
144	The prospects for 10 nm III-V CMOS. , 2010, , .		3

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145	Device Physics and Performance Potential of III-V Field-Effect Transistors. , 2010, , 31-50.		7
146	Impact of $\sim 110^\circ\text{C}$ uniaxial strain on n-channel $\text{In}_{0.15}\text{Ga}_{0.85}\text{As}$ high electron mobility transistors. Applied Physics Letters, 2009, 95, 243504.	3.3	12
147	Analysis of Gate Delay Scaling in $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ -Channel High Electron Mobility Transistors. Japanese Journal of Applied Physics, 2009, 48, 04C086.	1.5	6
148	Measurement of Channel Temperature in GaN High-Electron Mobility Transistors. IEEE Transactions on Electron Devices, 2009, 56, 2895-2901.	3.0	141
149	Corrosion-induced degradation of GaAs PHEMTs under operation in high humidity conditions. Microelectronics Reliability, 2009, 49, 1515-1519.	1.7	9
150	GaN HEMT reliability. Microelectronics Reliability, 2009, 49, 1200-1206.	1.7	408
151	Nanoscale mapping of temperature and defect evolution inside operating AlGaIn/GaN high electron mobility transistors. Applied Physics Letters, 2009, 95, .	3.3	25
152	Scalability of sub-100 nm thin-channel InAs PHEMTs. , 2009, , .		9
153	Quantum capacitance in scaled down III-V FETs. , 2009, , .		15
154	Performance analysis of ultra-scaled InAs HEMTs. , 2009, , .		19
155	Extraction of virtual-source injection velocity in sub-100 nm III-V HFETs. , 2009, , .		44
156	30 nm $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ Inverted-Type HEMTs with reduced gate leakage current for logic applications. , 2009, , .		5
157	A Versatile Internet-Accessible Electronics Workbench with Troubleshooting Capabilities. International Journal of Online and Biomedical Engineering, 2009, 5, 72.	1.4	13
158	Quantum-corrected Monte Carlo analysis of scaling behavior of nano-scale InGaAs high electron mobility transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2795-2798.	0.8	5
159	A Simple Current Collapse Measurement Technique for GaN High-Electron Mobility Transistors. IEEE Electron Device Letters, 2008, 29, 665-667.	3.9	93
160	Lateral and Vertical Scaling of $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ HEMTs for Post-Si-CMOS Logic Applications. IEEE Transactions on Electron Devices, 2008, 55, 2546-2553.	3.0	69
161	TEM Observation of Crack- and Pit-Shaped Defects in Electrically Degraded GaN HEMTs. IEEE Electron Device Letters, 2008, 29, 1098-1100.	3.9	128
162	Degradation mechanisms of GaAs PHEMTs under operation in high humidity conditions. , 2008, , .		2

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163	Degradation Uniformity of RF-Power GaAs PHEMTs Under Electrical Stress. IEEE Transactions on Device and Materials Reliability, 2008, 8, 283-288.	2.0	13
164	30 nm E-mode InAs PHEMTs for THz and future logic applications. , 2008, , .		47
165	Impact of electrical degradation on trapping characteristics of GaN high electron mobility transistors. , 2008, , .		32
166	Critical Voltage for Electrical Degradation of GaN High-Electron Mobility Transistors. IEEE Electron Device Letters, 2008, 29, 287-289.	3.9	220
167	30-nm InAs Pseudomorphic HEMTs on an InP Substrate With a Current-Gain Cutoff Frequency of 628 GHz. IEEE Electron Device Letters, 2008, 29, 830-833.	3.9	145
168	Degradation Mechanism of AlGaAs/InGaAs Power Pseudomorphic High-Electron-Mobility Transistors under Large-Signal Operation. Japanese Journal of Applied Physics, 2008, 47, 833-838.	1.5	3
169	Correlation between RF and DC reliability in GaN high electron mobility transistors. , 2008, , .		11
170	Impact of lateral engineering on the logic performance of sub-50 nm InGaAs HEMTs. , 2007, , .		1
171	Beyond CMOS: Logic Suitability of InGaAs HEMTs. Indium Phosphide and Related Materials Conference (IPRM), IEEE International Conference on, 2007, , .	0.0	2
172	Gate Current Degradation Mechanisms of GaN High Electron Mobility Transistors. , 2007, , .		58
173	Logic Performance of 40 nm InAs HEMTs. , 2007, , .		25
174	Through-Substrate Interconnects for 3-D ICs, RF Systems, and MEMS. , 2007, , .		11
175	InGaAs CMOS: a "Beyond-the-Roadmap" Logic Technology?. Device Research Conference, IEEE Annual, 2007, , .	0.0	2
176	90 nm Self-aligned Enhancement-mode InGaAs HEMT for Logic Applications. , 2007, , .		19
177	Logic Suitability of 50-nm $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ HEMTs for Beyond-CMOS Applications. IEEE Transactions on Electron Devices, 2007, 54, 2606-2613.	3.0	76
178	Scaling Behavior of $\text{In}_{0.7}\text{Ga}_{0.3}\text{As}$ HEMTs for Logic. , 2006, , .		15
179	Mechanisms for Electrical Degradation of GaN High-Electron Mobility Transistors. , 2006, , .		134
180	Fundamental Power and Frequency Limits of Deeply-Scaled CMOS for RF Power Applications. , 2006, , .		23

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181	A Nonlinear Drain Resistance Model for a High Power Millimeter-wave PHEMT. , 2006, , .		7
182	Growth of InP high electron mobility transistor structures with Te doping. Journal of Crystal Growth, 2005, 278, 596-599.	1.5	2
183	Technology for the fabrication of ultrashort channel metal-oxide-semiconductor field-effect transistors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1737-1741.	2.1	6
184	Scheme for the fabrication of ultrashort channel metal-oxide-semiconductor field-effect transistors. Applied Physics Letters, 2000, 77, 298-300.	3.3	13
185	An analytical framework for first-order CMOS device design. , 1998, , .		0
186	Characterization of surface roughness anisotropy on mismatched InAlAs/InP heterostructures. Journal of Electronic Materials, 1996, 25, 313-319.	2.2	6
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