Giovanni Ghione

List of Publications by Year
in descending order

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	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
2	Coplanar Waveguides for MMIC Applications: Effect of Upper Shielding, Conductor Backing, Finite-Extent Ground Planes, and Line-to-Line Coupling. IEEE Transactions on Microwave Theory and Techniques, 1987, 35, 260-267.	2.9	305
3	Analytical formulas for coplanar lines in hybrid and monolithic MICs. Electronics Letters, 1984, 20, 179.	0.5	178
4	3–3.6-GHz Wideband GaN Doherty Power Amplifier Exploiting Output Compensation Stages. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2543-2548.	2.9	131
5	An efficient approach to noise analysis through multidimensional physics-based models. IEEE Transactions on Electron Devices, 1998, 45, 261-269.	1.6	121
6	Band structure nonlocal pseudopotential calculation of the III-nitride wurtzite phase materials system. Part I. Binary compounds GaN, AlN, and InN. Journal of Applied Physics, 2000, 88, 6467-6475.	1.1	113
7	A CAD-oriented analytical model for the losses of general asymmetric coplanar lines in hybrid and monolithic MICs. IEEE Transactions on Microwave Theory and Techniques, 1993, 41, 1499-1510.	2.9	110
8	Parameters of coplanar waveguides with lower ground plane. Electronics Letters, 1983, 19, 734.	0.5	107
9	Noise in Semiconductor Devices. Springer Series in Advanced Microelectronics, 2001, , .	0.3	92
10	Band structure nonlocal pseudopotential calculation of the III-nitride wurtzite phase materials system. Part II. Ternary alloys AlxGa1−xN, InxGa1−xN, and InxAl1−xN. Journal of Applied Physics, 2000, 88, 6476-6482.	1.1	86
11	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
12	On the application of the Kirchhoff transformation to the steady-state thermal analysis of semiconductor devices with temperature-dependent and piecewise inhomogeneous thermal conductivity. Solid-State Electronics, 1995, 38, 1409-1412.	0.8	76
13	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
14	Generation–recombination noise modelling in semiconductor devices through population or approximate equivalent current density fluctuations. Solid-State Electronics, 1999, 43, 285-295.	0.8	52
15	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
16	Auger recombination in InGaN/GaN quantum wells: A full-Brillouin-zone study. Applied Physics Letters, 2013, 103, 081106.	1.5	51
17	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
18	Microwave modeling and characterization of thick coplanar waveguides on oxide-coated lithium niobate substrates for electrooptical applications. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 2287-2293.	2.9	45

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19	Effect of Load Modulation on Phase Distortion in Doherty Power Amplifiers. IEEE Microwave and Wireless Components Letters, 2014, 24, 505-507.	2.0	43
20	Modeling of multiconductor buses and analysis of crosstalk, propagation delay and pulse distortion in high speed GaAs logic circuits. IEEE Transactions on Microwave Theory and Techniques, 1989, 37, 445-456.	2.9	42
21	A computationally efficient unified approach to the numerical analysis of the sensitivity and noise of semiconductor devices. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1993, 12, 425-438.	1.9	42
22	Physical modeling of GaAs MESFETs in an integrated CAD environment: from device technology to microwave circuit performance. IEEE Transactions on Microwave Theory and Techniques, 1989, 37, 457-468.	2.9	41
23	Physics-based electron device modelling and computer-aided MMIC design. IEEE Transactions on Microwave Theory and Techniques, 1992, 40, 1333-1352.	2.9	39
24	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
25	Hydrodynamic transport parameters of wurtzite ZnO from analytic- and full-band Monte Carlo simulation. Solid-State Electronics, 2008, 52, 1796-1801.	0.8	39
26	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
27	Experimental validation of GaN HEMTs thermal management by using photocurrent measurements. IEEE Transactions on Electron Devices, 2006, 53, 182-188.	1.6	35
28	Physics-Based PiN Diode SPICE Model for Power-Circuit Simulation. IEEE Transactions on Industry Applications, 2007, 43, 911-919.	3.3	35
29	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
30	Semiclassical simulation of trap-assisted tunneling in GaN-based light-emitting diodes. Journal of Computational Electronics, 2015, 14, 444-455.	1.3	34
31	Noise source modeling for cyclostationary noise analysis in large-signal device operation. IEEE Transactions on Electron Devices, 2002, 49, 1640-1647.	1.6	33
32	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
33	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
34	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
35	Looking for Auger signatures in III-nitride light emitters: A full-band Monte Carlo perspective. Applied Physics Letters, 2015, 106, .	1.5	30
36	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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37	Correlating electroluminescence characterization and physics-based models of InGaN/GaN LEDs: Pitfalls and open issues. AIP Advances, 2014, 4, .	0.6	29
38	RF power performance evaluation of surface channel diamond MESFETs. Solid-State Electronics, 2011, 55, 19-24.	0.8	28
39	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
40	Transfer matrix method modelling of inhomogeneous Schottky barrier diodes on silicon carbide. Solid-State Electronics, 2007, 51, 466-474.	0.8	27
41	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
42	Analytic determination of the capacitance matrix of planar or cylindrical multiconductor lines on multilayered substrates. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 363-373.	2.9	26
43	Experimental demonstration of a balanced electroabsorption modulated microwave photonic link. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1956-1961.	2.9	26
44	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
45	Two-dimensional finite-boxes analysis of monopolar corona fields including ion diffusion. IEEE Transactions on Magnetics, 1990, 26, 567-570.	1.2	24
46	Microwave modeling and characterization of thick coplanar waveguides on oxide-coated lithium niobate substrates for electro-optical applications. , 0, , .		24
47	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
48	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
49	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
50	Discretization schemes for high-frequency semiconductor device models. IEEE Transactions on Antennas and Propagation, 1997, 45, 443-456.	3.1	22
51	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
52	Simulation of Small-Pitch HgCdTe Photodetectors. Journal of Electronic Materials, 2017, 46, 5458-5470.	1.0	22
53	The influence of ground-plane width on the ohmic losses of coplanar waveguides with finite lateral ground planes. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 1640-1642.	2.9	21
54	Comparing FDTD and Ray-Tracing Models in Numerical Simulation of HgCdTe LWIR Photodetectors. Journal of Electronic Materials, 2016, 45, 4524-4531.	1.0	20

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55	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
56	Complex ray analysis of radiation from large apertures with tapered illumination. IEEE Transactions on Antennas and Propagation, 1984, 32, 684-693.	0.8	19
57	Physics-based large-signal sensitivity analysis of microwave circuits using technological parametric sensitivity from multidimensional semiconductor device models. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 846-855.	2.9	19
58	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
59	Broad-band coaxial directional couplers for high-power applications. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 994-997.	2.9	18
60	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
61	A 20 Watt Micro-strip X-Band AlGaN/GaN HPA MMIC for Advanced Radar Applications. , 2008, , .		18
62	Carrier capture in InGaN/GaN quantum wells: Role of electron-electron scattering. Journal of Applied Physics, 2017, 121, 123107.	1.1	18
63	New simple proofs of the two-port stability criterium in terms of the single stability parameter μ_1 (μ_2). IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1073-1076.	2.9	17
64	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
65	A novel smart caliper foam pig for low-cost pipeline inspection â€" Part B: Field test and data processing. Journal of Petroleum Science and Engineering, 2015, 133, 771-775.	2.1	17
66	Multi-Gate FinFET Mixer Variability Assessment Through Physics-Based Simulation. IEEE Electron Device Letters, 2017, 38, 1004-1007.	2.2	17
67	High-resolution self-consistent thermal modelling of multi-gate power GaAs MESFETs. , 0, , .		15
68	3.5 GHz WiMAX GaN doherty power amplifier with second harmonic tuning. Microwave and Optical Technology Letters, 2012, 54, 2601-2605.	0.9	15
69	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
70	Deriving k·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
71	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
72	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

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73	Simulation and design of OFET RFIDs through an analog/digital physics-based library. Organic Electronics, 2011, 12, 1328-1335.	1.4	14
74	Physics-based SS and SSLS variability assessment of microwave devices through efficient sensitivity analysis. , 2012, , .		14
75	Demonstration of inkjet-printed silver nanoparticle microstrip lines on alumina for RF power modules. Organic Electronics, 2014, 15, 91-98.	1.4	14
76	Accurate large-signal GaAs MESFET and HEMT modeling for power MMIC amplifier design. The International Executive, 1995, 5, 195-209.	0.2	13
77	A closed-form CAD-oriented model for the high-frequency conductor attenuation of symmetrical coupled coplanar waveguides. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 1065-1070.	2.9	13
78	Power PiN diode model for PSPICE simulations. , 0, , .		13
79	Reducing inter-pixel crosstalk in HgCdTe detectors. Optical and Quantum Electronics, 2020, 52, 1.	1.5	13
80	Physics-based RF noise modeling of submicron MOSFETs. , 0, , .		12
81	Physics-based modeling of submicron GaN permeable base transistors. IEEE Electron Device Letters, 2002, 23, 303-305.	2.2	12
82	When self-consistency makes a difference. IEEE Microwave Magazine, 2008, 9, 81-89.	0.7	12
83	Trap-assisted tunneling in InGaN/GaN LEDs: Experiments and physics-based simulation. , 2014, , .		12
84	Experimental investigation of bias current and load modulation effects in phase distortion of GaN HEMTs. Electronics Letters, 2014, 50, 773-775.	0.5	12
85	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
86	New analytical approach for computing DC unipolar corona losses. IEE Proceedings A: Physical Science Measurement and Instrumentation Management and Education Reviews, 1984, 131, 318.	0.1	11
87	Sensitivity-based optimization and statistical analysis of microwave semiconductor devices through multidimensional physical simulation (invited article). The International Executive, 1997, 7, 129-143.	0.2	11
88	Failure analysis of travelling wave MSM distributed photodetectors. , 0, , .		11
89	Simulation of Carrier Transport in Wide Band Gap Semiconductors. International Journal of High Speed Electronics and Systems, 2001, 11, 525-584.	0.3	11
90	Guest Editorial Special Issue on GaN Electronic Devices. IEEE Transactions on Electron Devices, 2013, 60, 2975-2981.	1.6	11

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91	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
92	Physics-based modeling of FinFET RF variability. , 2016, , .		11
93	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
94	A K-band GaAs MMIC Doherty power amplifier for point-to-point microwave backhaul applications. , 2014, , .		10
95	13-bit GaAs serial-to-parallel converter with compact layout for core-chip applications. Microelectronics Journal, 2014, 45, 864-869.	1.1	10
96	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
97	A new, efficient approach to the large-scale thermal modeling of III-V devices and integrated circuits. , 0, , .		9
98	Compact Conversion and Cyclostationary Noise Modeling of pn–Junction Diodes in Low-Injection–Part I: Model Derivation. IEEE Transactions on Electron Devices, 2004, 51, 467-476.	1.6	9
99	Compact Conversion and Cyclostationary Noise Modeling of pn–Junction Diodes in Low-Injection–Part II: Discussion. IEEE Transactions on Electron Devices, 2004, 51, 477-485.	1.6	9
100	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
101	X-band wideband 5W GaN MMIC power amplifier with large-signal gain equalization. , 2012, , .		9
102	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
103	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
104	Electrical Effects of a Single Extended Defect in MOSFETs. IEEE Transactions on Electron Devices, 2016, 63, 3069-3075.	1.6	9
105	Heterostructure modeling considerations for Ge-on-Si waveguide photodetectors. Optical and Quantum Electronics, 2018, 50, 1.	1.5	9
106	FDTD simulation of compositionally graded HgCdTe photodetectors. Infrared Physics and Technology, 2019, 97, 203-209.	1.3	9
107	Plasmonic-organic hybrid electro/optic Mach-Zehnder modulators: from waveguide to multiphysics modal-FDTD modeling. Optics Express, 2020, 28, 29253.	1.7	9
108	Constraints and performance trade-offs in Auger-suppressed HgCdTe focal plane arrays. Applied Optics, 2020, 59, E1.	0.9	9

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109	Inverse scattering for optical couplers. Exact solution of Marchenko equations. Journal of Mathematical Physics, 1984, 25, 1900-1904.	0.5	8
110	Thermal analysis of power GaAs MESFETs. , 1987, , .		8
111	An efficient, CAD-oriented model for the characteristic parameters of multiconductor buses in high-speed digital GaAs ICs. Analog Integrated Circuits and Signal Processing, 1994, 5, 67-75.	0.9	8
112	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
113	Fast Exact Inversion of the Generalized Zakharovâ€"Shabat Problem for Rational Scattering Data: Application to the Synthesis of Optical Couplers. SIAM Journal on Applied Mathematics, 1988, 48, 689-702.	0.8	7
114	High-field diffusivity and noise spectra in GaAs MESFETs. Journal Physics D: Applied Physics, 1994, 27, 365-375.	1.3	7
115	Analysis of failure mechanisms in velocity-matched distributed photodetectors. IEE Proceedings: Optoelectronics, 1999, 146, 25-30.	0.8	7
116	Exact, conformal-mapping models for the high-frequency losses of coplanar waveguides with thick electrodes of rectangular or trapezoidal cross section. , 0, , .		7
117	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
118	Compact modelling of cyclostationary noise in semiconductor devices: a critical discussion. , 0, , .		7
119	Finite Difference Based Power Diodes Simulation Within SPICE: Modeling Approach and Validation. , 0, , .		7
120	Largeâ€signal device simulation in timeâ€and frequencyâ€domain: a comparison. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2008, 27, 1319-1325.	0.5	7
121	Compact GaAs HEMT D flip-flop for the integration of a SAR MMIC core-chip digital control logic. , 2010, , .		7
122	Development of singleâ€stage and doherty GaNâ€based hybrid RF power amplifiers for quasiâ€constant envelope and high peak to average power ratio wireless standards. Microwave and Optical Technology Letters, 2012, 54, 206-210.	0.9	7
123	An overview on recent developments in RF and microwave power H-terminated diamond MESFET technology. , 2014, , .		7
124	Computer interpretation of carotid waves using a knowledge based system. Signal Processing, 1982, 4, 409-423.	2.1	6
125	Large-scale, computer-aided thermal design of power GaAs integrated devices and circuits. , 0, , .		6
126	Simulation of Carrier Transport in Wide Band Gap Semiconductors. Selected Topics in Electornics and Systems, 2001, , 163-222.	0.2	6

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127	Design, Fabrication and Characterization of 1.5 mÎ©cm<sub>2</sub>, 800 V 4H-SiC n-Type Schottky Barrier Diodes. Materials Science Forum, 2005, 483-485, 941-944.	0.3	6
128	GaN Device Technology: Manufacturing, Characterization, Modelling and Verification. , 2008, , .		6
129	A Generalized Drift-Diffusion Model for Rectifying Schottky Contact Simulation. IEEE Transactions on Electron Devices, 2010, 57, 1539-1547.	1.6	6
130	Numerical study of thin-film quantum-dot solar cells combining selective doping and light-trapping approaches. , 2016, , .		6
131	Challenges towards the simulation of GaN-based LEDs beyond the semiclassical framework. Proceedings of SPIE, 2016, , .	0.8	6
132	Non-Monochromatic 3D Optical Simulation of HgCdTe Focal Plane Arrays. Journal of Electronic Materials, 2018, 47, 5742-5751.	1.0	6
133	Looking for Quality in TCAD-Based Papers. IEEE Transactions on Electron Devices, 2019, 66, 3252-3253.	1.6	6
134	Generalized Symmetrical 3 dB Power Dividers With Complex Termination Impedances. IEEE Access, 2020, 8, 38239-38247.	2.6	6
135	A new approach to the physics-based noise analysis of semiconductor devices operating in large signal, (quasi) periodic regime. , 0, , .		5
136	Design and characterization of a 10-Gb/s dual-drive Z-cut Ti:LiNbO/sub 3/ electrooptical modulator. Journal of Lightwave Technology, 2006, 24, 2355-2361.	2.7	5
137	Novel TCAD-Oriented Definition of the off-State Breakdown Voltage in Schottky-Gate FETs: A 4Hâ€"SiC MESFET Case Study. IEEE Transactions on Electron Devices, 2008, 55, 3347-3353.	1.6	5
138	SPICE Library for Low-Cost RFID Applications Based on Pentacene Organic FET. , 2010, , .		5
139	GaN Monolithic Power Amplifiers for Microwave Backhaul Applications. Electronics (Switzerland), 2016, 5, 25.	1.8	5
140	Challenges in multiphysics modeling of dual-band HgCdTe infrared detectors. Applied Optics, 2020, 59, 5656.	0.9	5
141	Evaluating the impedance field through several transport models: A comparison. Journal of Applied Physics, 1999, 85, 2192-2196.	1.1	4
142	GREEN'S FUNCTIONS APPROACH TO MOS PHYSICS-BASED COMPACT NOISE MODELLING. Fluctuation and Noise Letters, 2001, 01, R51-R63.	1.0	4
143	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
144	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

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145	FPGA Implementation of Adaptive Baseband Predistortion for FET-Based Wireless Power Amplifiers. , 2009, , .		4
146	Floquet-Based Stability Analysis of Power Amplifiers Including Distributed Elements. IEEE Microwave and Wireless Components Letters, 2014, 24, 493-495.	2.0	4
147	A Novel TCAD Approach to Temperature Dependent DC FinFET Variability Analysis. , 2018, , .		4
148	Physical noise modelling of majority-carrier devices: an adjoint-network approach. , 0, , .		3
149	New, closed-form compact model for the cyclostationary noise and LS conversion behaviour of RF junction diodes. , 0, , .		3
150	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
151	Evaluation of GaN HEMT Technology Development Through Nonlinear Characterization. , 0, , .		3
152	A 20 Watt Micro-strip X-Band AlGaN/GaN HPA MMIC for Advanced Radar Applications. , 2008, , .		3
153	Assessment of surge current capabilities of SiC-based high-power diodes through physics-based mixed-mode electro-thermal simulations. , 2009, , .		3
154	A 22W 65% efficiency GaN Doherty Power Amplifier at 3.5 GHz for WiMAX applications. , 2011, , .		3
155	Bandwidth extension of GaN Doherty power amplifier: Effect on power, efficiency and linearity. , 2013, , .		3
156	A green's function approach to the analysis of non volatile memory device variability as a function of individual trap position. , 2013, , .		3
157	Assessment of silver nanoparticle inkjet-printed microstrip lines for RF and microwave applications. , 2013, , .		3
158	Application of Floquet theory to the large signal stability analysis of microwave amplifiers. , 2013, , .		3
159	Broadband 3D optical modeling of HgCdTe infrared focal plane arrays. , 2017, , .		3
160	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
161	A new general-purpose two-dimensional mesh generator for finite elements, generalized finite differences, and moment method applications. IEEE Transactions on Magnetics, 1988, 24, 307-310.	1.2	2
162	A new dynamic, self-consistent electro-thermal model of power HBTs and a novel interpretation of thermal collapse loci in multi-finger devices. , 0, , .		2

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163	Physics-based Mixer Noise Simulation. , 2006, , .		2
164	Fabrication, Characterization and Numerical Simulation of High Breakdown Voltage pHEMTs. , 2006, , .		2
165	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
166	Theoretical investigation of GaN permeable base transistors for microwave power applications. Semiconductor Science and Technology, 2006, 21, 13-18.	1.0	2
167	Innovative techniques for device large-signal noise simulations. AIP Conference Proceedings, 2007, , .	0.3	2
168	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
169	A novel, rigorous approach to the dynamic, large-signal stability analysis of semiconductor devices and circuits under electro-thermal interaction. , 2008, , .		2
170	Concurrent dual-band SiGe HBT power amplifier for Wireless applications. International Journal of Microwave and Wireless Technologies, 2009, 1, 117-126.	1.5	2
171	A device-level analog and digital subsystem SPICE library for the design of low-cost pentacene OFET RFIDs. , 2010, , .		2
172	7 GHz GaN MMIC power amplifier for Microwave Radio links with 45% drain efficiency in a wide power range. , 2010, , .		2
173	Advanced GaN-based high frequency power amplifiers. , 2013, , .		2
174	System level characterization and digital predistortion of GaN MMIC Doherty power amplifiers for microwave point-to-point radios. , 2014, , .		2
175	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
176	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
177	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
178	Physically-based statistical analysis of nonlinear circuits through X-parameters. , 2019, , .		2
179	Simulation of electro optic modulators based on plasmonic directional couplers. , 2020, , .		2
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