

Nuno Borges De Carvalho

List of Publications by Year in descending order

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348
papers

4,385
citations

147566

31
h-index

174990

52
g-index

363
all docs

363
docs citations

363
times ranked

2998
citing authors

#	ARTICLE	IF	CITATIONS
1	A comprehensive explanation of distortion sideband asymmetries. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 2090-2101.	2.9	160
2	Large- and small-signal IMD behavior of microwave power amplifiers. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 2364-2374.	2.9	153
3	A Comprehensive Analysis of IMD Behavior in RF CMOS Power Amplifiers. IEEE Journal of Solid-State Circuits, 2004, 39, 24-34.	3.5	145
4	Wireless Power Transmission: R&D Activities Within Europe. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1031-1045.	2.9	138
5	Nonlinear Device Model of Microwave Power GaN HEMTs for High Power-Amplifier Design. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 2585-2592.	2.9	132
6	On the use of multitone techniques for assessing RF components' intermodulation distortion. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 2393-2402.	2.9	126
7	Boosting the Efficiency: Unconventional Waveform Design for Efficient Wireless Power Transfer. IEEE Microwave Magazine, 2015, 16, 87-96.	0.7	124
8	Maximizing DC power in energy harvesting circuits using multisine excitation. , 2011, , .		118
9	Optimum behavior: Wireless power transmission system design through behavioral models and efficient synthesis techniques. IEEE Microwave Magazine, 2013, 14, 26-35.	0.7	111
10	Prediction of IMD in LDMOS transistor amplifiers using a new large-signal model. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 2834-2842.	2.9	108
11	Implementation Challenges and Opportunities in Beyond-5G and 6G Communication. IEEE Journal of Microwaves, 2021, 1, 86-100.	4.9	85
12	Smart Surfaces: Large Area Electronics Systems for Internet of Things Enabled by Energy Harvesting. Proceedings of the IEEE, 2014, 102, 1723-1746.	16.4	78
13	Quadrature Amplitude Backscatter Modulator for Passive Wireless Sensors in IoT Applications. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1103-1110.	2.9	71
14	Designing multisine excitations for nonlinear model testing. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 45-54.	2.9	67
15	A Selective, Tracking, and Power Adaptive Far-Field Wireless Power Transfer System. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3856-3866.	2.9	66
16	Toward 1G Mobile Power Networks: RF, Signal, and System Designs to Make Smart Objects Autonomous. IEEE Microwave Magazine, 2018, 19, 69-82.	0.7	64
17	Multisine signals for wireless system test and design [Application Notes]. IEEE Microwave Magazine, 2008, 9, 122-138.	0.7	62
18	A Review of Antennas for Indoor Positioning Systems. International Journal of Antennas and Propagation, 2012, 2012, 1-14.	0.7	61

#	ARTICLE	IF	CITATIONS
19	Designing and Testing Software-Defined Radios. IEEE Microwave Magazine, 2010, 11, 83-94.	0.7	58
20	Continuously Power Delivering for Passive Backscatter Wireless Sensor Networks. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3723-3731.	2.9	48
21	Spatial Power Combining of Multi-Sine Signals for Wireless Power Transmission Applications. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1022-1030.	2.9	47
22	Accurate smartphone indoor positioning using a WSN infrastructure and non-invasive audio for TDoA estimation. Pervasive and Mobile Computing, 2015, 20, 29-46.	2.1	43
23	Design and Optimization of Flexible and Coding Efficient All-Digital RF Transmitters. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 625-632.	2.9	42
24	The Sky's the Limit: Key Technology and Market Trends in Satellite Communications. IEEE Microwave Magazine, 2014, 15, 65-78.	0.7	41
25	Challenges in Resource-Constrained IoT Devices: Energy and Communication as Critical Success Factors for Future IoT Deployment. Sensors, 2020, 20, 6420.	2.1	41
26	Extending Reading Range of Commercial RFID Readers. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 633-640.	2.9	40
27	Multitone frequency-domain simulation of nonlinear circuits in large- and small-signal regimes. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 2016-2024.	2.9	38
28	Antennas and circuits for ambient RF energy harvesting in wireless body area networks. , 2013, , .		38
29	Review of the present technologies concurrently contributing to the implementation of the Internet of Things (IoT) paradigm: RFID, Green Electronics, WPT and Energy Harvesting. , 2015, , .		38
30	Bandwidth Analysis of RF-DC Converters Under Multisine Excitation. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 791-802.	2.9	36
31	Energy Harvesting Mechanisms in a Smart City—A Review. Smart Cities, 2021, 4, 476-498.	5.5	36
32	Characterizing the gate-to-source nonlinear capacitor role on GaAs FET IMD performance. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 2344-2355.	2.9	33
33	Perfect Isolation: Dealing with Self-Jamming in Passive RFID Systems. IEEE Microwave Magazine, 2016, 17, 20-39.	0.7	33
34	Four-PAM Modulation of Ambient FM Backscattering for Spectrally Efficient Low-Power Applications. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5909-5921.	2.9	32
35	A Metric for the Quantification of Memory Effects in Power Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 4432-4439.	2.9	31
36	Resistive FET mixer conversion loss and IMD optimization by selective drain bias. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 2382-2392.	2.9	27

#	ARTICLE	IF	CITATIONS
37	Evaluation of Signal-to-Noise and Distortion Ratio Degradation in Nonlinear Systems. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 813-822.	2.9	27
38	Bio-Inspired Hybrid Filter Bank for Software-Defined Radio Receivers. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 1455-1466.	2.9	27
39	Tracking Trains via Radio Frequency Systems. IEEE Transactions on Intelligent Transportation Systems, 2005, 6, 244-258.	4.7	26
40	Nonlinear RF circuits and systems simulation when driven by several modulated signals. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 572-579.	2.9	26
41	A methodology to measure innovation in European Union through the national innovation system. International Journal of Innovation and Regional Development, 2015, 6, 159.	0.1	26
42	Smart Hardware for Smart Objects: Microwave Electronic Circuits to Make Objects Smart. IEEE Microwave Magazine, 2018, 19, 48-68.	0.7	26
43	RFID-Based Wireless Passive Sensors Utilizing Cork Materials. IEEE Sensors Journal, 2015, 15, 7242-7251.	2.4	25
44	Ultrafast Backscatter Modulator With Low-Power Consumption and Wireless Power Transmission Capabilities. IEEE Microwave and Wireless Components Letters, 2017, 27, 1152-1154.	2.0	25
45	A Novel All-Digital Multichannel Multimode RF Transmitter Using Delta-Sigma Modulation. IEEE Microwave and Wireless Components Letters, 2012, 22, 156-158.	2.0	23
46	Compact, Frequency Reconfigurable, Printed Monopole Antenna. International Journal of Antennas and Propagation, 2012, 2012, 1-6.	0.7	23
47	Filling the Spectral Holes: Novel/Future Wireless Communications and Radar Receiver Architectures. IEEE Microwave Magazine, 2014, 15, 45-56.	0.7	23
48	Intermodulation Distortion of Third-Order Nonlinear Systems With Memory Under Multisine Excitations. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 1264-1271.	2.9	22
49	A Low-Power Wakeup Radio for Application in WSN-Based Indoor Location Systems. International Journal of Wireless Information Networks, 2013, 20, 67-73.	1.8	22
50	IQ Impedance Modulator Front-End for Low-Power LoRa Backscattering Devices. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 5307-5314.	2.9	22
51	Design of high order modulation backscatter wireless sensor for passive IoT solutions. , 2016, , .		20
52	Multitone phase and amplitude measurement for nonlinear device characterization. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 1982-1989.	2.9	19
53	Pentagonal Patch-Excited Sectorized Antenna for Localization Systems. IEEE Transactions on Antennas and Propagation, 2012, 60, 1634-1638.	3.1	19
54	A Batteryless RFID Remote Control System. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2727-2736.	2.9	19

#	ARTICLE	IF	CITATIONS
55	Spectrum opportunities for electromagnetic energy harvesting from 350 mhz to 3 ghz. , 2013, , .		19
56	RnProbe: A LoRa-Enabled IoT Edge Device for Integrated Radon Risk Management. IEEE Access, 2020, 8, 203488-203502.	2.6	19
57	Guest Editorial Advanced Circuits and Systems for CR/SDR Applications. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 485-488.	2.7	18
58	Performance improvement of rectifiers for WPT exploiting thermal energy harvesting. Wireless Power Transfer, 2015, 2, 22-31.	0.9	18
59	The Design of a High-Performance Multisine RFID Reader. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 3389-3400.	2.9	18
60	Quasi-optical analysis of a double reflector microwave antenna system. Wireless Power Transfer, 2018, 5, 75-86.	0.9	18
61	A 5-W GaN Doherty Amplifier for <i>Ka</i>-Band Satellite Downlink With 4-GHz Bandwidth and 17-dB NPR. IEEE Microwave and Wireless Components Letters, 2022, 32, 964-967.	2.0	18
62	Evaluating co-channel distortion ratio in microwave power amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1777-1784.	2.9	17
63	Backscatter wireless sensor network with WPT capabilities. , 2015, , .		16
64	Resonant Electrical Coupling: Circuit Model and First Experimental Results. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 2983-2990.	2.9	16
65	Nonlinear Dynamic RF System Characterization: Envelope Intermodulation Distortion Profilesâ€”A Noise Power Ratio-Based Approach. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4256-4271.	2.9	16
66	Diode Power Probe Measurements of Wireless Signals. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 987-997.	2.9	15
67	Electromagnetic energy harvesting-global information database. Transactions on Emerging Telecommunications Technologies, 2014, 25, 56-63.	2.6	15
68	Agile All-Digital RF Transceiver Implemented in FPGA. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 4229-4240.	2.9	15
69	Low-Profile Aperture-Coupled Patch Antenna Array for CubeSat Applications. IEEE Access, 2020, 8, 20473-20479.	2.6	15
70	Detection, Classification and Location of Sources of Partial Discharges Using the Radiometric Method: Trends, Challenges and Open Issues. IEEE Access, 2021, 9, 110787-110810.	2.6	15
71	Harvesting circuits for triboelectric nanogenerators for wearable applications. IScience, 2022, 25, 103977.	1.9	15
72	Characterizing nonlinear RF circuits for their in-band signal distortion. IEEE Transactions on Instrumentation and Measurement, 2002, 51, 420-426.	2.4	14

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73	Low power location protocol based on ZigBee Wireless Sensor Networks. , 2010, , .		14
74	Amplitude and frequency analysis of multi-sine wireless power transfer. , 2015, , .		14
75	When Backscatter Communication Meets Vehicular Networks: Boosting Crosswalk Awareness. IEEE Access, 2020, 8, 34507-34521.	2.6	14
76	The use of intermodulation distortion for the design of passive RFID. , 2007, , .		13
77	Mixed analog-digital instrumentation for software-defined-radio characterization. , 2008, , .		13
78	Evaluation of Nonlinear distortion in ADCs using multisines. , 2008, , .		13
79	Wideband Behavioral Model for Nonlinear Operation of Bandpass Sampling Receivers. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1006-1015.	2.9	13
80	Digital predistortion for RSOAs as external modulators in radio over fiber systems. Optics Express, 2011, 19, 17641.	1.7	13
81	An Agile and Wideband All-Digital SDR Receiver for 5G Wireless Communications. , 2015, , .		13
82	Design of Compact LoRa Devices for Smart Building Applications. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 142-153.	0.2	13
83	A New Volterra Series Based Orthogonal Behavioral Model for Power Amplifiers. , 0, , .		12
84	Increasing the range of wireless passive sensor nodes using multisines. , 2011, , .		12
85	Design and evaluation of multi-band RF energy harvesting circuits and antennas for WSNs. , 2014, , .		12
86	A Broadband Almost-Digital RF Transmitter With an Efficient Power Amplifier. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 1526-1534.	2.9	12
87	Backscatter Communications. IEEE Journal of Microwaves, 2021, 1, 864-878.	4.9	12
88	An OOK Chirp Spread Spectrum Backscatter Communication System for Wireless Power Transfer Applications. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 1838-1845.	2.9	12
89	Evaluation of pulse modulators for all-digital agile transmitters. , 2012, , .		11
90	Enhanced front-end to extend reading range of commercial RFID readers using efficient multisine signals. , 2012, , .		11

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91	Smart floor: Indoor navigation based on RFID. , 2013, , .		11
92	Towards a denser frequency grid in phase measurements using mixer-based receivers. , 2015, , .		11
93	S^{-1} Notation="TeX"> S^{-1} </tex></formula>-Parameters: A Novel Framework for Characterization and Behavioral Modeling of Mixed-Signal Systems. IEEE Transactions on Microwave Theory and Techniques. 2015. 63. 3277-3287.	2.9	11
94	Small antenna design for very compact devices and wearables. IET Microwaves, Antennas and Propagation, 2017, 11, 874-879.	0.7	11
95	Dual-Band High Order Modulation Ambient Backscatter. , 2018, , .		11
96	Time-varying Volterra-series analysis of spectral regrowth and noise power ratio in FET mixers. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 545-549.	2.9	10
97	High efficiency and high linearity power amplifier design. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 453-468.	0.8	10
98	Analog Filter Bank for Cochlear Radio. , 2010, , .		10
99	Measurement setup for linear characterization of a mixed-signal SoC wideband receiver. , 2014, , .		10
100	RF Subsampling Feedback Loop Technique for Concurrent Dual-Band PA Linearization. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 4174-4182.	2.9	10
101	Increasing wireless powered systems efficiency by combining WPT and Electromagnetic Energy Harvesting. , 2016, , .		10
102	Millimeter-Wave Hybrid RF-DC Converter Based on a GaAs Chip for IoT-WPT Applications. IEEE Microwave and Wireless Components Letters, 2021, 31, 787-790.	2.0	10
103	Design and optimization of an antenna with Thermo-Electric Generator (TEG) for autonomous wireless nodes. , 2014, , .		9
104	Passive Sensors for Long Duration Internet of Things Networks. Sensors, 2017, 17, 2268.	2.1	9
105	Harmonic Suppression in Frequency Shifted Backscatter Communications. IEEE Open Journal of the Communications Society, 2020, 1, 990-999.	4.4	9
106	Millimeter-Wave BiCMOS Backscatter Modulator for 5 G-IoT Applications. IEEE Microwave and Wireless Components Letters, 2021, 31, 173-176.	2.0	9
107	Synchronous frequency domain measurements for the extraction of X-parameters in digital to analog transmitters. , 2013, , .		8
108	Textile antenna for electromagnetic energy harvesting for GSM900 and DCS1800 bands. , 2013, , .		8

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109	RFID passive tag antenna for cork bottle stopper. , 2014, , .		8
110	Towards circulator-free multi antenna transmitters for 5G. , 2017, , .		8
111	OFDM-like High Order Backscatter Modulation. , 2018, , .		8
112	Spectrally Efficient 4-PAM Ambient FM Backscattering for Wireless Sensing and RFID Applications. , 2018, , .		8
113	A Convex Optimization Approach for the Design of Supergain Electrically Small Antenna and Rectenna Arrays Comprising Parasitic Reactively Loaded Elements. IEEE Transactions on Antennas and Propagation, 2022, 70, 4674-4682.	3.1	8
114	A corrected microwave multisine waveform generator. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 2659-2664.	2.9	7
115	Modeling nonlinear memory effects on the AM/AM, AM/PM and two-tone IMD in microwave PA circuits. International Journal of RF and Microwave Computer-Aided Engineering, 2006, 16, 13-23.	0.8	7
116	EVM Estimation in RF/Wireless Components. , 2007, , .		7
117	PAPR Evaluation in Multi-Mode SDR Transceivers. , 2008, , .		7
118	Mixed-domain receiver architecture for white space software-defined radio scenarios. , 2012, , .		7
119	Wireless Power Transmission: The Last Cut of Wires... [From the Guest Editors' Desk]. IEEE Microwave Magazine, 2013, 14, 22-24.	0.7	7
120	Automatic characterization of RF DACs for software defined radio applications. , 2014, , .		7
121	Passive UHF RFID enabled temperature sensor tag on cork substrate. , 2014, , .		7
122	RFID Tags on Paper Substrate for Bottle Labelling. Procedia Technology, 2014, 17, 65-72.	1.1	7
123	An Agile Digital Radio System for UHF White Spaces. IEEE Microwave Magazine, 2014, 15, 92-97.	0.7	7
124	A Flexible Research Testbed for C-RAN. , 2015, , .		7
125	Wireless Sensor Tag and Network for Improved Clinical Triage. , 2015, , .		7
126	Evaluation of simultaneous wireless power transfer and backscattering data communication through multisine signals. , 2015, , .		7

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127	Harmonic spaced multisines for efficient wireless power transmission. , 2015, , .		7
128	Agile All-Digital DPD Feedback Loop. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 2476-2484.	2.9	7
129	Wireless energy transfer: Dielectric lens antennas for beam shaping in wireless power-transfer applications. Comptes Rendus Physique, 2017, 18, 78-85.	0.3	7
130	Focus Location Measurement of a Quasioptical Double Reflector System. , 2021, , .		7
131	All Digital Ambient Backscatter System. , 2020, , .		7
132	Design and Characterization of Novel Barium Strontium Titanate Thick Films for Sub-6 GHz RF Applications. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 611-621.	2.9	7
133	Efficient Harmonic Balance Computation of Microwave Circuits' Response to Multi-Tone Spectra. , 1999, , .		6
134	Nonlinear simulation of mixers for assessing system-level performance. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 350-361.	0.8	6
135	Dynamic AM-AM and AM-PM Behavior in Microwave PA Circuits. , 0, , .		6
136	Design of a battery-free wireless sensor node. , 2011, , .		6
137	Indoor guidance system for the blind and the visually impaired. IET Microwaves, Antennas and Propagation, 2012, 6, 1149.	0.7	6
138	A dynamically reconfigurable architecture enabling all-digital transmission for cognitive radios. , 2012, , .		6
139	Novel fine tunable multichannel all-digital transmitter. , 2013, , .		6
140	Intermodulation in active reconfigurable antennas. , 2014, , .		6
141	RFID tags on cork stoppers for bottle identification. , 2014, , .		6
142	Investigation on self-jamming suppression in passive RFID when using multisines to enhance wireless power transfer. , 2015, , .		6
143	Measurement of sensitivity improvement in RFID tags. , 2016, , .		6
144	Enabling a constant and efficient flow of wireless energy for IoT sensors. , 2017, , .		6

#	ARTICLE	IF	CITATIONS
145	Chirp Based Backscatter Modulation. , 2019, , .		6
146	Design of a Cost-Effective Multimodal IoT Edge Device for Building Occupancy Estimation. , 2019, , .		6
147	Over-the-Air Calibration of Active Antenna Arrays Using Multisine. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 431-442.	2.9	6
148	From Macro to Micro: Impact of Smart Turbine Energy Harvesters (STEH), on Environmental Sustainability and Smart City Automation. Sustainability, 2022, 14, 1887.	1.6	6
149	Nonlinear distortion model for VCO-PLL FM transmission systems. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 1999, 46, 348-352.	2.3	5
150	Simulation of nonlinear RF circuits driven by multi-carrier modulated signals. , 2005, , .		5
151	Multi-sine Response of Third Order Nonlinear Systems with Memory Based on Two-tone Measurements. , 2006, , .		5
152	Cross-polarization interference cancelation (XPIC) performance in presence of non-linear effects. , 2010, , .		5
153	Evaluation of an FPGA-based Reconfigurable SoC for All-Digital Flexible RF Transmitters. , 2012, , .		5
154	Spatially-combined multisine transmitter for wireless power transmission. , 2013, , .		5
155	Synchronous Oversampled Measurements for the Extraction of Mixed-Signal Behavioral Models in Digital to Analog Integrated Transmitters. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 3183-3192.	2.9	5
156	Experimental Characterization of Wearable Antennas and Circuits for RF Energy Harvesting in WBANs. , 2014, , .		5
157	Analysis on in-band distortion caused by switching amplifiers. IET Microwaves, Antennas and Propagation, 2014, 8, 351-357.	0.7	5
158	Behavior of resonant electrical coupling in terms of range and relative orientation. , 2014, , .		5
159	High performance microwave point-to-point link for 5G backhaul with flexible spectrum aggregation. , 2015, , .		5
160	WPT related applications enabling Internet of Things evolution. , 2016, , .		5
161	3D antenna for wireless power transmission: Aperture coupled microstrip antenna with dielectric lens. , 2017, , .		5
162	Over the air characterization for 5G massive MIMO array transmitters. , 2017, , .		5

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163	Coexistence Without Interference: Interference Mitigation on DVB-T Reception Caused by Neutral Systems Operating in the Digital Dividend Band. IEEE Microwave Magazine, 2018, 19, 29-43.	0.7	5
164	Optimized DPD Feedback Loop for m-MIMO sub-6GHz Systems. , 2018, , .		5
165	Active Antenna Array Characterization for Massive MIMO 5G Scenarios. , 2018, , .		5
166	Characterisation and implementation of high-order backscatter modulation for IoT applications. IET Microwaves, Antennas and Propagation, 2019, 13, 2636-2640.	0.7	5
167	LTE Signal Detector for LSA Spectrum Sharing Model in Portugal. IEEE Transactions on Vehicular Technology, 2020, 69, 15127-15136.	3.9	5
168	Enabling Multicarrier Backscattering Communications. , 2020, , .		5
169	Harmonic RFID Temperature Sensor Design for Harsh Environments. IEEE Microwave and Wireless Components Letters, 2022, 32, 1239-1242.	2.0	5
170	Simulating Strong Nonlinear Microwave Circuits Driven By a Large Number of Input Tones. , 1997, , .		4
171	Load-impedance selection for maximized large-signal IMD sweet-spot effects. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 434-440.	0.8	4
172	Inferring nonlinear distortion performance of power amplifiers subject to telecommunications signals from two-tone measurements. , 2005, , .		4
173	Bias Networks Impact on the Dynamic AM/AM Contours in Microwave Power Amplifiers. , 2006, , .		4
174	The Impact of Long Term Memory Effects in Wireless QPSK Modulated Signals. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	4
175	Characterization of SNDR degradation in nonlinear wireless transmitters. International Journal of RF and Microwave Computer-Aided Engineering, 2009, 19, 470-480.	0.8	4
176	Enhanced architecture to increase the dynamic range of SDR receivers. , 2011, , .		4
177	Using X-parameters to model diode-based RF power probes. , 2011, , .		4
178	RF and IF channelizers for wide-band sensing in cognitive/Software-Defined-Radio receivers. , 2012, , .		4
179	Electromagnetic geo-referenced footprints for energy harvesting systems. , 2012, , .		4
180	Papoulis-Gerchberg Hybrid Filter Bank receiver for cognitive-/Software-Defined Radio systems. , 2013, , .		4

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181	Modeling and Simulation of a Reflective Semiconductor Optical Amplifier Modulator Using X-Parameters. IEEE Photonics Technology Letters, 2013, 25, 272-274.	1.3	4
182	Wireless power transmission based on resonant electrical coupling. , 2014, , .		4
183	Improving DPD performance by compensating feedback loop impairments in RF ADCs. , 2015, , .		4
184	Parasitic stacked slot patch antenna for DTT energy harvesting. , 2015, , .		4
185	“Energy evaporation”: The new concept of indoor systems for WPT and EH embedded into the floor. , 2015, , .		4
186	Comparison of timebase interpolation methods for traceable, wideband mm-wave communication signals. , 2016, , .		4
187	High-efficiency D-TV energy harvesting system for low-input power. Wireless Power Transfer, 2016, 3, 34-42.	0.9	4
188	Livestock low power monitoring system. , 2016, , .		4
189	All-digital flexible uplink remote radio head for C-RAN. , 2016, , .		4
190	Design of UAV and ground station antennas for communications link budget improvement. , 2017, , .		4
191	HEMT based RF to DC converter efficiency enhancement using special designed waveforms. , 2017, , .		4
192	Comparison of active and passive sensors for IoT applications. , 2018, , .		4
193	A Low Complexity and Accurate Battery-Less Trackable Device. , 2018, , .		4
194	Swept Notch NPR for Linearity Assessment of Systems Presenting Long-Term Memory Effects. , 2020, , .		4
195	Accurate Nonlinear Resistive FET Modeling for IMD Calculations. , 1998, , .		3
196	Intermodulation Distortion Analysis of FET Mixers under Multitone Excitation. , 2000, , .		3
197	Laboratory generation of multi-sines with pre-described statistics. , 2005, , .		3
198	A Formal Procedure for Microwave Power Amplifier Behavioral Modeling. , 2006, , .		3

#	ARTICLE	IF	CITATIONS
199	Modeling band-pass sampling receivers nonlinear behavior in different Nyquist zones. , 2010, , .		3
200	GaN RF oscillator used in space applications. , 2010, , .		3
201	Architecture for dynamic range extension of analogue-to-digital conversion. , 2010, , .		3
202	A proposal for dynamic power control in RFID and Passive Sensor Systems based on RSSI. , 2012, , .		3
203	Corrected mixed-domain measurements for software defined radios. , 2012, , .		3
204	Synchronization and syntonization of wireless sensor networks. , 2013, , .		3
205	Planar omnidirectional microstrip antenna array for 5 GHz ISM and UNII band. , 2013, , .		3
206	UHF RFID tag antenna for bottle labeling. , 2014, , .		3
207	Smart environment technology as a possible enabler of smart cities. , 2014, , .		3
208	RF-DC converter efficiency optimization using source-pull techniques. , 2014, , .		3
209	Design of an efficient D-TV energy harvesting system for low-power applications. , 2015, , .		3
210	Constructive combination of resonant magnetic coupling and resonant electrical coupling. , 2015, , .		3
211	Backscatter radio coverage enhancements using improved WPT signal waveform. , 2015, , .		3
212	FPGA-based all-digital software defined radio system demonstration. , 2015, , .		3
213	FPGA-based all-digital Software Defined Radio receiver. , 2015, , .		3
214	All-digital transceivers – Recent advances and trends. , 2016, , .		3
215	A software-defined radio RFID reader design with improved wireless power transfer capabilities. , 2016, , .		3
216	Far field WPT – Main challenges. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
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218	Massive MIMO Antenna Transmitting Characterization. , 2018, , .		3
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