## Bart K J C Nauwelaers

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9089574/publications.pdf

Version: 2024-02-01

319 papers 2,860 citations

331259 21 h-index 315357 38 g-index

321 all docs

321 docs citations

times ranked

321

1904 citing authors

#	Article	IF	Citations
1	Mutual Coupling Reduction Between Planar Antennas by Using a Simple Microstrip U-Section. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 1501-1503.	2.4	173
2	Analytical Model of the DC Actuation of Electrostatic MEMS Devices With Distributed Dielectric Charging and Nonplanar Electrodes. Journal of Microelectromechanical Systems, 2007, 16, 1243-1253.	1.7	123
3	Physics-based closed-form inductance expression for compact modeling of integrated spiral inductors. IEEE Journal of Solid-State Circuits, 2002, 37, 77-80.	3.5	116
4	Multilayer thin-film MCM-D for the integration of high-performance RF and microwave circuits. IEEE Transactions on Components and Packaging Technologies, 2001, 24, 510-519.	1.4	96
5	Power and noise limitations of active circulators. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 316-319.	2.9	74
6	Two new measurement methods for explicit determination of complex permittivity. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 1614-1619.	2.9	68
7	A smart wearable textile array system for biomedical telemetry applications. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2253-2261.	2.9	64
8	A Planar One-Port Microwave Microfluidic Sensor for Microliter Liquids Characterization. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2018, 2, 10-17.	2.3	46
9	Consistent small-signal and large-signal extraction techniques for heterojunction FET's. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 87-93.	2.9	42
10	Broadband Dielectric Spectroscopy of Cell Cultures. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5750-5759.	2.9	42
11	Integration of Interdigitated Electrodes in Split-Ring Resonator for Detecting Liquid Mixtures. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 2080-2089.	2.9	42
12	Direct Extraction of the Non-Linear Model for Two-Port Devices from Vectorial Non-Linear Network Analyzer Measurements., 1997,,.		37
13	A wideband beamformer for a phased-array 60GHz receiver in 40nm digital CMOS., 2010,,.		37
14	Characterizing the TEM Cell Electric and Magnetic Field Coupling to PCB Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2012, 54, 976-985.	1.4	34
15	50-to-67GHz ESD-protected power amplifiers in digital 45nm LP CMOS. , 2009, , .		32
16	Modeling of Coplanar Interdigital Capacitor for Microwave Microfluidic Application. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2674-2683.	2.9	32
17	An electrostatic fringing-field actuator (EFFA): application towards a low-complexity thin-film RF-MEMS technology. Journal of Micromechanics and Microengineering, 2007, 17, S204-S210.	1.5	31
18	Complex permittivity measurement method based on asymmetry of reciprocal two-ports. Electronics Letters, 1996, 32, 1497.	0.5	30

#	Article	IF	CITATIONS
19	A simple error correction method for two-port transmission parameter measurement., 1998, 8, 58-59.		30
20	Technology-Independent Non-Quasi-Static Table-Based Nonlinear Model Generation. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 2845-2852.	2.9	30
21	Hybrid Characterization of Nanolitre Dielectric Fluids in a Single Microfluidic Channel Up to 110 GHz. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 5063-5073.	2.9	29
22	A Visible Light Positioning system using Frequency Division Multiple Access with square waves. , 2015, , .		28
23	A survey on multiple access Visible Light Positioning. , 2016, , .		27
24	Accurate transmission line characterisation on high and low-resistivity substrates. IET Microwaves Antennas and Propagation, 2001, 148, 285.	1.2	26
25	RF-power: driver for electrostatic RF-MEMS devices. Journal of Micromechanics and Microengineering, 2004, 14, S43-S48.	1.5	26
26	Wavelet packet based multicarrier modulation., 0,,.		24
27	A system-level simulator for indoor mmW SAR imaging and its applications. Optics Express, 2012, 20, 23811.	1.7	24
28	Optical CDMA codes for an indoor localization system using VLC. , 2014, , .		22
29	Distributed, Signal Strength-Based Indoor Localization Algorithm for Use in Healthcare Environments. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1887-1893.	3.9	22
30	Effect of Open-Ended Coaxial Probe-to-Tissue Contact Pressure on Dielectric Measurements. Sensors, 2020, 20, 2060.	2.1	22
31	S-parameter measurement based quasistatic large-signal cold HEMT model for resistive mixer design. The International Executive, 1996, 6, 250-258.	0.2	21
32	Characterising differences between measurement and calibration wafer in probe-tip calibrations. Electronics Letters, 1999, 35, 1087.	0.5	20
33	Influence of Different Types of Metal Plates on a High Frequency RFID Loop Antenna: Study and Design. Advances in Electrical and Computer Engineering, 2009, 9, 3-8.	0.5	20
34	Broadband active microstrip antenna design with the simplified real frequency technique. IEEE Transactions on Antennas and Propagation, 1994, 42, 1612-1619.	3.1	19
35	Broadband microstrip antenna design with the simplified real frequency technique. IEEE Transactions on Antennas and Propagation, 1994, 42, 129-136.	3.1	19
36	A Modeling Procedure of the Broadband Dielectric Spectroscopy for Ionic Liquids. IEEE Transactions on Nanobioscience, 2018, 17, 387-393.	2.2	19

#	Article	lF	Citations
37	Waveforms-Only Based Nonlinear De-Embedding in Active Devices. IEEE Microwave and Wireless Components Letters, 2012, 22, 215-217.	2.0	18
38	Implementation of a Project-Based Telecommunications Engineering Design Course. IEEE Transactions on Education, 2014, 57, 25-33.	2.0	18
39	Constitutive relations for nonlinear modeling of Si/SiGe HBTs using an ANN model. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 203-209.	0.8	17
40	Study of active millimeter-wave image speckle reduction by Hadamard phase pattern illumination. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 312.	0.8	17
41	Characterization of Intermodulation and Memory Effects Using Offset Multisine Excitation. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 645-657.	2.9	17
42	Effect of Dehydration on Dielectric Measurements of Biological Tissue as Function of Time. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2020, 4, 200-207.	2.3	17
43	Identification technique of FET model based on vector nonlinear measurements. Electronics Letters, 2011, 47, 1323.	0.5	16
44	An Interdigital Capacitor for Microwave Heating at 25 GHz and Wideband Dielectric Sensing of nL Volumes in Continuous Microfluidics. Sensors, 2019, 19, 715.	2.1	16
45	Integration of CPW quadrature couplers in multilayer thin-film MCM-D. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1770-1776.	2.9	15
46	Add-on Cu/SiLK/sup TM/ module for high Q inductors. IEEE Electron Device Letters, 2002, 23, 173-175.	2.2	15
47	Sensitivity Analysis of Broadband On-Wafer Dielectric Spectroscopy of Yeast Cell Suspensions up to 110 GHz. IEEE Microwave and Wireless Components Letters, 2015, 25, 199-201.	2.0	15
48	Metamaterial inspired miniaturized SIW resonator for sensor applications. Sensors and Actuators A: Physical, 2018, 283, 313-316.	2.0	15
49	A 20-GHz Microwave Miniaturized Ring Resonator for nL Microfluidic Sensing Applications. , 2019, 3, 1-4.		15
50	Numerical modeling of two microwave sensors for biomedical applications. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2021, 34, .	1.2	15
51	A Robust Semantic Overlay Network for Microgrid Control Applications. Lecture Notes in Computer Science, 2008, , 101-123.	1.0	15
52	A novel measurement technique for amplifier-type active antennas. , 0, , .		14
53	Accurate measurement and characterization up to 50 GHz of CPW-based integrated passives in microwave MCM-D. , 0, , .		13
54	High Q inductor add-on module in thick Cu/SiLK/sup TM/ single damascene. , 2001, , .		13

#	Article	IF	CITATIONS
55	Distributed inductance and resistance per-unit-length formulas for VLSI interconnects on silicon substrate. Microwave and Optical Technology Letters, 2001, 30, 302-304.	0.9	13
56	Wafer-level package interconnect options. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2006, 14, 654-659.	2.1	13
57	A surface micromachined electrostatically tunable film bulk acoustic resonator. Sensors and Actuators A: Physical, 2006, 126, 436-446.	2.0	13
58	RF Class-E Power Amplifier Design Based on a Load Line-Equivalent Capacitance Method. IEEE Microwave and Wireless Components Letters, 2008, 18, 206-208.	2.0	13
59	Vector two-tone measurements for validation of non-linear microwave FinFET model. Microelectronic Engineering, 2010, 87, 2008-2013.	1.1	13
60	Noise figure measurement of receiving active microstrip antennas. Electronics Letters, 1993, 29, 1594.	0.5	12
61	Surface wave losses of rectangular microstrip antennas. Electronics Letters, 1989, 25, 696-697.	0.5	11
62	Ar Implantation, a Passivation Technique for High-Resistivity Silicon within the MCM-D Technology. , 2006, , .		11
63	Thin-film MCM-D technology with through-substrate vias for the integration of 3D SiP modules. , 2008, , .		11
64	Detailed analysis of parasitic loading effects on power performance of GaN-on-silicon HEMTs. Solid-State Electronics, 2009, 53, 185-189.	0.8	11
65	LIMITATIONS OF APPROXIMATIONS TOWARDS FOURIER OPTICS FOR INDOOR ACTIVE MILLIMETER WAVE IMAGING SYSTEMS. Progress in Electromagnetics Research, 2010, 109, 245-262.	1.6	11
66	Simple and Scalable Methodology for Equivalent Circuit Modeling of IC Packages. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 303-315.	1.4	11
67	New Methods for Series-Resistor Calibrations on Substrates With Losses Up to 110 GHz. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 4287-4297.	2.9	11
68	Modal analysis based equivalent circuit model and its verification for a single cMUT cell. Journal of Micromechanics and Microengineering, 2017, 27, 035001.	1.5	11
69	A General Line–Line Method for Dielectric Material Characterization Using Conductors With the Same Cross-Sectional Geometry. IEEE Microwave and Wireless Components Letters, 2018, 28, 356-358.	2.0	11
70	A 20 GHz microwave heater for digital microfluidic. International Journal of Microwave and Wireless Technologies, 2017, 9, 1591-1596.	1.5	11
71	Integrals for the mutual coupling between dipoles or between slots: with or without complex conjugate?. IEEE Transactions on Antennas and Propagation, 1988, 36, 1375-1381.	3.1	10
72	Broadband active microstrip array elements. Electronics Letters, 1991, 27, 2378.	0.5	10

#	Article	IF	Citations
73	Measurement technique for active microstrip antennas. Electronics Letters, 1993, 29, 1646.	0.5	10
74	The influence of packaging materials on RF performance. Microelectronics Reliability, 2003, 43, 351-357.	0.9	10
75	Filter-through device: a distributed RF-MEMS capacitive series switch. Journal of Micromechanics and Microengineering, 2005, 15, S97-S102.	1.5	10
76	Circuits and systems engineering education through interdisciplinary team-based design projects. , 2011, , .		10
77	Biosensor Using a One-Port Interdigital Capacitor: A Resonance-Based Investigation of the Permittivity Sensitivity for Microfluidic Broadband Bioelectronics Applications. Electronics (Switzerland), 2020, 9, 340.	1.8	10
78	Fast and accurate analysis of the multiconductor interconnects. Microelectronic Engineering, 2001, 55, 37-42.	1.1	9
79	A direct Ku-band linear subharmonically pumped BPSK and I/Q vector modulator in multilayer thin-film MCM-D. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1374-1382.	2.9	9
80	Characteristic impedance extraction using calibration comparison. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 2573-2579.	2.9	9
81	Microstrip thin-film MCM-D technology on high-resistivity silicon with integrated through-substrate vias. , 2007, , .		9
82	On the evaluation of the high-frequency load line in active devices. International Journal of Microwave and Wireless Technologies, 2011, 3, 19-24.	1.5	9
83	An FPGA-based digital predistorter for RF power amplifier linearization using cross-memory polynomial model. , 2014, , .		9
84	SPICE analysis of RL and RC snubber circuits for synchronous buck DC-DC converters. , 2015, , .		9
85	Uniplanar microwave heater for digital microfluidics. , 2017, , .		9
86	A Microwave Platform for Reliable and Instant Interconnecting Combined with Microwave-Microfluidic Interdigital Capacitor Chips for Sensing Applications. Sensors, 2020, 20, 1687.	2.1	9
87	Novel Fabrication Process for Integration of Microwave Sensors in Microfluidic Channels. Micromachines, 2020, 11, 320.	1.4	9
88	Complementary Split-Ring Resonator With Improved Dielectric Spatial Resolution. IEEE Sensors Journal, 2021, 21, 4543-4552.	2.4	9
89	Improved HEMT model for low phase-noise InP-based MMIC oscillators. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 1583-1585.	2.9	8
90	Novel approach for a design-oriented measurement-based fully scalable coplanar waveguide transmission line model. IET Microwaves Antennas and Propagation, 2001, 148, 227.	1.2	8

#	Article	IF	CITATIONS
91	Modeling and characterization of the polymer stud grid array (PSGA) package: electrical, thermal and thermo-mechanical qualification. IEEE Transactions on Electronics Packaging Manufacturing, 2003, 26, 54-67.	1.6	8
92	Package level interconnect options., 2005,,.		8
93	High-resistivity silicon surface passivation for the thin-film MCM-D technology. , 0, , .		8
94	Fast Modeling and Optimization of Active Millimeter Wave Imaging Systems. , 2006, , .		8
95	Fully micromachined W-band rectangular waveguide to grounded coplanar waveguide transition. IET Microwaves, Antennas and Propagation, 2012, 6, 533.	0.7	8
96	Dielectric characterization of biological liquids and tissues up to 110 GHz using an LTCC CPW sensor. , 2013, , .		8
97	Liquid measurements at microliter volumes using 1-port coplanar interdigital capacitor., 2017,,.		8
98	Design and Comparison of Resonant and Non-Resonant Single-Layer Microwave Heaters for Continuous Flow Microfluidics in Silicon-Glass Technology. Energies, 2020, 13, 2635.	1.6	8
99	Impact of Measurement Uncertainty on Modeling of Dielectric Relaxation in Aqueous Solutions. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4082-4092.	2.9	8
100	Matching network design of microstrip antennas with simplified real frequency technique. Electronics Letters, 1991, 27, 2295.	0.5	7
101	A new approach for the calculation of line capacitances of two-layer IC interconnects. Microwave and Optical Technology Letters, 2000, 27, 297-302.	0.9	7
102	Integrated Wilkinson Power Dividers in C-, Ku- and Ka-Band in Multi-Layer Thin-Film MCM-D., 2000,,.		7
103	High Q inductors and capacitors on Si substrate. , 0, , .		7
104	Characterisation, Modelling and Design of Bond-Wire Interconnects for Chip-Package Co-Design., 2003,,.		7
105	RF evaluation of low-cost leadless packages and development of distributed electrical models. , 0, , .		7
106	Modelling of the RF self-actuation of electrostatic RF-MEMS devices. , 0, , .		7
107	GaN power amplifier design based on artificial neural network modelling. , 2007, , .		7
108	A novel indoor localization system for healthcare environments. , 2012, , .		7

#	Article	lF	Citations
109	Broadband dielectric spectroscopy calibration for microliter samples of biogenic liquid., 2014,,.		7
110	Straightforward modeling of dynamic I-V characteristics for microwave FETs. International Journal of RF and Microwave Computer-Aided Engineering, 2014, 24, 109-116.	0.8	7
111	Microwave heater at 20 GHz for nanoliter scale digital microfluidics. , 2015, , .		7
112	Novel Broadband Transition for Rectangular Dielectric Waveguide to Planar Circuit Board at D Band. , 2018, , .		7
113	Time of Arrival Based on Chirp Pulses as a means to Perform Localization in IEEE 802.15.4a Wireless Sensor Networks. Advances in Electrical and Computer Engineering, 2010, 10, 65-70.	0.5	7
114	New analytic expressions for mutual inductance and resistance of coupled interconnects on lossy silicon substrate. , $0$ , , .		6
115	On the modelling of multiconductor multilayer systems for interconnect applications. Microelectronics Journal, 2001, 32, 351-355.	1.1	6
116	New closed-form formula for frequency-dependent resistance and inductance of IC interconnects on silicon substrate. Journal of Micromechanics and Microengineering, 2001, 11, 283-286.	1.5	6
117	Accurate analytic expressions for frequency-dependent inductance and resistance of single on-chip interconnects on conductive silicon substrate. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 293, 195-198.	0.9	6
118	A Measurement-Based Multisine Design Procedure. , 2006, , .		6
119	RF-MEMS technology platform for agile mobile and satellite communications. , 2006, , .		6
120	$60~\mathrm{GHz}$ ultra low phase noise sige common base oscillator using a wirebond coupled mcm integrated micromachined cavity resonator. , $2008,$ , .		6
121	Horizontal Integration of Cavity Filters on High-Resistivity Silicon Thin-Film Technology. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 2893-2901.	2.9	6
122	Millimeter wave imaging system modeling: spatial frequency domain calculation versus spatial domain calculation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 131.	0.8	6
123	Design and reliability evaluation of passive HF RFID systems in metal environments. , 2011, , .		6
124	Optimization of an RFID loop antenna with smart goal functions. , 2012, , .		6
125	Design of a visible light communication transmitter for the evaluation of a wide range of modulation techniques. , 2013, , .		6
126	Broadband dielectric spectroscopy calibration using calibration liquids with unknown permittivity. , 2014, , .		6

#	Article	IF	CITATIONS
127	Characterization of a novel microwave heater for continuous flow microfluidics fabricated on high-resistivity silicon. , 2016, , .		6
128	An Improved Line-Reflect-Reflect-Match Calibration With an Enhanced Load Model. IEEE Microwave and Wireless Components Letters, 2017, 27, 97-99.	2.0	6
129	Coplanar waveguide for dielectric material measurements at frequencies from 140 GHz to 220 GHz. , 2017, , .		6
130	Broadband dielectric spectroscopy measurements of liquids combining interdigital capacitor and coplanar waveguide. , 2017, , .		6
131	Improved Estimation of Radiated Fields of Unintentional Radiators by Correction of the Impedance Mismatch Between a Transverse Electromagnetic Cell and a Hybrid Coupler. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1717-1725.	1.4	6
132	A Simplified Dielectric Material Characterization Algorithm for Both Liquids and Solids. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1639-1646.	1.4	6
133	DC, LF dispersion and hf characterisation of short time stressed inp based LM-HEMTS. Microelectronics Reliability, 1996, 36, 1911-1914.	0.9	5
134	Compensating Differences Between Measurement and Calibation Wafer in Probe Tip Calibrations - Deembedding of Line Parameters. , 1998, , .		5
135	Computation of capacitance matrix for integrated circuit interconnects using semi-analytic Green's function method. The Integration VLSI Journal, 2000, 30, 55-63.	1.3	5
136	Closed form inductance calculation for integrated spiral inductor compact modeling., 0,,.		5
137	Accurate RF Electrical Characterization of CSPs Using MCM-D Thin Film Technology. IEEE Transactions on Advanced Packaging, 2004, 27, 203-212.	1.7	5
138	Extending on-die wiring hierarchy with wafer level packaging concepts., 0, , .		5
139	Influence of measurement uncertainties on model uncertainties: practical case of a SiGe HBT., 0,,.		5
140	Compact broadband resistance model for microstrip transmission lines. , 0, , .		5
141	Detecting variations of small-signal equivalent-circuit model parameters in the Si/SiGe HBT process with ANN. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 102-108.	0.8	5
142	Microstrip thin-film MCM-D technology on high-resistivity silicon with integrated through-substrate vias. , 2007, , .		5
143	Wide-band hybrid power amplifier design using GaN FETs. International Journal of RF and Microwave Computer-Aided Engineering, 2008, 18, 536-542.	0.8	5
144	Black box modelling of the Op-Amp including switching power supply on effect. AEU - International Journal of Electronics and Communications, 2008, 62, 544-548.	1.7	5

#	Article	IF	Citations
145	Simultaneous measurement of high and low frequency response of non-linear microwave circuits. , 2008, , .		5
146	Ultra-Miniaturized Integrated Cavities on High-Resistivity Silicon Thin-Film MCM-D Technology. , 2008, , .		5
147	Millimeter wave on-wafer measurement of yeast cell suspension using a CPW test fixture in LCP technology. , 2013, , .		5
148	Influence of Bluetooth Low Energy on WIFI Communications and Vice Versa. Lecture Notes in Electrical Engineering, 2014, , 205-216.	0.3	5
149	Automated design of an HF RFID loop antenna based on parametric geometry modification. , 2014, , .		5
150	Millimeter wave planar transition from plastic rectangular waveguide to $1\ \text{mm}$ coax. , $2016, \ldots$		5
151	A Unified Approach for Reformulations of LRM/LRMM/LRRM Calibration Algorithms Based on the T-Matrix Representation. Applied Sciences (Switzerland), 2017, 7, 866.	1.3	5
152	A Multiline Multimaterial Calibration Method for Liquid Characterization. IEEE Microwave and Wireless Components Letters, 2018, 28, 732-734.	2.0	5
153	High-Sensitivity Large-Throughput Broadband Tunable Microwave Wear Debris Sensing System. IEEE Sensors Journal, 2022, 22, 304-314.	2.4	5
154	Characteristic impedance of stripline. Electronics Letters, 1987, 23, 930.	0.5	4
155	Simple transmission line feed model for microstrip antennas in two-sided structure with coaxial probe coupling. Electronics Letters, 1992, 28, 1722.	0.5	4
156	A new technique for in-fixture calibration using standards of constant length. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 1318-1320.	2.9	4
157	Simulations and measurements of capacitance in dielectric stacks and consequences for integration. Microelectronic Engineering, 2001, 55, 29-35.	1.1	4
158	Accurate RF electrical characterisation of CSPs using MCM-D thin film technology. , 0, , .		4
159	Extraction of small-signal equivalent circuit model parameters for Si/SiGe HBT using S-parameters measurements and one geometrical information. AEU - International Journal of Electronics and Communications, 2006, 60, 567-572.	1.7	4
160	Millimeter wave imaging: System modeling and phenomena discussion. , 2007, , .		4
161	DISCUSSION ON VALIDITY OF HADAMARD SPECKLE CONTRAST REDUCTION IN COHERENT IMAGING SYSTEMS. Progress in Electromagnetics Research, 2010, 104, 125-143.	1.6	4
162	A de-embedding procedure oriented to the determination of FET intrinsic I-V characteristics from high-frequency large-signal measurements. , $2010$ , , .		4

#	Article	IF	CITATIONS
163	Nonlinear deembedding of microwave large-signal measurements. , 2012, , .		4
164	Waveforms-based large-signal identification of transistor models. , 2012, , .		4
165	60 GHz low noise amplifiers with 1 kV CDM protection in 40 nm LP CMOS. , 2012, , .		4
166	A 90 GHz liquid sensing substrate integrated cavity resonator in LTCC for microfluidic sensing applications. , $2014, \ldots$		4
167	Evaluation of angle of arrival estimation for localization in multiple indoor environments. , 2014, , .		4
168	Matlab based platform for the evaluation of modulation techniques used in VLC. , 2014, , .		4
169	EMC-oriented design of output stage of synchronous buck converter. , 2017, , .		4
170	Investigation of thermal effect caused by different input power of biosensor using a novel microwave and optical sensing system for biological liquids. , 2017, , .		4
171	Yeast Cell Growth Monitoring Using Microwave Measurements Correlated to Optical Absorbance. , 2018, , .		4
172	An impedance matched interdigital capacitor at 1.5 GHz for microfluidic sensing applications. Sensors and Actuators A: Physical, 2021, 330, 112867.	2.0	4
173	A 4 × 4 Array of Complementary Split-Ring Resonators for Label-Free Dielectric Spectroscopy. Chemosensors, 2021, 9, 348.	1.8	4
174	Current antenna research at K. U. Leuven. IEEE Antennas and Propagation Magazine, 1991, 33, 30-42.	1.2	3
175	Broadband circularly polarised microstrip antenna in two-sided structure with coaxial probe coupling. Electronics Letters, 1993, 29, 310.	0.5	3
176	Simultaneous Power and Noise Optimization of Active Circulators. , 1998, , .		3
177	Modelling and characterisation of the polymer stud grid array (PSGA) package: electrical, thermal and thermo-mechanical qualification. , 0, , .		3
178	On the capacitance and conductance calculations of integrated-circuit interconnects with thick conductors. Microwave and Optical Technology Letters, 2001, 30, 335-339.	0.9	3
179	Identifying error-box parameters from the twelve-term vector network analyzer error model. , 0, , .		3
180	A surface micromachined tunable film bulk acoustic resonator. , 2004, 5455, 166.		3

#	Article	IF	CITATIONS
181	60 GHz Si micromachined cavity resonator on MCM-D., 0,,.		3
182	Constant Impedance Scaling Paradigm for Scaling LC transmission lines. , 0, , .		3
183	Low-Cost CMOS-Based Receive Modules for 60 GHz Wireless Communication. , 2009, , .		3
184	Evaluation of lookup-table non-quasi-static nonlinear models at microwave and mm-wave frequencies, , 2010, , .		3
185	Efficient Dithering Technique With Periodic Waveforms for RF Test and Characterization. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 3998-4007.	2.9	3
186	Microstrip to buried waveguide probe feeds for V- and W-band in LTCC technology. , 2013, , .		3
187	A test bench for a VLP system using CDMA as Multiple Access Technology. , 2015, , .		3
188	A general multi-mode lumped equivalent circuit model for circular cMUT cells., 2016,,.		3
189	Broadband interferometric dielectric spectroscopy for aqueous solutions., 2017,,.		3
190	Reliable, Fast and Reusable Interfacing of High-Frequency Signals to Disposable Lab-on-a-Chip Devices. , 2019, , .		3
191	Flexible, Segmented Tubular Design With Embedded Complementary Split-Ring Resonators for Tissue Identification. IEEE Sensors Journal, 2021, 21, 16024-16032.	2.4	3
192	Complementary Split-Ring Resonator for Microwave Heating of µL Volumes in Microwells in Continuous Microfluidics. Chemosensors, 2021, 9, 184.	1.8	3
193	Controlled Measurement Setup for Ultra-Wideband Dielectric Modeling of Muscle Tissue in 20–45 °C Temperature Range. Sensors, 2021, 21, 7644.	2.1	3
194	Fully Automated Electrically Controlled Tunable Broadband Interferometric Dielectric Spectroscopy for Aqueous Solutions. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 532-541.	2.9	3
195	Introducing Telecommunications by System Design. , 1994, , .		2
196	Scaleable non-linear and bias-dependent low-frequency noise model for improved InP HEMT based MMIC oscillator design. , 0, , .		2
197	A Design-Oriented Scaleable MMIC Spiral Inductor Model. , 1998, , .		2
198	Development of a frequency-domain simulation tool and nonlinear device model from vectorial large-signal measurements. International Journal of RF and Microwave Computer-Aided Engineering, 2000, 10, 63-72.	0.8	2

#	Article	lF	Citations
199	HEMT parameter extraction combining optimization and direct parasitic extraction. International Journal of RF and Microwave Computer-Aided Engineering, 2000, 10, 81-90.	0.8	2
200	Design of a direct Ku-band linear subharmonically pumped I/Q vector modulator in multi-layer thin-film MCM-D. , 0, , .		2
201	Design and characterization of CPW feedthroughs in multi-layer thin-film MCM-D., 0,,.		2
202	Design of distributed elements in Ku-band in coplanar-waveguide based MCM-D., 0,,.		2
203	Admittance matrix calculations of on-chip interconnects on lossy silicon substrate using multilayer Green's function. , 0, , .		2
204	Frequency-dependent mutual resistance and inductance formulas for coupled IC interconnects on an Si-SiO2 substrate. The Integration VLSI Journal, 2001, 30, 133-141.	1.3	2
205	Distributed circuit models for near-CSP interconnects. , 0, , .		2
206	On the frequencyâ€dependent line capacitance and conductance of onâ€chip interconnects on lossy silicon substrate. Microelectronics International, 2002, 19, 11-18.	0.4	2
207	Electrical characterisation of BGA package for RF applications. Microelectronics International, 2002, 19, 13-18.	0.4	2
208	S-parameter reciprocity relations, normalization, and thru-line-reflect error box completion. International Journal of RF and Microwave Computer-Aided Engineering, 2002, 12, 418-427.	0.8	2
209	Frequency-dependent expressions for inductance and resistance of microstrip line on silicon substrate. Microwave and Optical Technology Letters, 2002, 33, 349-352.	0.9	2
210	New modeling approach of onâ€chip interconnects for RF integrated circuits in CMOS technology. Microelectronics International, 2003, 20, 41-44.	0.4	2
211	Compact and high-accuracy RF MEMS capacitive series devices. , 2005, 5717, 55.		2
212	Integration of silicon etched waveguides with MCM-D for V- and W-band. , 2005, , .		2
213	Design and fabrication of a surface micromachined frequency tunable film bulk acoustic resonator with an extended electrostatic tuning range., 0, , .		2
214	Accurate broadband parameter extraction methodology for s-parameter measurements. , 0, , .		2
215	Analysis and Modeling of Power Grid Transmission lines. , 2006, , .		2
216	Four-port Deembedding Technique for FET Devices Mounted in Hybrid Test Fixture. , 2006, , .		2

#	Article	lF	Citations
217	Black Box Modelling at the Circuit level: Op-Amp as a Case Study. , 0, , .		2
218	RF-MEMS technology platform for agile mobile and satellite communications. , 2006, , .		2
219	Efficient Link Architecture for On-Chip Serial links and Networks. , 2006, , .		2
220	Characterization of speckle/despeckling in active millimeter wave imaging systems using a first order 1.5D model., 2006, 6194, 60.		2
221	Doherty amplifier design for 3.5 GHz WiMAX considering load line and loop stability. , 2008, , .		2
222	Non-quasi-static nonlinear model for FinFETs using higher-order sources. , 2008, , .		2
223	Comparison of optical and millimeter wave imaging on speckle. , 2008, , .		2
224	Complete characterisation of LF and RF dynamics at device terminals within microwave circuits. , 2008, , .		2
225	Millimeter wave micromachined cavity resonators on MCM-D: Oscillator-resonator co-design and packaging considerations. , 2009, , .		2
226	Impact of sampling domain and number of samples on the accuracy of large-signal multisine measurement-based behavioral model. International Journal of RF and Microwave Computer-Aided Engineering, 2010, 20, 374-381.	0.8	2
227	Experimental investigation of LF dispersion and IMD asymmetry within GaN based HEMT technology. , 2010, , .		2
228	Waveguide tuner stabilized ultra low phase noise 60 GHz SiGe:C oscillator MMIC., 2011,,.		2
229	Temperature controlled measurement setup for permittivity extraction of water up to 40 GHz from 10 to 40 °C., 2014,,.		2
230	A 2.4 GHz phase locked loop for a linear phased antenna array. , 2014, , .		2
231	FEM simulation and measurement validation of a cMUT cell. , 2014, , .		2
232	Using a decision tree for real-time distributed indoor localization in healthcare environments. , 2014, , .		2
233	Radiation of input decoupling network typically used in switching DC-DC converters., 2015,,.		2
234	Performance simulations of a 2.4 GHz indoor angle of arrival system for multipath components. , 2015, , .		2

#	Article	lF	CITATIONS
235	A PCB-Embedding Scheme for LCP Ribbon Waveguide at D-band. , 2018, , .		2
236	Microfluidic Biosensor for Bioengineering: High-frequency Equivalent-Circuit Modeling of Interdigital Capacitor. , $2019, \ldots$		2
237	Electrically Controlled Tunable Broadband Interferometric Dielectric Spectroscopy: Groundwork for Single Cell Analysis. , $2019$ , , .		2
238	Microwave Characterization of Liquid Mixtures with a Miniaturized Interdigital Sensor., 2019, , .		2
239	A transmission line model for arrays of rectangular microstrip antennas. Annales Des Telecommunications/Annals of Telecommunications, 1989, 44, 549-554.	1.6	1
240	Optical links for installation of a GSM base transceiver station. , 0, , .		1
241	HEMT MMIC-circuits for millimetre-wave telecommunications systems. , 0, , .		1
242	Microwave Design as a Study Method. , 1994, , .		1
243	Free space dyadic Green's function applied to the full-wave numerical analysis of planar transmission lines and dielectric waveguides. IET Microwaves Antennas and Propagation, 1996, 143, 328.	1.2	1
244	Effect of capture and escape phenomena in Monte Carlo technique on the simulation of the nonlinear characteristics in high electron mobility transistors. Journal of Applied Physics, 1997, 82, 6312-6318.	1.1	1
245	Optimization of nMOS high-frequency transistor characteristics for application in MMICs., 0, , .		1
246	Optimal Design Parameters for High Performant InP HEMT Frequency Doublers. , 1998, , .		1
247	Evaluation of non-linear modelling techniques for MOSFETs based on vectorial large-signal measurements., 0,,.		1
248	Design of CPW Lange Couplers in Multi-Layer Thin-Film MCM-D., 2000,,.		1
249	Accurate frequency-dependent formula for series line impedance of microstrip on lossy silicon substrate., 0,,.		1
250	A direct Ku-band linear subharmonically pumped BPSK and I/Q vector modulator in multi-layer thin-film MCM-D. , 0, , .		1
251	On the mutual capacitance and inductance of a shielded interconnect four-line system. Journal of Micromechanics and Microengineering, 2001, 11, 161-164.	1.5	1
252	Simple and accurate expressions for distributed mutual inductance and resistance of semiconducting interconnects. Applied Physics Letters, 2001, 79, 1378-1380.	1.5	1

#	Article	IF	Citations
253	Some measurement results for frequency-dependent inductance of IC interconnects on a lossy silicon substrate. IEEE Electron Device Letters, 2002, 23, 103-104.	2.2	1
254	Highly accurate closed form approximation for frequency-dependent line impedance of a lossy silicon substrate IC interconnect. Microelectronic Engineering, 2002, 60, 31-37.	1.1	1
255	On the frequency-dependent line admittance of VLSI interconnect lines on silicon-based semiconductor substrates. Microelectronics Journal, 2002, 33, 449-458.	1.1	1
256	A physics-based VLSI interconnect model including substrate and conductor skin effects. Semiconductor Science and Technology, 2004, 19, 516-518.	1.0	1
257	GaN FET's non-linear model constructed by adaptive multi-bias S-parameter measurements., 2005,,.		1
258	MEMS capacitive series switches: optimal test vehicles for the RF self-biasing phenomenon. , 0, , .		1
259	RF vector measurement test-bench for evaluation of behavioral model accuracy under realistic excitation., 2006,,.		1
260	Novel Effa-Based Thin-Film RF-MEMS Technology. , 2007, , .		1
261	A new method to characterize substrate conductivity. , 2007, , .		1
262	WiMAX class AB and class E power amplifier design using equivalent capacitance concept. International Journal of RF and Microwave Computer-Aided Engineering, 2008, 18, 543-551.	0.8	1
263	Efficiency Enhancement of Harmonic-Tuned GaN Power Amplifier Using Doherty like Load Modulation. Compound Semiconductor Integrated Circuit Symposium (CSICS), IEEE, 2008, , .	0.0	1
264	Inexpensive solution to double RF bandwidth of vector signal generator. , 2008, , .		1
265	Doherty amplifier design for 3.5 GHz WiMAX considering load line and loop stability. , 2008, , .		1
266	A low-cost linear upconverter to extend frequency range of vector signal generator., 2011,,.		1
267	Analysis of the Realistic Resolution with Angle of Arrival for Indoor Positioning., 2011,,.		1
268	$Octave-bandwidth\ band-pass\ filter\ with\ high\ selectivity\ and\ wide\ highly-suppressed\ stopband.\ ,\ 2012,\ ,\ .$		1
269	Behavioral modeling approach for array of amplifiers in active antenna array system. , 2013, , .		1
270	Circuit modelling of printed circuit boards for a DC-DC converter design. , 2014, , .		1

#	Article	IF	Citations
271	Micromechanical ring resonators with a 2D phononic crystal support for mechanical robustness and providing mask misalignment tolerance. , 2015, , .		1
272	Influence of MAI in a CDMA VLP system. , 2015, , .		1
273	Extraction of smallâ€signal model parameters of Si/SiGe heterojunction bipolar transistor using least squares support vector machines. Electronics Letters, 2015, 51, 1821-1823.	0.5	1
274	Capacitive micromachined ultrasonic transducers for acoustic manipulation. , 2015, , .		1
275	Real-Time kHz to GHz Monitoring of Incubated Yeast Cell Growth Using Interdigitated Capacitors. , 2018, , .		1
276	Multisegment Multiconductor Transmission Line Model of High-Current Card-Edge Connectors With Analytically Calculated Model Parameters. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 538-547.	1.4	1
277	Dielectric-based temperature sensing of nanoliter water samples with a post-processing tuned matching network. Measurement Science and Technology, 2020, 31, 115104.	1.4	1
278	Broadband active circularly polarized microstrip antennas., 1993,,.		0
279	InP based heterostructure for medium power applications. , 0, , .		0
280	Frequency-Domain Simulation Tool Dedicated for Frequency-Domain Based Non-Linear Models. , 1998, , .		0
281	Accurate and Easily Extractable Equivalent Circuit Models for Slotline and NRD Resonators. , 1999, , .		O
282	Power Amplifier Linearisation Using a Straightforward Technology Independent Method Based on Vectorial Large-Signal Measurements. , 1999, , .		0
283	The influence of the bumping height on the performance of flip-chipped CPW Lange couplers. Microwave and Optical Technology Letters, 2001, 29, 263-267.	0.9	O
284	New approach for calculation of line parameters of IC interconnects. Microelectronics International, 2001, 18, 29-31.	0.4	0
285	Simple and efficient approach for shunt admittance parameters calculations of VLSI on-chip interconnects on semiconducting substrate. , 0, , .		O
286	Frequency-dependent closed-form expressions for inductance and resistance of a single interconnect on a silicon substrate. Journal Physics D: Applied Physics, 2002, 35, L18-L20.	1.3	0
287	A CAD-oriented analytical model for frequency-dependent series resistance and inductance of microstrip on-chip interconnect on silicon substrate. Microprocessors and Microsystems, 2002, 26, 45-48.	1.8	0
288	Highly Accurate Quasi-Static Modeling of Coupled Interconnects in CMOS Technology. Analog Integrated Circuits and Signal Processing, 2002, 30, 249-252.	0.9	0

#	Article	IF	CITATIONS
289	High frequency modelling approach of onâ€chip interconnects considering conductor and substrate skin effects. Microelectronics International, 2004, 21, 35-38.	0.4	0
290	Integration of high-Q resonators with MCM-D for millimeter wave applications. , 0, , .		0
291	Harmonic orthogonality condition in RF Class-E Power Amplifiers. , 2006, , .		0
292	Large-signal behavioural modelling - from transistor to amplifier. , 2006, , .		0
293	Accurate Large-Signal Time-Domain Behavioral Model for Multi-Signal Analysis. , 2006, , .		0
294	Wideband Large-Signal RF Measurements Applied to Behavioral Model Extraction., 2006,,.		0
295	System modelling for millimeter-wave imaging systems using a 2.5D calculation method., 2007,,.		0
296	Three-stage Doherty amplifier for WiMAX application. , 2008, , .		0
297	Simple and accurate approaches to implement the complex trans-conductance suited for time-domain simulators for small-signal and large-signal table-based models. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2010, 23, n/a-n/a.	1.2	0
298	Influence of antenna's directivity in indoor mmW/THz SAR imaging systems: A system level simulation-based study. , 2011, , .		0
299	Slot coupled patch antenna in MCM-D for millimeter wave detector matrix applications. International Journal of Microwave and Wireless Technologies, 2012, 4, 407-412.	1.5	0
300	Possible improvements of exisiting indoor MMW focal plane imaging systems. , 2012, , .		0
301	Process tolerant design of baw resonators via hole engineering. , 2013, , .		0
302	EuMW Special Issue. International Journal of Microwave and Wireless Technologies, 2013, 5, 195-196.	1.5	0
303	Electromagnetic-Analysis-Based Transistor De-embedding and Related Radio-Frequency Amplifier Design., 2014,, 317-383.		0
304	A bottom-up cell modeling strategy using broadband microwave and millimeter wave dielectric spectroscopy. , 2014, , .		0
305	Resolving positions of coherent sources using linear antenna arrays at 2.4 GHz., 2014, , .		0
306	Generic highâ€frequency smallâ€signal lookâ€up table model extraction for Si–Ge heterojunction bipolar transistors. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 923-934.	1.2	O

#	Article	IF	CITATIONS
307	An inexpensive backside-sensing coplanar waveguide sensor for characterization of liquids and solids up to 40 GHz., $2014$ ,,.		О
308	Radiation characteristics of small loop antenna above perforated finite image plane., 2015,,.		0
309	Optimized shape of a parametric designed HF loop antenna. , 2015, , .		О
310	Study of broadband propagation characteristic of quasi-fractal phononic crystal for enhanced sensing applications. , $2015, \ldots$		0
311	Radiation of Small Loop Above Finite Image Plane. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 935-938.	1.4	O
312	Radiation of synchronous buck converter modelled by three magnetic moments and combined with SPICE simulations. , $2016, \ldots$		0
313	Microwave determination of liquid mixing ratio for microfluidics. , 2018, , .		O
314	Broadband Determination of Liquid Mixing Ratio through One-Port Microwave Measurements. , 2019, , .		0
315	Microwave Dielectric Sensing for Sample Preparation in Digital Microfluidics. , 2019, , .		O
316	S-Parameter Measurements of High-Temperature Superconducting and Normal Conducting Microwave Circuits at Cryogenic Temperatures. European Physical Journal Special Topics, 1996, 06, C3-397-C3-401.	0.2	0
317	Non-Invasive Microwave Hyperthermia and Simultaneous Temperature Monitoring with a Single Theranostic Applicator <sup>*</sup> ., 2021, 2021, 1314-1317.		O
318	Analysis of Microwave Heating Devices for Microfluidics., 2022,,.		0
319	Microwave Interferometric on-chip Measurement of the Collagen Gel. , 2022, , .		O