

# Tomas Gonzalez

## List of Publications by Year in descending order

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301  
papers

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201385

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302  
docs citations

302  
times ranked

1082  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimization of the Epilayer Design for the Fabrication of Doped GaN Planar Gunn Diodes. IEEE Transactions on Electron Devices, 2022, 69, 514-520.	1.6	3
2	Temperature and Gate-Length Dependence of Subthreshold RF Detection in GaN HEMTs. Sensors, 2022, 22, 1515.	2.1	5
3	Monte Carlo analysis of thermal effects in the DC and AC performance of AlGaIn/GaN HEMTs. Solid-State Electronics, 2022, 193, 108289.	0.8	3
4	Non-linear thermal resistance model for the simulation of high power GaN-based devices. Semiconductor Science and Technology, 2021, 36, 055002.	1.0	7
5	Bias-dependence of surface charge at low temperature in GaN Self-Switching Diodes. , 2021, , .		0
6	Technological Parameters and Edge Fringing Capacitance in GaN Schottky Barrier Diodes: Monte Carlo Simulations. , 2021, , .		0
7	Temperature Behavior of Gunn Oscillations in Planar InGaAs Diodes. IEEE Electron Device Letters, 2021, 42, 1136-1139.	2.2	2
8	Influence of Laser Modulation Frequency on the Performance of Terahertz Photoconductive Switches on Semi-Insulating GaAs Exhibiting Negative Differential Conductance. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 591-597.	2.0	1
9	Monte Carlo analysis of the influence of surface charges on GaN asymmetric nanochannels: Bias and temperature dependence. Journal of Applied Physics, 2021, 130, .	1.1	5
10	Dielectric Passivation and Edge Effects in Planar GaN Schottky Barrier Diodes. IEEE Transactions on Electron Devices, 2021, 68, 4296-4301.	1.6	1
11	Analysis of Surface Charge Effects and Edge Fringing Capacitance in Planar GaAs and GaN Schottky Barrier Diodes. IEEE Transactions on Electron Devices, 2020, 67, 3530-3535.	1.6	10
12	Noise and charge discreteness as ultimate limit for the THz operation of ultra-small electronic devices. Scientific Reports, 2020, 10, 15990.	1.6	2
13	Analysis of trap states in AlGaIn/GaN self-switching diodes via impedance measurements. Microelectronics Reliability, 2020, 114, 113806.	0.9	2
14	Trap-related frequency dispersion of zero-bias microwave responsivity at low temperature in GaN-based self-switching diodes. Nanotechnology, 2020, 31, 405204.	1.3	8
15	Interplay between channel and shot noise at the onset of spiking activity in neural membranes. Journal of Computational Electronics, 2020, 19, 792-799.	1.3	0
16	Special Issue on Terahertz Devices. Semiconductor Science and Technology, 2020, 35, 040201.	1.0	1
17	Comprehensive characterization of Gunn oscillations in $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ planar diodes. Semiconductor Science and Technology, 2020, 35, 115009.	1.0	3
18	Design and Fabrication of Planar Gunn Nanodiodes Based on Doped GaN. , 2019, , .		5

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19	GaN-based SSD structure for THz applications. , 2019, , .		5
20	Impact ionization and band-to-band tunneling in In <sub>x</sub> Ga <sub>1-x</sub> As PIN ungated devices: A Monte Carlo analysis. Journal of Applied Physics, 2018, 123, 034501.	1.1	1
21	Noise and Charge Discreteness as Ultimate Limit for the THz Operation of Ultra-Small Electronic Devices. , 2018, , .		0
22	Fabrication Process of Non-Linear Planar Diodes Based on GaN. , 2018, , .		0
23	Planar Asymmetric Semiconductor Nanodiodes for THz Detection. , 2018, , .		1
24	Voltage controlled sub-THz detection with gated planar asymmetric nanochannels. Applied Physics Letters, 2018, 113, .	1.5	13
25	GaN nanodiode arrays with improved design for zero-bias sub-THz detection. Semiconductor Science and Technology, 2018, 33, 095016.	1.0	12
26	Ion shot noise in Hodgkin-Huxley neurons. Journal of Computational Electronics, 2018, 17, 1790-1796.	1.3	5
27	Monte Carlo analysis of III-V PIN diodes for tunnel-FETs and Impact Ionization-MOSFETs. , 2017, , .		2
28	Geometry and bias dependence of trapping effects in planar GaN nanodiodes. , 2017, , .		3
29	Microwave detection up to 43.5 GHz by GaN nanodiodes: Experimental and analytical responsivity. , 2017, , .		3
30	Stochastic model for action potential simulation including ion shot noise. Journal of Computational Electronics, 2017, 16, 419-430.	1.3	4
31	Anomalous DC and RF behavior of virgin AlGaIn/GaN HEMTs. Semiconductor Science and Technology, 2017, 32, 035011.	1.0	9
32	A high performance Full Adder based on Ballistic Deflection Transistor technology. , 2017, , .		1
33	Stochastic model for ion shot noise in Hodgkin and Huxley neurons. , 2017, , .		1
34	Monte Carlo calculation of In <sub>0.53</sub> Ga <sub>0.47</sub> As and InAs noise parameters. , 2017, , .		0
35	Impact of substrate and thermal boundary resistance on the performance of AlGaIn/GaN HEMTs analyzed by means of electro-thermal Monte Carlo simulations. Semiconductor Science and Technology, 2016, 31, 065005.	1.0	21
36	Modeling and Study of Two-BDT-Nanostructure based Sequential Logic Circuits. , 2016, , .		2

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37	Ballistic deflection transistor very high frequency modeling. , 2016, , .		0
38	Characterization and modeling of traps and RF frequency dispersion in AlGa <sub>N</sub> /AlN/GaN HEMTs. , 2016, , .		0
39	Modeling edge capacitances in ultra-scaled GaAs Schottky barrier diodes for THz applications. , 2016, , .		1
40	Monte Carlo modeling of ultra-fast operating Ballistic Deflection Transistor. , 2016, , .		3
41	Monte Carlo Study of 2-D Capacitance Fringing Effects in GaAs Planar Schottky Diodes. IEEE Transactions on Electron Devices, 2016, 63, 3900-3907.	1.6	14
42	Design and Analysis of High Performance Ballistic Nanodevice-Based Sequential Circuits Using Monte Carlo and Verilog AMS Simulations. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 2236-2244.	3.5	2
43	Room Temperature Direct and Heterodyne Detection of 0.28â€“0.69-THz Waves Based on GaN 2-DEG Unipolar Nanochannels. IEEE Transactions on Electron Devices, 2016, 63, 353-359.	1.6	27
44	Review of electron transport properties in bulk InGaAs and InAs at room temperature. Lithuanian Journal of Physics, 2016, 55, .	0.1	5
45	Exploration of digital latch design using ballistic deflection transistors â€” Modeling and simulation. , 2015, , .		3
46	Modelling of Thermal Boundary Resistance in a GaN Diode by means of Electro-Thermal Monte Carlo Simulations. Journal of Physics: Conference Series, 2015, 609, 012005.	0.3	2
47	Shot-noise suppression effects in InGaAs planar diodes at room temperature. Journal of Physics: Conference Series, 2015, 647, 012061.	0.3	2
48	0.69 THz room temperature heterodyne detection using GaN nanodiodes. Journal of Physics: Conference Series, 2015, 647, 012006.	0.3	0
49	Ultrahigh responsivity of optically active, semiconducting asymmetric nano-channel diodes. Journal of Physics: Conference Series, 2015, 647, 012013.	0.3	1
50	Optimization of Ballistic Deflection Transistors by Monte Carlo Simulations. Journal of Physics: Conference Series, 2015, 647, 012066.	0.3	5
51	Improvement of interfacial and electrical properties of Al <sub>2</sub> O <sub>3</sub> /n-Ga <sub>0.47</sub> In <sub>0.53</sub> As for III-V impact ionization MOSFETs. Journal of Physics: Conference Series, 2015, 647, 012062.	0.3	1
52	19th International Conference on Electron Dynamics in Semiconductors, Optoelectronics and Nanostructures (EDISON'19). Journal of Physics: Conference Series, 2015, 647, 011001.	0.3	0
53	Monte Carlo model for the analysis and development of III-V Tunnel-FETs and Impact Ionization-MOSFETs. Journal of Physics: Conference Series, 2015, 647, 012056.	0.3	1
54	Temperature and Surface Traps Influence on the THz Emission from InGaAs Diodes. Journal of Physics: Conference Series, 2015, 647, 012039.	0.3	0

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55	Experimental verification of low-frequency noise effects at the onset of oscillations in planar Gunn diodes. , 2015, , .		0
56	Carrier dynamics probed by noise in high-frequency electronic devices. , 2015, , .		0
57	Experimental analysis of shot-noise suppression in InGaAs/InAlAs recessed planar diodes at room temperature. , 2015, , .		0
58	Self-consistent electro-thermal simulations of AlGaIn/GaN diodes by means of Monte Carlo method. Semiconductor Science and Technology, 2015, 30, 035001.	1.0	5
59	Introduction to special issue on noise modeling. Journal of Computational Electronics, 2015, 14, 1-3.	1.3	6
60	Monte Carlo modelling of noise in advanced III-V HEMTs. Journal of Computational Electronics, 2015, 14, 72-86.	1.3	9
61	Time-dependent physics of double-tunnel junctions. , 2015, , .		0
62	Time-dependent shot noise in multi-level quantum dot-based single-electron devices. Semiconductor Science and Technology, 2015, 30, 055002.	1.0	4
63	Fabrication and Characterization of Fully Transparent ZnO Thin-Film Transistors and Self-Switching Nano-Diodes. Journal of Physics: Conference Series, 2015, 647, 012068.	0.3	3
64	Evaluation of the thermal resistance in GaN-diodes by means of electro-thermal Monte Carlo simulations. , 2015, , .		0
65	Anomalous low-frequency noise increase at the onset of oscillations in Gunn diodes. , 2015, , .		0
66	Optimization and small-signal modeling of zero-bias InAs self-switching diode detectors. Solid-State Electronics, 2015, 104, 79-85.	0.8	21
67	GaN-based Implanted self switching diodes for THz imaging. , 2014, , .		0
68	Time-domain Monte Carlo simulation of GaN planar Gunn nanodiodes in resonant circuits. , 2014, , .		0
69	Experimental assessment of anomalous low-frequency noise increase at the onset of Gunn oscillations in InGaAs planar diodes. Applied Physics Letters, 2014, 105, .	1.5	9
70	Effect of tunnel injection through the Schottky gate on the static and noise behavior of GaInAs/AlInAs high electron mobility transistor. Journal of Applied Physics, 2014, 116, 234502.	1.1	5
71	Frequency-dependent shot noise in single-electron devices. , 2014, , .		0
72	Monte Carlo study of the operation of GaN planar nanodiodes as sub-THz emitters in resonant circuits. Semiconductor Science and Technology, 2014, 29, 115032.	1.0	6

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73	Comparative Monte Carlo analysis of InP- and GaN-based Gunn diodes. Journal of Applied Physics, 2014, 115, .	1.1	25
74	Operation of GaN Planar Nanodiodes as THz Detectors and Mixers. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 670-677.	2.0	13
75	On the effect of $\delta$ -doping in self-switching diodes. Applied Physics Letters, 2014, 105, .	1.5	12
76	Optimized V-shape design of GaN nanodiodes for the generation of Gunn oscillations. Applied Physics Letters, 2014, 104, .	1.5	27
77	Time-domain Monte Carlo simulations of resonant-circuit operation of GaN Gunn diodes. , 2013, , .		4
78	Numerical study of sub-millimeter Gunn oscillations in InP and GaN vertical diodes: Dependence on bias, doping, and length. Journal of Applied Physics, 2013, 114, .	1.1	19
79	Accurate predictions of terahertz noise in ultra-small devices: A limiting factor for their practical application?. , 2013, , .		0
80	Monte Carlo analysis of thermal effects in self-switching diodes. , 2013, , .		3
81	Ballistic deflection transistor: Geometry dependence and boolean operations. , 2013, , .		4
82	Nonlinear nanochannels for room temperature terahertz heterodyne detection. Semiconductor Science and Technology, 2013, 28, 125024.	1.0	15
83	Room temperature THz detection and emission with semiconductor nanodevices. , 2013, , .		2
84	Experimental demonstration of direct terahertz detection at room-temperature in AlGaIn/GaN asymmetric nanochannels. Journal of Applied Physics, 2013, 113, .	1.1	62
85	200 GHz communication system using unipolar InAs THz rectifiers. , 2013, , .		0
86	Noise in terahertz detectors based on semiconductor nanochannels. , 2013, , .		1
87	Searching for THz Gunn oscillations in GaN planar nanodiodes. Journal of Applied Physics, 2012, 111, .	1.1	48
88	Analysis of nonharmonic oscillations in Schottky diodes. Journal of Applied Physics, 2012, 112, 053703.	1.1	0
89	Kink effect and noise performance in isolated-gate InAs/AlSb high electron mobility transistors. Semiconductor Science and Technology, 2012, 27, 065018.	1.0	9
90	Monte Carlo studies of the intrinsic time-domain response of nanoscale three-branch junctions. Journal of Applied Physics, 2012, 111, 084511.	1.1	0

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91	Plasma Enhanced Terahertz Rectification and Noise in InGaAs HEMTs. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 562-569.	2.0	21
92	Effects of a High-k Dielectric on the Performance of 110V Ballistic Deflection Transistors. IEEE Electron Device Letters, 2012, 33, 1120-1122.	2.2	9
93	Monte Carlo study of the noise performance of isolated-gate InAs/AlSb HEMTs. Semiconductor Science and Technology, 2012, 27, 015008.	1.0	2
94	Toward THz Gunn oscillations in planar GaN nanodiodes. , 2011, , .		0
95	Monte Carlo study of the noise performance of isolated-gate InAs HEMTs. , 2011, , .		2
96	OPTTR induced current oscillations in GaN diodes Monte Carlo simulations. , 2011, , .		0
97	Dynamic Monte Carlo study of isolated-gate InAs/AlSb HEMTs. Semiconductor Science and Technology, 2011, 26, 025004.	1.0	10
98	Noise and Terahertz rectification in semiconductor diodes and transistors. , 2011, , .		1
99	Monte Carlo study of impact ionization and hole transport in InAs HEMTs with isolated gate. , 2011, , .		0
100	Static and large signal noise analysis in GaAs and GaN Schottky diodes for high frequency applications. , 2011, , .		1
101	Transconductance characteristics and plasma oscillations in nanometric InGaAs field effect transistors. Solid-State Electronics, 2011, 56, 116-119.	0.8	2
102	Evidence of surface charge effects in T-branch nanojunctions using microsecond-pulse testing. Nanotechnology, 2011, 22, 445203.	1.3	2
103	Comparison of noise characteristics of GaAs and GaN Schottky diodes for millimeter and submillimeter applications. , 2011, , .		0
104	Correlation between low-frequency current-noise enhancement and high-frequency oscillations in GaN-based planar nanodiodes: A Monte Carlo study. Applied Physics Letters, 2011, 99, 062109.	1.5	15
105	Exploring Digital Logic Design Using Ballistic Deflection Transistors Through Monte Carlo Simulations. IEEE Nanotechnology Magazine, 2011, 10, 1337-1346.	1.1	12
106	Analysis of noise spectra in GaAs and GaN Schottky barrier diodes. Semiconductor Science and Technology, 2011, 26, 055023.	1.0	6
107	Monte Carlo study of the dynamic performance of isolated-gate InAs/AlSb HEMTs. , 2011, , .		0
108	Realization of Logic Operations Through Optimized Ballistic Deflection Transistors. , 2011, , .		0

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109	Submillimeter-Wave Oscillations in Recessed InGaAs/InAlAs Heterostructures: Origin and Tunability. Acta Physica Polonica A, 2011, 119, 111-113.	0.2	5
110	Monte Carlo Analysis of Impact Ionization in Isolated-Gate InAs/AlSb High Electron Mobility Transistors. Acta Physica Polonica A, 2011, 119, 222-224.	0.2	1
111	Monte Carlo Analysis of the Dynamic Behavior of InAlAs/InGaAs Velocity Modulation Transistors: A Geometrical Optimization. Acta Physica Polonica A, 2011, 119, 193-195.	0.2	0
112	Enhanced Terahertz detection in self-switching diodes. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2010, 23, 301-314.	1.2	7
113	A Generalized Drift-Diffusion Model for Rectifying Schottky Contact Simulation. IEEE Transactions on Electron Devices, 2010, 57, 1539-1547.	1.6	6
114	Monte Carlo Study of the Dynamic Performance of a 100-nm-Gate InAlAs/InGaAs Velocity Modulation Transistor. IEEE Transactions on Electron Devices, 2010, 57, 2572-2578.	1.6	0
115	Monte Carlo study of kink effect in isolated-gate InAs/AlSb high electron mobility transistors. Journal of Applied Physics, 2010, 108, .	1.1	14
116	Terahertz current oscillations assisted by optical phonon emission in GaN n <sup>+</sup> nn <sup>+</sup> diodes: Monte Carlo simulations. Journal of Applied Physics, 2010, 107, 053707.	1.1	6
117	Three-terminal junctions operating as mixers, frequency doublers and detectors: a broad-band frequency numerical and experimental study at room temperature. Semiconductor Science and Technology, 2010, 25, 125013.	1.0	18
118	Plasma-resonant THz detection with HEMTs. , 2010, , .		1
119	Sub-THz frequency analysis in nano-scale devices at room temperature. , 2010, , .		3
120	THz generation based on Gunn oscillations in GaN planar asymmetric nanodiodes. , 2010, , .		1
121	Monte Carlo study of ballistic effects in high speed InAs-based quantum hot electron transistor. , 2010, , .		0
122	Isolated-gate InAs/AlSb HEMTs: A Monte Carlo study. , 2010, , .		0
123	Plasmonic noise in nanometric semiconductor layers. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P02030.	0.9	5
124	Noise and terahertz rectification linked by geometry in planar asymmetric nanodiodes. Applied Physics Letters, 2009, 94, 093512.	1.5	24
125	Fabrication and fundamentals of operation of an InAlAs/InGaAs velocity modulation transistor. Applied Physics Letters, 2009, 94, 103504.	1.5	2
126	Monte Carlo Study of an InAlAs/InGaAs Velocity Modulation Transistor. , 2009, , .		0



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127	Monte Carlo investigation of terahertz plasma oscillations in gated ultrathin channel of n-InGaAs. Applied Physics Letters, 2009, 95, 152102.	1.5	8
128	Monte Carlo analysis of thermal effects in GaN HEMTs. , 2009, , .		4
129	Influence of the branches width on the nonlinear output characteristics of InAlAs/InGaAs-based three-terminal junctions. Journal of Applied Physics, 2009, 105, 094504.	1.1	15
130	Noise Enhanced THz Rectification Tuned by Geometry in Planar Asymmetric Nanodiodes. , 2009, , .		0
131	High-mobility heterostructures based on InAs and InSb: A Monte Carlo study. Journal of Applied Physics, 2009, 105, .	1.1	34
132	High Frequency Noise in GaN HEMTs. , 2009, , .		1
133	Monte Carlo analysis of noise spectra in InAs channels from diffusive to ballistic regime. , 2009, , .		0
134	Monte Carlo Simulation of Sb-based Heterostructures. , 2009, , .		1
135	Tunable Terahertz Resonance in Planar Asymmetric Nanodiodes. , 2009, , .		0
136	Frequency response of T-shaped Three Branch Junctions as Mixers and Detectors. , 2009, , .		2
137	Current oscillations excited by optical phonon emission in GaN <sub>n</sub> diodes: Monte Carlo simulations. Journal of Physics: Conference Series, 2009, 193, 012023.	0.3	0
138	Monte Carlo analysis of Gunn oscillations in narrow and wide band-gap asymmetric nanodiodes. Journal of Physics: Conference Series, 2009, 193, 012018.	0.3	10
139	RF doubling and rectification in three-terminal junctions: experimental characterization and Monte Carlo analysis. Journal of Physics: Conference Series, 2009, 193, 012021.	0.3	1
140	Terahertz tunable detection in self-switching diodes based on high mobility semiconductors: InGaAs, InAs and InSb. Journal of Physics: Conference Series, 2009, 193, 012082.	0.3	11
141	On the geometrical tunability of THz Gunn-like oscillations in InGaAs/InAlAs slot diodes. Journal of Physics: Conference Series, 2009, 193, 012090.	0.3	2
142	Plasmonic noise in Si and InGaAs semiconductor nanolayers. Journal of Physics: Conference Series, 2009, 193, 012091.	0.3	1
143	A Monte Carlo investigation of plasmonic noise in nanometric n-In <sub>0.53</sub> Ga <sub>0.47</sub> As channels. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P01040.	0.9	5
144	Monte Carlo simulation of ballistic transport in high-mobility channels. Journal of Physics: Conference Series, 2009, 193, 012035.	0.3	4

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145	Monte Carlo simulation of surface charge effects in T&Ebranch nanojunctions. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 94-97.	0.8	3
146	Monte Carlo analysis of memory effects in nano&Escale rectifying diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 82-85.	0.8	1
147	Monte Carlo simulation of plasma oscillations in ultra-thin layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 249-252.	0.8	1
148	Onset of quasi-ballistic transport and mobility degradation in ultra scaled MOSFETs: a Monte Carlo study. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 123-126.	0.8	2
149	Excitation of millimeter-wave oscillations in InAlAs/InGaAs heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 146-149.	0.8	1
150	Comparison Between the Noise Performance of Double- and Single-Gate InP-Based HEMTs. IEEE Transactions on Electron Devices, 2008, 55, 1535-1540.	1.6	25
151	Monte Carlo investigation of terahertz plasma oscillations in ultrathin layers of n-type In <sub>0.53</sub> Ga <sub>0.47</sub> As. Applied Physics Letters, 2008, 92, 042113.	1.5	21
152	Terahertz Gunn-like oscillations in InGaAs/InAlAs planar diodes. Journal of Applied Physics, 2008, 103, 094516.	1.1	52
153	Monte Carlo comparison of the noise performance of InAlAs/InGaAs Double-Gate and Standard HEMTs. , 2008, , .		0
154	Terahertz oscillations in ultra-thin<i>n</i>-In<sub>0.53</sub>Ga<sub>0.47</sub>As ungated channels. Journal of Physics Condensed Matter, 2008, 20, 384210.	0.7	4
155	Monte Carlo analysis of noise spectra in self-switching nanodiodes. Journal of Applied Physics, 2008, 103, 024502.	1.1	24
156	Ballistic nanodevices for high frequency applications. International Journal of Nanotechnology, 2008, 5, 796.	0.1	5
157	Monte Carlo Investigation of THz Oscillations in InAlAs/InGaAs Heterostructures by Means of Current and Voltage Noise Spectra. AIP Conference Proceedings, 2007, , .	0.3	1
158	Microscopic Analysis of Noise in Self-Switching Diodes. AIP Conference Proceedings, 2007, , .	0.3	0
159	Kinetic and Partial-Differential Equation Modeling of Noise in Schottky Barrier Diodes: a Comparison. AIP Conference Proceedings, 2007, , .	0.3	0
160	Noise Behavior of InP-Based Double-Gate and Standard HEMTs: a Comparison. AIP Conference Proceedings, 2007, , .	0.3	0
161	RF Noise and Scaling in Nanometer SOI MOSFETs: Influence of Quasiballistic Transport. AIP Conference Proceedings, 2007, , .	0.3	0
162	Noise analysis of plasma wave oscillations in InGaAs channels. AIP Conference Proceedings, 2007, , .	0.3	1

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163	Influence of the surface charge on the operation of ballistic T-branch junctions: a self-consistent model for Monte Carlo simulations. Semiconductor Science and Technology, 2007, 22, 663-670.	1.0	51
164	Monte Carlo analysis of carrier transport from diffusive to ballistic regime in nanometer SOI MOSFETs. , 2007, , .		0
165	Hysteresis phenomena in nanoscale rectifying diodes: A Monte Carlo interpretation in terms of surface effects. Applied Physics Letters, 2007, 91, .	1.5	13
166	Monte Carlo simulation of AlGaIn/GaN heterostructures. , 2007, , .		1
167	Quasiballistic transport in nanometer Si metal-oxide-semiconductor field-effect transistors: Experimental and Monte Carlo analysis. Journal of Applied Physics, 2007, 101, 114511.	1.1	24
168	InAlAs/InGaAs heterostructures for THz generation. , 2007, , .		0
169	Monte Carlo Comparison Between InAlAs/InGaAs Double-Gate and Standard HEMTs. , 2007, , .		0
170	Surface Charge Effects in Ballistic T-Branch Nanojunctions. , 2007, , .		0
171	Ballistic nano-devices for high frequency applications. Thin Solid Films, 2007, 515, 4321-4326.	0.8	13
172	Comparison Between the Dynamic Performance of Double- and Single-Gate AlInAs/InGaAs HEMTs. IEEE Transactions on Electron Devices, 2007, 54, 2815-2822.	1.6	66
173	Negative Differential Transconductance and Nonreciprocal Effects in a Y-Branch Nanojunction: High-Frequency Analysis. IEEE Nanotechnology Magazine, 2006, 5, 750-757.	1.1	17
174	Monte Carlo Comparison Between InP-Based Double-Gate and Standard HEMTs. , 2006, , .		7
175	Numerical modeling of TeraHertz electronic devices. Journal of Computational Electronics, 2006, 5, 71-77.	1.3	8
176	A microscopic interpretation of the RF noise performance of fabricated FDSOI MOSFETs. IEEE Transactions on Electron Devices, 2006, 53, 523-532.	1.6	17
177	Theoretical investigation of Schottky-barrier diode noise performance in external resonant circuits. Semiconductor Science and Technology, 2006, 21, 550-557.	1.0	10
178	Transport and Noise in Ultrafast Unipolar Nanodiodes and Nanotransistors. , 2006, , 109-113.		1
179	TeraHertz Emission From Nanometric HEMTs Analyzed by Noise Spectra. , 2006, , 291-294.		0
180	THz operation of self-switching nano-diodes and nano-transistors. , 2005, , .		24

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181	TeraHertz emission from nanometric HEMTs analyzed by noise spectra. AIP Conference Proceedings, 2005, , .	0.3	0
182	Non-linear noise in nanometric Schottky-barrier diodes. AIP Conference Proceedings, 2005, , .	0.3	0
183	Investigation of longitudinal velocity fluctuations in MOSFETs by means of ensemble Monte Carlo simulation. AIP Conference Proceedings, 2005, , .	0.3	0
184	Influence of the kink effect on the dynamic performance of short-channel InAlAs/InGaAs high electron mobility transistors. Semiconductor Science and Technology, 2005, 20, 956-960.	1.0	1
185	TeraHertz Emission and Noise Spectra in HEMTs. AIP Conference Proceedings, 2005, , .	0.3	2
186	Operation and high-frequency performance of nanoscale unipolar rectifying diodes. Applied Physics Letters, 2005, 86, 212103.	1.5	82
187	Current noise spectra of Schottky barrier diodes with electron traps in the active layer. Journal of Applied Physics, 2005, 97, 073708.	1.1	3
188	Microwave Detection at 110 GHz by Nanowires with Broken Symmetry. Nano Letters, 2005, 5, 1423-1427.	4.5	99
189	Voltage tuneable terahertz emission from a ballistic nanometer InGaAs <sup>*</sup> InAlAs transistor. Journal of Applied Physics, 2005, 97, 064307.	1.1	133
190	Theoretical Investigation of Large-Signal Noise in Nanometric Schottky-Barrier Diodes Operating in External Resonant Circuits. Acta Physica Polonica A, 2005, 107, 396-399.	0.2	2
191	Dynamical formation of hot-carrier intergroup noise under sub-terahertz cyclostationary conditions. Semiconductor Science and Technology, 2004, 19, S170-S172.	1.0	3
192	Noise temperature reduction by doping in ballistic n+ $\delta$ n-nanodiodes. Semiconductor Science and Technology, 2004, 19, S209-S211.	1.0	0
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