

Susana Perez

List of Publications by Year in descending order

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758635

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times ranked

359
citing authors

#	ARTICLE	IF	CITATIONS
1	Terahertz Gunn-like oscillations in InGaAs/InAlAs planar diodes. Journal of Applied Physics, 2008, 103, 094516.	1.1	52
2	Microscopic analysis of generation-recombination noise in semiconductors under dc and time-varying electric fields. Journal of Applied Physics, 2000, 88, 800-807.	1.1	25
3	Comparative Monte Carlo analysis of InP- and GaN-based Gunn diodes. Journal of Applied Physics, 2014, 115, .	1.1	25
4	Upconversion of partition noise in semiconductors operating under periodic large-signal conditions. Physical Review B, 2003, 67, .	1.1	24
5	Monte Carlo Simulation of Schottky Diodes Operating Under Terahertz Cyclostationary Conditions. IEEE Electron Device Letters, 2004, 25, 1-3.	2.2	23
6	Monte Carlo investigation of terahertz plasma oscillations in ultrathin layers of n-type In _{0.53} Ga _{0.47} As. Applied Physics Letters, 2008, 92, 042113.	1.5	21
7	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
8	An Assessment of Available Models for the Design of Schottky-Based Multipliers Up to THz Frequencies. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 277-287.	2.0	20
9	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
10	Monte Carlo analysis of the noise behavior in Si bipolar junction transistors and SiGe heterojunction bipolar transistors at radio frequencies. Journal of Applied Physics, 2001, 90, 1582-1588.	1.1	16
11	Microscopic investigation of large-signal noise in semiconductor materials and devices. , 2003, 5113, 252.		15
12	Monte carlo simulation of threshold bandwidth for high-order harmonic extraction. IEEE Transactions on Electron Devices, 2003, 50, 1171-1178.	1.6	14
13	Voltage controlled sub-THz detection with gated planar asymmetric nanochannels. Applied Physics Letters, 2018, 113, .	1.5	13
14	GaN nanodiode arrays with improved design for zero-bias sub-THz detection. Semiconductor Science and Technology, 2018, 33, 095016.	1.0	12
15	Noise in Schottky-barrier diodes: from static to large-signal operation. , 2004, 5470, 322.		10
16	Theoretical investigation of Schottky-barrier diode noise performance in external resonant circuits. Semiconductor Science and Technology, 2006, 21, 550-557.	1.0	10
17	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
18	Extremely low noise InGaP/GaAs HBT oscillator at C-band. Electronics Letters, 1998, 34, 813.	0.5	9

#	ARTICLE	IF	CITATIONS
19	Monte Carlo analysis of the influence of dc conditions on the upconversion of generation-recombination noise in semiconductors. <i>Semiconductor Science and Technology</i> , 2001, 16, L8-L11.	1.0	9
20	Monte Carlo simulation of high-order harmonics generation in bulk semiconductors and submicron structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 1367-1376.	0.8	9
21	Experimental assessment of anomalous low-frequency noise increase at the onset of Gunn oscillations in InGaAs planar diodes. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	9
22	Anomalous DC and RF behavior of virgin AlGaIn/AlN/GaN HEMTs. <i>Semiconductor Science and Technology</i> , 2017, 32, 035011.	1.0	9
23	Monte Carlo Simulation of Electronic Noise in Semiconductor Materials and Devices Operating under Cyclostationary Conditions. <i>Journal of Computational Electronics</i> , 2003, 2, 455-458.	1.3	8
24	Numerical modeling of TeraHertz electronic devices. <i>Journal of Computational Electronics</i> , 2006, 5, 71-77.	1.3	8
25	Monte Carlo investigation of terahertz plasma oscillations in gated ultrathin channel of n-InGaAs. <i>Applied Physics Letters</i> , 2009, 95, 152102.	1.5	8
26	Monte Carlo analysis of voltage noise in sub-micrometre semiconductor structures under large-signal regime. <i>Semiconductor Science and Technology</i> , 2002, 17, 696-700.	1.0	7
27	Monte Carlo Simulation of Noise in Electronic Devices: Limitations and Perspectives. <i>AIP Conference Proceedings</i> , 2003, , .	0.3	7
28	Non-linear thermal resistance model for the simulation of high power GaN-based devices. <i>Semiconductor Science and Technology</i> , 2021, 36, 055002.	1.0	7
29	A Generalized Drift-Diffusion Model for Rectifying Schottky Contact Simulation. <i>IEEE Transactions on Electron Devices</i> , 2010, 57, 1539-1547.	1.6	6
30	Analysis of noise spectra in GaAs and GaN Schottky barrier diodes. <i>Semiconductor Science and Technology</i> , 2011, 26, 055023.	1.0	6
31	Electrical and Noise Modeling of GaAs Schottky Diode Mixers in the THz Band. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2016, 6, 69-82.	2.0	6
32	Influence of Ge profile on the noise behavior of SiGe HBTs under high injection conditions. <i>Physica B: Condensed Matter</i> , 2002, 314, 381-385.	1.3	5
33	Plasmonic noise in nanometric semiconductor layers. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P02030.	0.9	5
34	A Monte Carlo investigation of plasmonic noise in nanometric n-In _{0.53} Ga _{0.47} As channels. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P01040.	0.9	5
35	Self-consistent electro-thermal simulations of AlGaIn/GaN diodes by means of Monte Carlo method. <i>Semiconductor Science and Technology</i> , 2015, 30, 035001.	1.0	5
36	Design and Fabrication of Planar Gunn Nanodiodes Based on Doped GaN. , 2019, , .		5

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37	GaN-based SSD structure for THz applications. , 2019, , .		5
38	Submillimeter-Wave Oscillations in Recessed InGaAs/InAlAs Heterostructures: Origin and Tunability. Acta Physica Polonica A, 2011, 119, 111-113.	0.2	5
39	Terahertz oscillations in ultra-thin<i>n</i>-In_{0.53}Ga_{0.47}As ungated channels. Journal of Physics Condensed Matter, 2008, 20, 384210.	0.7	4
40	Monte Carlo analysis of thermal effects in GaN HEMTs. , 2009, , .		4
41	High injection effects on noise characteristics of Si BJTs and SiGe HBTs. Microelectronics Reliability, 2001, 41, 847-854.	0.9	3
42	Dynamical formation of hot-carrier intergroup noise under sub-terahertz cyclostationary conditions. Semiconductor Science and Technology, 2004, 19, S170-S172.	1.0	3
43	Current noise spectra of Schottky barrier diodes with electron traps in the active layer. Journal of Applied Physics, 2005, 97, 073708.	1.1	3
44	Ultra Fast Gunn Effect at THz Frequencies in HEMTs. , 0, , .		3
45	Geometry and bias dependence of trapping effects in planar GaN nanodiodes. , 2017, , .		3
46	Microwave detection up to 43.5 GHz by GaN nanodiodes: Experimental and analytical responsivity. , 2017, , .		3
47	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
48	State of the art Integrated InGaP/GaAs HBT-DRO with -124 dBc/Hz at 6.7 GHz. , 1997, , .		2
49	TeraHertz Emission and Noise Spectra in HEMTs. AIP Conference Proceedings, 2005, , .	0.3	2
50	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
51	Transconductance characteristics and plasma oscillations in nanometric InGaAs field effect transistors. Solid-State Electronics, 2011, 56, 116-119.	0.8	2
52	Room temperature THz detection and emission with semiconductor nanodevices. , 2013, , .		2
53	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
54	Shot-noise suppression effects in InGaAs planar diodes at room temperature. Journal of Physics: Conference Series, 2015, 647, 012061.	0.3	2

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55	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
56	UPCONVERSION OF INTERGROUP HOT-CARRIER NOISE IN SEMICONDUCTORS OPERATING UNDER PERIODIC LARGE-SIGNAL CONDITIONS. Fluctuation and Noise Letters, 2003, 03, L51-L61.	1.0	1
57	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
58	Noise analysis of plasma wave oscillations in InGaAs channels. AIP Conference Proceedings, 2007, , .	0.3	1
59	Monte Carlo simulation of AlGaIn/GaN heterostructures. , 2007, , .		1
60	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
61	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
62	High Frequency Noise in GaN HEMTs. , 2009, , .		1
63	Plasmonic noise in Si and InGaAs semiconductor nanolayers. Journal of Physics: Conference Series, 2009, 193, 012091.	0.3	1
64	Static and large signal noise analysis in GaAs and GaN Schottky diodes for high frequency applications. , 2011, , .		1
65	Planar Asymmetric Semiconductor Nanodiodes for THz Detection. , 2018, , .		1
66	Dielectric Passivation and Edge Effects in Planar GaN Schottky Barrier Diodes. IEEE Transactions on Electron Devices, 2021, 68, 4296-4301.	1.6	1
67	Monte Carlo Simulation of Electronic Noise under Large-Signal Operation. AIP Conference Proceedings, 2003, , .	0.3	0
68	TeraHertz emission from nanometric HEMTs analyzed by noise spectra. AIP Conference Proceedings, 2005, , .	0.3	0
69	Non-linear noise in nanometric Schottky-barrier diodes. AIP Conference Proceedings, 2005, , .	0.3	0
70	Electron transport and noise in schottky diodes with electron traps in the active layer. , 0, , .		0
71	Kinetic and Partial-Differential Equation Modeling of Noise in Schottky Barrier Diodes: a Comparison. AIP Conference Proceedings, 2007, , .	0.3	0
72	InAlAs/InGaAs heterostructures for THz generation. , 2007, , .		0

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73	Monte Carlo analysis of noise spectra in InAs channels from diffusive to ballistic regime. , 2009, , .		0
74	Comparison of noise characteristics of GaAs and GaN Schottky diodes for millimeter and submillimeter applications. , 2011, , .		0
75	Analysis of nonharmonic oscillations in Schottky diodes. Journal of Applied Physics, 2012, 112, 053703.	1.1	0
76	Temperature and Surface Traps Influence on the THz Emission from InGaAs Diodes. Journal of Physics: Conference Series, 2015, 647, 012039.	0.3	0
77	Nonequilibrium transport in GaAs Schottky mixers at 2.5 THz. Journal of Physics: Conference Series, 2015, 647, 012038.	0.3	0
78	Experimental verification of low-frequency noise effects at the onset of oscillations in planar Gunn diodes. , 2015, , .		0
79	Experimental analysis of shot-noise suppression in InGaAs/InAlAs recessed planar diodes at room temperature. , 2015, , .		0
80	Evaluation of the thermal resistance in GaN-diodes by means of electro-thermal Monte Carlo simulations. , 2015, , .		0
81	Anomalous low-frequency noise increase at the onset of oscillations in Gunn diodes. , 2015, , .		0
82	Characterization and modeling of traps and RF frequency dispersion in AlGaN/AlN/GaN HEMTs. , 2016, , .		0
83	Fabrication Process of Non-Linear Planar Diodes Based on GaN. , 2018, , .		0
84	Technological Parameters and Edge Fringing Capacitance in GaN Schottky Barrier Diodes: Monte Carlo Simulations. , 2021, , .		0