

# Giovanni Ghione

## List of Publications by Year in descending order

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256  
papers

4,308  
citations

147566

31  
h-index

155451

55  
g-index

263  
all docs

263  
docs citations

263  
times ranked

2588  
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasmon-Enhanced Light Absorption in Mid-Wavelength Infrared HgCdTe Detectors. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-10.	1.9	1
2	Quantum Efficiency and Crosstalk in Subwavelength HgCdTe Dual Band Infrared Detectors. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-9.	1.9	2
3	Analysis and Design of Plasmonic-Organic Hybrid Electro-Optic Modulators Based on Directional Couplers. IEEE Photonics Journal, 2022, 14, 1-11.	1.0	0
4	Changes in the Editorial Board. IEEE Transactions on Electron Devices, 2021, 68, 1398-1399.	1.6	0
5	Organic Electro-Optic Mach-Zehnder Modulators: From Physics-Based to System-Level Modeling. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100390.	0.8	3
6	Plasmonic nanorods for enhanced absorption in mid-wavelength infrared detectors. , 2021, , .		0
7	Efficient TCAD Large-Signal temperature-dependent variability analysis of a FinFET power amplifier. , 2021, , .		0
8	Kudos to Our Reviewers. IEEE Transactions on Electron Devices, 2021, 68, 5933-5933.	1.6	0
9	Reducing inter-pixel crosstalk in HgCdTe detectors. Optical and Quantum Electronics, 2020, 52, 1.	1.5	13
10	Challenges in multiphysics modeling of dual-band HgCdTe infrared detectors. , 2020, , .		0
11	Analysis of Carrier Transport in Tunnel-Junction Vertical-Cavity Surface-Emitting Lasers by a Coupled Nonequilibrium Green's Function-Drift-Diffusion Approach. Physical Review Applied, 2020, 14, .	1.5	10
12	Towards an efficient simulation framework for plasmonic organic hybrid E/O modulators. , 2020, , .		0
13	Simulation of electro optic modulators based on plasmonic directional couplers. , 2020, , .		2
14	Fabrication of Microsensor for Detection of Low-Concentration Formaldehyde Gas in Formalin-Treated Fish. IEEE Transactions on Electron Devices, 2020, 67, 5257-5261.	1.6	0
15	Editorial Special Section on Papers From the 2020 VLSI Symposium. IEEE Transactions on Electron Devices, 2020, 67, 5305-5305.	1.6	0
16	Changes in the Editorial Board. IEEE Transactions on Electron Devices, 2020, 67, 773-776.	1.6	0
17	Generalized Symmetrical 3 dB Power Dividers With Complex Termination Impedances. IEEE Access, 2020, 8, 38239-38247.	2.6	6
18	Plasmonic-organic hybrid electro/optic Mach-Zehnder modulators: from waveguide to multiphysics modal-FDTD modeling. Optics Express, 2020, 28, 29253.	1.7	9

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19	Challenges in multiphysics modeling of dual-band HgCdTe infrared detectors. Applied Optics, 2020, 59, 5656.	0.9	5
20	Kudos to Our Reviewers. IEEE Transactions on Electron Devices, 2020, 67, 5262-5262.	1.6	0
21	Constraints and performance trade-offs in Auger-suppressed HgCdTe focal plane arrays. Applied Optics, 2020, 59, E1.	0.9	9
22	Editorial Special Section on ESSDERC. IEEE Transactions on Electron Devices, 2020, 67, 4558-4558.	1.6	0
23	Looking for Quality in TCAD-Based Papers. IEEE Transactions on Electron Devices, 2019, 66, 3252-3253.	1.6	6
24	TCAD analysis of FinFET temperature-dependent variability for analog applications. , 2019, , .		1
25	Enhanced semiclassical simulation of InGaN/GaN multi-quantum-well solar cells. , 2019, , .		0
26	Efficient Sensitivity and Variability Analysis of Nonlinear Microwave Stages Through Concurrent TCAD and EM Modeling. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2019, 4, 356-363.	1.4	15
27	Physically-based statistical analysis of nonlinear circuits through X-parameters. , 2019, , .		2
28	Kudos to Our Reviewers. IEEE Transactions on Electron Devices, 2019, 66, 5024-5024.	1.6	0
29	Reducing inter-pixel crosstalk in HgCdTe detectors. , 2019, , .		0
30	FDTD simulation of compositionally graded HgCdTe photodetectors. Infrared Physics and Technology, 2019, 97, 203-209.	1.3	9
31	Corrections to "Analytic Determination of the Capacitance Matrix of Planar or Cylindrical Multiconductor Lines on Multilayered Substrates" [Feb 95 363-373]. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2284-2284.	2.9	0
32	Heterostructure modeling considerations for Ge-on-Si waveguide photodetectors. Optical and Quantum Electronics, 2018, 50, 1.	1.5	9
33	Variability of FinFET AC parameters: A physics-based insight. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2285.	1.2	2
34	Modeling Techniques for Electronic Noise and Process Variability in Nanoscale Devices. , 2018, , .		0
35	Kudos to Our Reviewers. IEEE Transactions on Electron Devices, 2018, 65, 5227-5227.	1.6	0
36	Diffusive-Probabilistic Model for Inter-Pixel Crosstalk in HgCdTe Focal Plane Arrays. IEEE Journal of the Electron Devices Society, 2018, 6, 664-673.	1.2	20

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37	A Novel TCAD Approach to Temperature Dependent DC FinFET Variability Analysis. , 2018, , .		4
38	Non-Monochromatic 3D Optical Simulation of HgCdTe Focal Plane Arrays. Journal of Electronic Materials, 2018, 47, 5742-5751.	1.0	6
39	Large-signal variability of microwave power amplifiers through efficient device sensitivity-based physical modeling. International Journal of RF and Microwave Computer-Aided Engineering, 2017, 27, e21099.	0.8	2
40	A 4-W Doherty Power Amplifier in GaN MMIC Technology for 15-GHz Applications. IEEE Microwave and Wireless Components Letters, 2017, 27, 365-367.	2.0	27
41	Carrier capture in InGaN/GaN quantum wells: Role of electron-electron scattering. Journal of Applied Physics, 2017, 121, 123107.	1.1	18
42	Simulation of Small-Pitch HgCdTe Photodetectors. Journal of Electronic Materials, 2017, 46, 5458-5470.	1.0	22
43	Multi-Gate FinFET Mixer Variability Assessment Through Physics-Based Simulation. IEEE Electron Device Letters, 2017, 38, 1004-1007.	2.2	17
44	Kudos to Our Reviewers. IEEE Transactions on Electron Devices, 2017, 64, 4776-4776.	1.6	0
45	Changes in the Editorial Board. IEEE Transactions on Electron Devices, 2017, 64, 4372-4373.	1.6	0
46	Broadband 3D optical modeling of HgCdTe infrared focal plane arrays. , 2017, , .		3
47	GaN Monolithic Power Amplifiers for Microwave Backhaul Applications. Electronics (Switzerland), 2016, 5, 25.	1.8	5
48	Kudos to Our Reviewers. IEEE Transactions on Electron Devices, 2016, 63, 4557-4557.	1.6	0
49	Physics-based modeling of FinFET RF variability. , 2016, , .		11
50	Numerical study of thin-film quantum-dot solar cells combining selective doping and light-trapping approaches. , 2016, , .		6
51	Comparing FDTD and Ray-Tracing Models in Numerical Simulation of HgCdTe LWIR Photodetectors. Journal of Electronic Materials, 2016, 45, 4524-4531.	1.0	20
52	Electrical Effects of a Single Extended Defect in MOSFETs. IEEE Transactions on Electron Devices, 2016, 63, 3069-3075.	1.6	9
53	Electrically Controlled Photocatalytic Reduction of Graphene Oxide Sheets by ZnO Nanostructures, Suitable for Tunable Optoelectronic Applications. IEEE Transactions on Electron Devices, 2016, , 1-7.	1.6	0
54	Modeling the Conductor Losses of Thick Multiconductor Coplanar Waveguides and Striplines: A Conformal Mapping Approach. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 1217-1227.	2.9	2

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55	A Unified Approach to the Sensitivity and Variability Physics-Based Modeling of Semiconductor Devices Operated in Dynamic Conditions. Part II—Small-Signal and Conversion Matrix Sensitivity. IEEE Transactions on Electron Devices, 2016, 63, 1202-1208.	1.6	24
56	A Unified Approach to the Sensitivity and Variability Physics-Based Modeling of Semiconductor Devices Operated in Dynamic Conditions—Part I: Large-Signal Sensitivity. IEEE Transactions on Electron Devices, 2016, 63, 1195-1201.	1.6	31
57	Challenges towards the simulation of GaN-based LEDs beyond the semiclassical framework. Proceedings of SPIE, 2016, , .	0.8	6
58	Cyclostationary noise modeling of radio frequency devices. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2015, 28, 659-674.	1.2	0
59	Physics-based modeling and experimental implications of trap-assisted tunneling in InGaN/GaN light-emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 947-953.	0.8	77
60	Numerical Modeling of SRH and Tunneling Mechanisms in High-Operating-Temperature MWIR HgCdTe Photodetectors. Journal of Electronic Materials, 2015, 44, 3056-3063.	1.0	35
61	Kudos To Our Reviewers. IEEE Transactions on Electron Devices, 2015, 62, 3905-3905.	1.6	0
62	Model for carrier capture time through phonon emission in InGaN/GaN quantum wells. Physica Status Solidi (B): Basic Research, 2015, 252, 971-976.	0.7	12
63	Semiclassical simulation of trap-assisted tunneling in GaN-based light-emitting diodes. Journal of Computational Electronics, 2015, 14, 444-455.	1.3	34
64	A novel smart caliper foam pig for low-cost pipeline inspection—Part A: Design and laboratory characterization. Journal of Petroleum Science and Engineering, 2015, 127, 311-317.	2.1	30
65	Looking for Auger signatures in III-nitride light emitters: A full-band Monte Carlo perspective. Applied Physics Letters, 2015, 106, .	1.5	30
66	Investigating the properties of interfacial layers in planar Schottky contacts on hydrogen-terminated diamond through direct current/small-signal characterization and radial line small-signal modelling. Applied Physics Letters, 2015, 106, .	1.5	9
67	A novel smart caliper foam pig for low-cost pipeline inspection — Part B: Field test and data processing. Journal of Petroleum Science and Engineering, 2015, 133, 771-775.	2.1	17
68	A spurious-solution-free envelope function model for quantum-confined wurtzite nanostructures. , 2014, , .		0
69	Trap-assisted tunneling in InGaN/GaN LEDs: Experiments and physics-based simulation. , 2014, , .		12
70	A surface-potential-based MOSFET compact model accounting for random doping fluctuations. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 748-760.	1.2	1
71	Deriving $k\cdot p$ parameters from full-Brillouin-zone descriptions: A finite-element envelope function model for quantum-confined wurtzite nanostructures. Journal of Applied Physics, 2014, 116, 033709.	1.1	15
72	A 2-watt, 0.15-W GaAs pHEMT stacked amplifier at 22 GHz. , 2014, , .		1

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73	A K-band GaAs MMIC Doherty power amplifier for point-to-point microwave backhaul applications. , 2014, , .		10
74	System level characterization and digital predistortion of GaN MMIC Doherty power amplifiers for microwave point-to-point radios. , 2014, , .		2
75	Effect of Load Modulation on Phase Distortion in Doherty Power Amplifiers. IEEE Microwave and Wireless Components Letters, 2014, 24, 505-507.	2.0	43
76	Single-crystal diamond microwave devices for space applications. , 2014, , .		1
77	Improved phase linearity in source field plate AlGaIn/GaN HEMTs. , 2014, , .		1
78	Microscopic models of non-radiative and high-current effects in LEDs: state of the art and future developments. Proceedings of SPIE, 2014, , .	0.8	0
79	Demonstration of inkjet-printed silver nanoparticle microstrip lines on alumina for RF power modules. Organic Electronics, 2014, 15, 91-98.	1.4	14
80	Linear GaN MMIC Combined Power Amplifiers for 7-GHz Microwave Backhaul. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 2700-2710.	2.9	28
81	Evaluating GaN Doherty architectures for 4G Picocells, WiMax and microwave backhaul links. , 2014, , .		1
82	Experimental investigation of bias current and load modulation effects in phase distortion of GaN HEMTs. Electronics Letters, 2014, 50, 773-775.	0.5	12
83	An overview on recent developments in RF and microwave power H-terminated diamond MESFET technology. , 2014, , .		7
84	Modeling Photocurrent Spectra of Single-Color and Dual-Band HgCdTe Photodetectors: Is 3D Simulation Unavoidable?. Journal of Electronic Materials, 2014, 43, 3070-3076.	1.0	11
85	Correlating electroluminescence characterization and physics-based models of InGaIn/GaN LEDs: Pitfalls and open issues. AIP Advances, 2014, 4, .	0.6	29
86	Floquet-Based Stability Analysis of Power Amplifiers Including Distributed Elements. IEEE Microwave and Wireless Components Letters, 2014, 24, 493-495.	2.0	4
87	13-bit GaAs serial-to-parallel converter with compact layout for core-chip applications. Microelectronics Journal, 2014, 45, 864-869.	1.1	10
88	Improved phase linearity in Source Field Plate AlGaIn/GaN HEMTs. , 2014, , .		1
89	Large-Signal Stability of Symmetric Multibranch Power Amplifiers Exploiting Floquet Analysis. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1580-1587.	2.9	15
90	Advanced GaN-based high frequency power amplifiers. , 2013, , .		2

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91	Auger recombination in InGaN/GaN quantum wells: A full-Brillouin-zone study. Applied Physics Letters, 2013, 103, 081106.	1.5	51
92	Bandwidth extension of GaN Doherty power amplifier: Effect on power, efficiency and linearity. , 2013, , .		3
93	A green's function approach to the analysis of non volatile memory device variability as a function of individual trap position. , 2013, , .		3
94	GaN MMIC Doherty power amplifier solutions for backhaul microwave links. , 2013, , .		1
95	Assessment of silver nanoparticle inkjet-printed microstrip lines for RF and microwave applications. , 2013, , .		3
96	Guest Editorial Special Issue on GaN Electronic Devices. IEEE Transactions on Electron Devices, 2013, 60, 2975-2981.	1.6	11
97	Consistent static and small-signal physics-based modeling of dye-sensitized solar cells under different illumination conditions. Physical Chemistry Chemical Physics, 2013, 15, 14634.	1.3	9
98	Application of Floquet theory to the large signal stability analysis of microwave amplifiers. , 2013, , .		3
99	Electroluminescence Analysis and Simulation of the Effects of Injection and Temperature on Carrier Distribution in InGaN-Based Light-Emitting Diodes with Color-Coded Quantum Wells. Japanese Journal of Applied Physics, 2013, 52, 08JG09.	0.8	10
100	3.6-GHz Wideband GaN Doherty Power Amplifier Exploiting Output Compensation Stages. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2543-2548.	2.9	131
101	Accurate large-signal equivalent circuit of surface channel diamond FETs based on the Chalmers model. Diamond and Related Materials, 2012, 26, 15-19.	1.8	9
102	Physics-based SS and SSLS variability assessment of microwave devices through efficient sensitivity analysis. , 2012, , .		14
103	3.5 GHz WiMAX GaN doherty power amplifier with second harmonic tuning. Microwave and Optical Technology Letters, 2012, 54, 2601-2605.	0.9	15
104	X-band wideband 5W GaN MMIC power amplifier with large-signal gain equalization. , 2012, , .		9
105	Ag nanoparticle-based inkjet printed planar transmission lines for RF and microwave applications: Considerations on ink composition, nanoparticle size distribution and sintering time. Microelectronic Engineering, 2012, 97, 8-15.	1.1	51
106	Development of single-stage and doherty GaN-based hybrid RF power amplifiers for quasi-constant envelope and high peak to average power ratio wireless standards. Microwave and Optical Technology Letters, 2012, 54, 206-210.	0.9	7
107	A 22W 65% efficiency GaN Doherty Power Amplifier at 3.5 GHz for WiMAX applications. , 2011, , .		3
108	Modeling and simulation of noise in transistors under large-signal condition. , 2011, , .		1

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109	Simulation and design of OFET RFIDs through an analog/digital physics-based library. Organic Electronics, 2011, 12, 1328-1335.	1.4	14
110	RF power performance evaluation of surface channel diamond MESFETs. Solid-State Electronics, 2011, 55, 19-24.	0.8	28
111	A Generalized Drift-Diffusion Model for Rectifying Schottky Contact Simulation. IEEE Transactions on Electron Devices, 2010, 57, 1539-1547.	1.6	6
112	A device-level analog and digital subsystem SPICE library for the design of low-cost pentacene OFET RFIDs. , 2010, , .		2
113	A device-level analog and digital subsystem SPICE library for the design of low-cost pentacene OFET RFIDs. , 2010, , .		1
114	Compact GaAs HEMT D flip-flop for the integration of a SAR MMIC core-chip digital control logic. , 2010, , .		7
115	GaN transistor characterization and modeling activities performed within the frame of the KorriGaN project. International Journal of Microwave and Wireless Technologies, 2010, 2, 51-61.	1.5	25
116	SPICE Library for Low-Cost RFID Applications Based on Pentacene Organic FET. , 2010, , .		5
117	7 GHz GaN MMIC power amplifier for Microwave Radio links with 45% drain efficiency in a wide power range. , 2010, , .		2
118	HB-based CAD-oriented dynamic stability analysis of circuits and devices: Application to the assessment of thermal instabilities in multifinger HBTs. , 2009, , .		1
119	Concurrent dual-band SiGe HBT power amplifier for Wireless applications. International Journal of Microwave and Wireless Technologies, 2009, 1, 117-126.	1.5	2
120	RF power performance of submicron MESFET on hydrogen terminated polycrystalline diamond. , 2009, , .		1
121	Assessment of surge current capabilities of SiC-based high-power diodes through physics-based mixed-mode electro-thermal simulations. , 2009, , .		3
122	Immittance and $S$ -Parameter-Based Criteria for the Unconditional Stability of Linear Two-Ports: Relations and Invariance Properties. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 519-523.	2.9	4
123	Behavioral modeling of GaN-based power amplifiers: Impact of electrothermal feedback on the model accuracy and identification. Microwave and Optical Technology Letters, 2009, 51, 2789-2792.	0.9	0
124	FPGA Implementation of Adaptive Baseband Predistortion for FET-Based Wireless Power Amplifiers. , 2009, , .		4
125	Assessment of Thermal Instabilities and Oscillations in Multifinger Heterojunction Bipolar Transistors Through a Harmonic-Balance-Based CAD-Oriented Dynamic Stability Analysis Technique. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 3461-3468.	2.9	8
126	Hydrodynamic transport parameters of wurtzite ZnO from analytic- and full-band Monte Carlo simulation. Solid-State Electronics, 2008, 52, 1796-1801.	0.8	39



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127	From device characterization to system level analysis of dual band PA design in SiGe technology. International Journal of RF and Microwave Computer-Aided Engineering, 2008, 18, 552-563.	0.8	2
128	Novel TCAD-Oriented Definition of the off-State Breakdown Voltage in Schottky-Gate FETs: A 4H-SiC MESFET Case Study. IEEE Transactions on Electron Devices, 2008, 55, 3347-3353.	1.6	5
129	A 20 Watt Micro-strip X-Band AlGaIn/GaN HPA MMIC for Advanced Radar Applications. , 2008, , .		18
130	When self-consistency makes a difference. IEEE Microwave Magazine, 2008, 9, 81-89.	0.7	12
131	GaN Device Technology: Manufacturing, Characterization, Modelling and Verification. , 2008, , .		6
132	A 20 Watt Micro-strip X-Band AlGaIn/GaN HPA MMIC for Advanced Radar Applications. , 2008, , .		3
133	Large-signal device simulation in time- and frequency-domain: a comparison. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 1319-1325.	0.5	7
134	A novel, rigorous approach to the dynamic, large-signal stability analysis of semiconductor devices and circuits under electro-thermal interaction. , 2008, , .		2
135	A 2.469&#x223C;2.69GHz AlGaIn/GaN HEMT power amplifier for IEEE 802.16e WiMAX applications. , 2008, , .		0
136	Kinetic and Partial-Differential Equation Modeling of Noise in Schottky Barrier Diodes: a Comparison. AIP Conference Proceedings, 2007, , .	0.3	0
137	Innovative techniques for device large-signal noise simulations. AIP Conference Proceedings, 2007, , .	0.3	2
138	Hydrodynamic transport parameters of wurtzite ZnO from analytic- and full-band Monte Carlo Simulation. , 2007, , .		0
139	Quantum, Power, &#x0026; Compound Semiconductors - Ultra High Speed SiGe and InP-based HBTs. , 2007, , .		0
140	Application of physical models to circuit simulations. , 2007, , .		1
141	Neural networks and volterra series for time-domain power amplifier behavioral models. International Journal of RF and Microwave Computer-Aided Engineering, 2007, 17, 160-168.	0.8	14
142	Transfer matrix method modelling of inhomogeneous Schottky barrier diodes on silicon carbide. Solid-State Electronics, 2007, 51, 466-474.	0.8	27
143	Self-Consistent Electrothermal Modeling of Class A, AB, and B Power GaN HEMTs Under Modulated RF Excitation. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 1824-1831.	2.9	47
144	On the Substrate Thermal Optimization in SiC-Based Backside-Mounted High-Power GaN FETs. IEEE Transactions on Electron Devices, 2007, 54, 1744-1752.	1.6	23

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145	Physics-Based PiN Diode SPICE Model for Power-Circuit Simulation. IEEE Transactions on Industry Applications, 2007, 43, 911-919.	3.3	35
146	Physics-based Mixer Noise Simulation. , 2006, , .		2
147	Fabrication, Characterization and Numerical Simulation of High Breakdown Voltage pHEMTs. , 2006, , .		2
148	GaN HEMT Technology Development Assessment through Nonlinear Characterization. , 2006, , .		0
149	Design and characterization of a 10-Gb/s dual-drive Z-cut Ti:LiNbO <sub>3</sub> electrooptical modulator. Journal of Lightwave Technology, 2006, 24, 2355-2361.	2.7	5
150	Physics-based mixed-mode reverse recovery modeling and optimization of Si PiN and MPS fast recovery diodes. Microelectronics Journal, 2006, 37, 190-196.	1.1	19
151	An efficient numerical technique for the implementation of SSSL and cyclostationary noise analysis in physics-based device simulators. Journal of Computational Electronics, 2006, 5, 85-89.	1.3	1
152	Experimental validation of GaN HEMTs thermal management by using photocurrent measurements. IEEE Transactions on Electron Devices, 2006, 53, 182-188.	1.6	35
153	Low-frequency noise conversion modeling in RF devices under forced nonlinear operation. International Journal of RF and Microwave Computer-Aided Engineering, 2006, 16, 4-12.	0.8	2
154	Fabrication and nonlinear characterization of GaN HEMTs on SiC and sapphire for high-power applications. International Journal of RF and Microwave Computer-Aided Engineering, 2006, 16, 70-80.	0.8	23
155	Theoretical investigation of GaN permeable base transistors for microwave power applications. Semiconductor Science and Technology, 2006, 21, 13-18.	1.0	2
156	Quantum, Power, and Compound Semiconductor Devices -- Devices and Passives for Si RF Power. , 2006, , .		0
157	Self-consistent coupled carrier transport full-wave EM analysis of semiconductor traveling-wave devices. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 1611-1618.	2.9	17
158	Design, Fabrication and Characterization of 1.5 m <sup>2</sup> cm <sup>2</sup> , 800 V 4H-SiC n-Type Schottky Barrier Diodes. Materials Science Forum, 2005, 483-485, 941-944.	0.3	6
159	Two-dimensional physics-based low-frequency noise modeling of bipolar semiconductor devices in small- and large-signal operation. AIP Conference Proceedings, 2005, , .	0.3	0
160	Key issues in trap-assisted low-frequency device noise simulation in nonlinear large-signal conditions. AIP Conference Proceedings, 2005, , .	0.3	1
161	Accurate simulation of travelling-wave electroabsorption modulators through a novel coupled electromagnetic and carrier-transport model. , 2005, , .		0
162	Simulation of switched-mode power supplies (SMPS) through an accurate non-quasi-static SPICE power diode model. , 2005, , .		1

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163	Small- and large-signal trap-assisted GR noise modeling in semiconductor devices. , 2004, 5470, 37.		0
164	Compact Conversion and Cyclostationary Noise Modeling of pnâ€“Junction Diodes in Low-Injectionâ€”Part I: Model Derivation. IEEE Transactions on Electron Devices, 2004, 51, 467-476.	1.6	9
165	Compact Conversion and Cyclostationary Noise Modeling of pnâ€“Junction Diodes in Low-Injectionâ€”Part II: Discussion. IEEE Transactions on Electron Devices, 2004, 51, 477-485.	1.6	9
166	Simulation of cyclostationary noise in semiconductor devices. , 2004, , .		0
167	Broad-band coaxial directional couplers for high-power applications. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 994-997.	2.9	18
168	Revisiting the partial-capacitance approach to the analysis of coplanar transmission lines on multilayered substrates. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 2007-2014.	2.9	33
169	Efficient quasi-TEM frequency-dependent analysis of lossy multiconductor lines through a fast reduced-order FEM model. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 2029-2035.	2.9	22
170	Physics-based simulation techniques for small- and large-signal device noise analysis in RF applications. IEEE Transactions on Electron Devices, 2003, 50, 633-644.	1.6	37
171	Comments on "Noise source modeling for cyclostationary noise analysis in large-signal device operation". IEEE Transactions on Electron Devices, 2003, 50, 2183.	1.6	3
172	Multisectional modeling of high-speed electrooptic modulators integrated in a microwave circuit CAD environment. Journal of Lightwave Technology, 2003, 21, 2989-2996.	2.7	4
173	Self-consistent time-domain large-signal model of high-speed traveling-wave electroabsorption modulators. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 1096-1104.	2.9	18
174	Physics-based modeling of submicron GaN permeable base transistors. IEEE Electron Device Letters, 2002, 23, 303-305.	2.2	12
175	A fast reduced-order model for the full-wave FEM analysis of lossy inhomogeneous anisotropic waveguides. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 2108-2114.	2.9	39
176	Noise source modeling for cyclostationary noise analysis in large-signal device operation. IEEE Transactions on Electron Devices, 2002, 49, 1640-1647.	1.6	33
177	Noise in Semiconductor Devices. Springer Series in Advanced Microelectronics, 2001, , .	0.3	92
178	Fast higher-order full-wave FEM analysis of traveling-wave optoelectronic devices. , 2001, , .		1
179	Experimental demonstration of a balanced electroabsorption modulated microwave photonic link. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1956-1961.	2.9	26
180	Simplex Algorithm for Band Structure Calculation of Noncubic Symmetry Semiconductors: Application to III-nitride Binaries and Alloys. VLSI Design, 2001, 13, 63-68.	0.5	7

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181	Simulation of Carrier Transport in Wide Band Gap Semiconductors. Selected Topics in Electornics and Systems, 2001, , 163-222.	0.2	6
182	<title>Simultaneous suppression of laser relative intensity noise: second- and third-order distortions using a balanced electro-absorption modulator</title>. , 2001, , .		1
183	Monte Carlo simulation of electron transport in the III-nitride wurtzite phase materials system: binaries and ternaries. IEEE Transactions on Electron Devices, 2001, 48, 535-542.	1.6	376
184	A TCAD approach to the physics-based modeling of frequency conversion and noise in semiconductor devices under large-signal forced operation. IEEE Transactions on Electron Devices, 2001, 48, 966-977.	1.6	64
185	A general conformal-mapping approach to the optimum electrode design of coplanar waveguides with arbitrary cross section. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1573-1580.	2.9	29
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