Jesus A Del Alamo

List of Publications by Year
in descending order

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223	8,186	100601 38	71088 80
papers	citations	h-index	g-index

253	253	253	6650
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nucleation-Limited Switching Dynamics Model for Efficient Ferroelectrics Circuit Simulation. IEEE Transactions on Electron Devices, 2022, 69, 395-399.	1.6	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.	1.6	6
3	Gate-geometry dependence of electrical characteristics of p-GaN gate HEMTs. Applied Physics Letters, 2022, 120, .	1.5	4
4	WO₃ Passivation of Access Regions in Diamond MOSFETs. IEEE Transactions on Electron Devices, 2022, 69, 3334-3340.	1.6	0
5	Sub-10-nm Diameter Vertical Nanowire p-Type GaSb/InAsSb Tunnel FETs. IEEE Electron Device Letters, 2022, 43, 846-849.	2.2	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, .	2.0	9
8	Switching Dynamics in Metalâ€œFerroelectric HfZrO₂â€œMetal Structures. IEEE Transactions on Electron Devices, 2022, 69, 4016-4021.	1.6	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.	4.5	25
11	Editorial 2020 Electron Devices Society George E. Smith Award. IEEE Electron Device Letters, 2021, 42, 1108-1108.	2.2	0
12	Analysis of Mo Sidewall Ohmic Contacts to InGaAs Fins. IEEE Transactions on Electron Devices, 2021, 68, 4847-4853.	1.6	1
13	Kudos to Our Golden Reviewers. IEEE Electron Device Letters, 2021, 42, 1692-1692.	2.2	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.	1.6	9
17	Refractory W Ohmic Contacts to H-Terminated Diamond. IEEE Transactions on Electron Devices, 2020, 67, 3516-3521.	1.6	6
18	Protonic solid-state electrochemical synapse for physical neural networks. Nature Communications, 2020, 11, 3134.	5.8	82

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19	Dynamics of HfZrO₂ Ferroelectric Structures: Experiments and Models. , 2020, , .		11
20	Editorial Kudos to Our Golden Reviewers. IEEE Electron Device Letters, 2020, 41, 1714-1714.	2.2	0
21	In Situ Thermal Atomic Layer Etching for Sub-5 nm InGaAs Multigate MOSFETs. Nano Letters, 2019, 19, 5159-5166.	4.5	32
22	Asymmetric gating for reducing leakage current in carbon nanotube field-effect transistors. Applied Physics Letters, 2019, 115, .	1.5	19
23	Stability and Reliability of Lateral GaN Power Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 4578-4590.	1.6	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.	1.6	3
26	A Scaling Study of Excess OFF-State Current in InGaAs Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 1208-1212.	1.6	6
27	X3D: Heterogeneous Monolithic 3D Integration of â€œXâ€•(Arbitrary) Nanowires: Silicon, IIIâ€"V, and Carbon Nanotubes. IEEE Nanotechnology Magazine, 2019, 18, 270-273.	1.1	6
28	Excess OFF-State Current in InGaAs FinFETs: Physics of the Parasitic Bipolar Effect. IEEE Transactions on Electron Devices, 2019, 66, 2113-2118.	1.6	2
29	Reassessing InGaAs for Logic: Mobility Extraction in sub-10nm Fin-Width FinFETs. , 2019, , .		7
30	Investigation of Source Starvation in High-Transconductance IIIâ€"V Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2019, 66, 4698-4705.	1.6	3
31	Pulsed Laser-Induced Single-Event Transients in InGaAs FinFETs with sub-10-nm Fin Widths. , 2019, , .		1
32	A Diamond:H/WO₃ Metalâ€"Oxideâ€"Semiconductor Field-Effect Transistor. IEEE Electron Device Letters, 2018, 39, 540-543.	2.2	27
33	Comprehensive dynamic on-resistance assessments in GaN-on-Si MIS-HEMTs for power switching applications. Semiconductor Science and Technology, 2018, 33, 055012.	1.0	11
34	Scaling Effects on Single-Event Transients in InGaAs FinFETs. IEEE Transactions on Nuclear Science, 2018, 65, 296-303.	1.2	18
35	Excess Off-State Current in InGaAs FinFETs. IEEE Electron Device Letters, 2018, 39, 476-479.	2.2	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

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37	Dislocations behavior in highly mismatched III-Sb growth and their impact on the fabrication of <i>top-down</i> nâ€‰+â€‰InAs/pâ€‰+â€‰GaSb nanowire tunneling devices. Journal of Applied Physics, 2018, 124, .	1.1	0
38	Enhanced transport in transistor by tuning transition-metal oxide electronic states interfaced with diamond. Science Advances, 2018, 4, eaau0480.	4.7	42
39	High hole mobility in strained In0.25Ga0.75Sb quantum well with high quality Al0.95Ga0.05Sb buffer layer. Applied Physics Letters, 2018, 113, 093501.	1.5	3
40	Sub-10-nm-Diameter InGaAs Vertical Nanowire MOSFETs: Ni Versus Mo Contacts. IEEE Transactions on Electron Devices, 2018, 65, 3762-3768.	1.6	11
41	Optimized Toroidal Inductors Versus Planar Spiral Inductors in Multilayered Technologies. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 423-431.	2.9	20
42	Unified Mechanism for Positive- and Negative-Bias Temperature Instability in GaN MOSFETs. IEEE Transactions on Electron Devices, 2017, 64, 2142-2147.	1.6	46
43	Sub-Thermal Subthreshold Characteristics in Topâ€“Down InGaAs/InAs Heterojunction Vertical Nanowire Tunnel FETs. IEEE Electron Device Letters, 2017, 38, 855-858.	2.2	43
44	Alcohol-Based Digital Etch for IIIâ€“V Vertical Nanowires With Sub-10 nm Diameter. IEEE Electron Device Letters, 2017, 38, 548-551.	2.2	25
45	Source/Drain Asymmetry in InGaAs Vertical Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2017, 64, 2161-2165.	1.6	10
46	A Si-Compatible Fabrication Process for Scaled Self-Aligned InGaAs FinFETs. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 468-474.	1.4	9
47	Anomalous Source-Side Degradation of InAlN/GaN HEMTs Under High-Power Electrical Stress. IEEE Transactions on Electron Devices, 2017, 64, 4435-4441.	1.6	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.	1.2	16
49	The Importance of Ballistic Resistance in the Modeling of Nanoscale InGaAs MOSFETs. IEEE Electron Device Letters, 2017, 38, 851-854.	2.2	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.	1.6	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.	1.2	17
53	Neutral beam etching for device isolation in AlGaN/GaN HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600617.	0.8	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.	1.6	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.	1.2	59
61	The effect of neutral beam etching on device isolation in AlGaN/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.	2.2	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.	1.6	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.	1.6	5
69	Record Maximum Transconductance of 3.45 mS/ for III-V FETs. IEEE Electron Device Letters, 2016, 37, 381-384.	2.2	54
70	InGaAs Quantum-Well MOSFET Arrays for Nanometer-Scale Ohmic Contact Characterization. IEEE Transactions on Electron Devices, 2016, 63, 1020-1026.	1.6	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.	1.6	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.	2.2	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, .	1.1	33
77	Physics and Mitigation of Excess OFF-State Current in InGaAs Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 1448-1455.	1.6	20
78	Nanoscale Mo Ohmic Contacts to IIIâ€“V Fins. IEEE Electron Device Letters, 2015, 36, 126-128.	2.2	11
79	Impact of Intrinsic Channel Scaling on InGaAs Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2015, 62, 3470-3476.	1.6	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.	1.2	20
82	A Diamond:H/MoO₃ MOSFET. IEEE Electron Device Letters, 2014, 35, 1320-1322.	2.2	36
83	Enhancing p-channel InGaSb QW-FETs via Process-Induced Compressive Uniaxial Strain. IEEE Electron Device Letters, 2014, 35, 1088-1090.	2.2	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.	2.2	43
86	Activation energy of drain-current degradation in GaN HEMTs under high-power DC stress. Microelectronics Reliability, 2014, 54, 2668-2674.	0.9	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	IIIâ€“V compound semiconductor transistorsâ€"from planar to nanowire structures. MRS Bulletin, 2014, 39, 668-677.	1.7	251
89	A Test Structure to Characterize Nano-Scale Ohmic Contacts in III-V MOSFETs. IEEE Electron Device Letters, 2014, 35, 178-180.	2.2	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.	2.2	54
92	Impact of Water-Assisted Electrochemical Reactions on the OFF-State Degradation of AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 437-444.	1.6	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.	2.2	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.	1.6	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 $hbox{Al}_{2} hbox{O}_{3}$ Insulator for Future RF Applications. IEEE Electron Device Letters, 2013, 34, 196-198.	2.2	16
102	Design and modeling of Faraday cages for substrate noise isolation. Solid-State Electronics, 2013, 85, 6-11.	0.8	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 Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistor Fabricated through a Lift-Off-Free Front-End Process. Applied Physics Express, 2012, 5, 064002.	1.1	38
107	Strain and Temperature Dependence of Defect Formation at AlGaN/GaN High-Electron-Mobility Transistors on a Nanometer Scale. IEEE Transactions on Electron Devices, 2012, 59, 2667-2674.	1.6	14
108	Lgâ€‰=â€‰60â€‰nm recessed In0.7Ga0.3As metal-oxide-semiconductor field-effect transistors with Al2O3 insulator. Applied Physics Letters, 2012, 101, .	1.5	26

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109	Spatial distribution of structural degradation under high-power stress in AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 2012, 100, 172109.	1.5	26
110	InAs quantum-well MOSFET (L<inf>g</inf> = 100 nm) with record high g<inf>m</inf>, f<inf>T</inf> and f<inf>max</inf>. , 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.	0.9	24
113	Sub-30 nm InAs Quantum-Well MOSFETs with self-aligned metal contacts and Sub-1 nm EOT HfO<inf>2</inf> 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.	0.9	10
116	Nanometre-scale electronics with IIIâ€“V compound semiconductors. Nature, 2011, 479, 317-323.	13.7	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.	1.6	394
118	Multiscale Metrology and Optimization of Ultra-Scaled InAs Quantum Well FETs. IEEE Transactions on Electron Devices, 2011, 58, 1963-1971.	1.6	16
119	Experimental Study of $langle hbox{110}angle$ Uniaxial Stress Effects on p-Channel GaAs Quantum-Well FETs. IEEE Transactions on Electron Devices, 2011, 58, 2597-2603.	1.6	6
120	Traps and defects in preâ€•and postâ€•stressed AlGaNâ€“GaN high electron mobility transistors. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1611-1613.	0.8	16
121	Role of stress voltage on structural degradation of GaN high-electron-mobility transistors. Microelectronics Reliability, 2011, 51, 201-206.	0.9	42
122	f<inf>T</inf> = 688 GHz and f<inf>max</inf> = 800 GHz in L<inf>g</inf> = 40 nm In<inf>0.7</inf>Ga<inf>0.3</inf>As MHEMTs with g<inf>m_max</inf> > 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 In0.41Ga0.59Sb quantum-well field-effect transistors. Applied Physics Letters, 2011, 98, 053505.	1.5	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.	0.3	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.	3.5	15
128	A model for the critical voltage for electrical degradation of GaN high electron mobility transistors. Microelectronics Reliability, 2010, 50, 767-773.	0.9	89
129	A Self-Aligned InGaAs HEMT Architecture for Logic Applications. IEEE Transactions on Electron Devices, 2010, 57, 297-304.	1.6	54
130	Fabrication and Characterization of Through-Substrate Interconnects. IEEE Transactions on Electron Devices, 2010, 57, 1261-1268.	1.6	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.	1.6	54
132	High voltage degradation of GaN High Electron Mobility Transistors on silicon substrate. Microelectronics Reliability, 2010, 50, 758-762.	0.9	37
133	Enabling Remote Design and Troubleshooting Experiments Using the iLab Shared Architecture. , 2010, , .		4
134	Mobility enhancement in indium-rich N-channel In<inf>x</inf>Ga<inf>1−x</inf>As HEMTs by application of <110> uniaxial strain. , 2010, , .		0
135	Evolution of structural defects associated with electrical degradation in AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 2010, 96, .	1.5	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.	0.3	0
139	50-nm E-mode In<inf>0.7</inf>Ga<inf>0.3</inf>As PHEMTs on 100-mm InP substrate with f<inf>max</inf> > 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 $f_{T} = hbox{644} hbox{GHz}$ and $f_{max} = hbox{681} hbox{GHz}$. IEEE Electron Device Letters, 2010, 31, 806-808.	2.2	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 âŸ¨110âŸ© uniaxial strain on n-channel In0.15Ga0.85As high electron mobility transistors. Applied Physics Letters, 2009, 95, 243504.	1.5	12
147	Analysis of Gate Delay Scaling in In0.7Ga0.3As-Channel High Electron Mobility Transistors. Japanese Journal of Applied Physics, 2009, 48, 04C086.	0.8	6
148	Measurement of Channel Temperature in GaN High-Electron Mobility Transistors. IEEE Transactions on Electron Devices, 2009, 56, 2895-2901.	1.6	141
149	Corrosion-induced degradation of GaAs PHEMTs under operation in high humidity conditions. Microelectronics Reliability, 2009, 49, 1515-1519.	0.9	9
150	GaN HEMT reliability. Microelectronics Reliability, 2009, 49, 1200-1206.	0.9	408
151	Nanoscale mapping of temperature and defect evolution inside operating AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 2009, 95, .	1.5	25
152	Scalability of sub-100 nm thin-channel InAs PHEMTs. , 2009, , .		9
153	Quantum capacitance in scaled down IIIâ€"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 In<inf>0.7</inf>Ga<inf>0.3</inf>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.	0.9	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.	2.2	93
160	Lateral and Vertical Scaling of <formula formulatype="inline"><tex Notation="TeX">$hbox{In}_{0.7} hbox{Ga}_{0.3}hbox{As}$</tex></formula> HEMTs for Post-Si-CMOS Logic Applications. IEEE Transactions on Electron Devices, 2008, 55, 2546-2553.	1.6	69
161	TEM Observation of Crack- and Pit-Shaped Defects in Electrically Degraded GaN HEMTs. IEEE Electron Device Letters, 2008, 29, 1098-1100.	2.2	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.	1.5	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.	2.2	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.	2.2	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.	0.8	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 $hbox{In}_{0.7} hbox{Ga}_{0.3}hbox{As}$ HEMTs for Beyond-CMOS Applications. IEEE Transactions on Electron Devices, 2007, 54, 2606-2613.	1.6	76
178	Scaling Behavior of In0.7Ga0.3As 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.	0.7	2
183	Technology for the fabrication of ultrashort channel metalâ€“oxideâ€“semiconductor field-effect transistors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1737-1741.	0.9	6
184	Scheme for the fabrication of ultrashort channel metal-oxide-semiconductor field-effect transistors. Applied Physics Letters, 2000, 77, 298-300.	1.5	13
185	An analytical framework for first-order CMOS device design. , 1998, , .		0
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