Zorana Popovic

List of Publications by Year
in descending order

142	3,173	257450	197818
papers	citations	24 h-index	49 g-index

144	144	144	2566
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Efficiency Harmonically Terminated Diode and Transistor Rectifiers. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 4043-4052.	4.6	234
2	Resistor Emulation Approach to Low-Power RF Energy Harvesting. IEEE Transactions on Power Electronics, 2008, 23, 1494-1501.	7.9	212
3	Low-Power Far-Field Wireless Powering for Wireless Sensors. Proceedings of the IEEE, 2013, 101, 1397-1409.	21.3	200
4	Low-Power Wireless Power Delivery. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2277-2286.	4.6	197
5	Power Management System for Online Low Power RF Energy Harvesting Optimization. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 1802-1811.	5.4	167
6	Scalable RF Energy Harvesting. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1046-1056.	4.6	121
7	Cut the Cord: Low-Power Far-Field Wireless Powering. IEEE Microwave Magazine, 2013, 14, 55-62.	0.8	89
8	THz Metrology and Instrumentation. IEEE Transactions on Terahertz Science and Technology, 2011, 1, 133-144.	3.1	87
9	Codesign of PA, Supply, and Signal Processing for Linear Supply-Modulated RF Transmitters. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 2010-2020.	4.6	74
10	Toward wearable wireless thermometers for internal body temperature measurements. , 2014, 52, 118-125.		66
11	Micro-Fabricated 130â€“180 GHz Frequency Scanning Waveguide Arrays. IEEE Transactions on Antennas and Propagation, 2012, 60, 3647-3653.	5.1	62
12	A Dual-Frequency Ultralow-Power Efficient 0.5-g Rectenna. IEEE Microwave Magazine, 2014, 15, 109-114.	0.8	62
13	Noninvasive Internal Body Temperature Tracking With Near-Field Microwave Radiometry. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2535-2545.	4.6	61
14	Measuring Transistor Large-Signal Noise Figure for Low-Power and Low Phase-Noise Oscillator Design. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 1511-1515.	4.6	58
15	High-performance large air-gap capacitive wireless power transfer system for electric vehicle charging. , 2017, , .		53
16	Custom IC for Ultralow Power RF Energy Scavenging. IEEE Transactions on Power Electronics, 2011, 26, 1620-1626.	7.9	50
17	Broadband Lumped-Element Integrated N-Way Power Dividers for Voltage Standards. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 2055-2063.	4.6	49
18	RF-Harvesting Tightly Coupled Rectenna Array Tee-Shirt With Greater Than Octave Bandwidth. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 3908-3919.	4.6	45

#	Article	IF	Citations
19	Kilowatt-scale large air-gap multi-modular capacitive wireless power transfer system for electric vehicle charging. , 2018, , .		41
20	Properties of 50â€“110-GHz Waveguide Components Fabricated by Metal Additive Manufacturing. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 5144-5153.	4.6	39
21	A Three-Stage 18.5â€“24-GHz GaN-on-SiC 4 W 40% Efficient MMIC PA. IEEE Journal of Solid-State Circuits, 2019, 54, 2402-2410.	5.4	39
22	Analysis of High-Efficiency Power Amplifiers With Arbitrary Output Harmonic Terminations. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2037-2048.	4.6	36
23	PA Efficiency and Linearity Enhancement Using External Harmonic Injection. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 4097-4106.	4.6	35
24	Novel Outphasing Power Amplifiers Designed With an Analytic Generalized Dohertyâ€“Chireix Continuum Theory. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 2935-2948.	5.4	35
25	Near-field capacitive wireless power transfer array with external field cancellation. , 2016, , .		31
26	A Dual-Band Dual-Output Power Amplifier for Carrier Aggregation. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3134-3146.	4.6	31
27	X-band MMIC GaN power amplifiers designed for high-efficiency supply-modulated transmitters. , 2013, , .		29
28	A Prepulsing Technique for the Characterization of GaN Power Amplifiers With Dynamic Supply Under Controlled Thermal and Trapping States. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 5046-5062.	4.6	27
29	Far-Field RF-Powered Variable Duty Cycle Wireless Sensor Platform. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 822-826.	3.0	26
30	Custom IC for Ultra-low Power RF Energy Harvesting. , 2009, , .		25
31	Sensing Depth of Microwave Radiation for Internal Body Temperature Measurement. IEEE Transactions on Antennas and Propagation, 2014, 62, 1293-1303.	5.1	24
32	Broadband Rectenna Arrays for Randomly Polarized Incident Waves. , 2000, , .		23
33	High-efficiency harmonically-terminated rectifier for wireless powering applications. , 2012, , .		22
34	G-Band Micro-Fabricated Frequency-Steered Arrays With 2^circ/GHz Beam Steering. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 566-573.	3.1	22
35	Efficient X-Band Transmitter With Integrated GaN Power Amplifier and Supply Modulator. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 1601-1614.	4.6	22
36	Over-Moded Cavity for Multiple-Electronic-Device Wireless Charging. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1074-1079.	4.6	21

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37	X-band wireless power transfer with two-stage high-efficiency GaN PA/ rectifier. , 2015, , .		21
38	Multi-objective optimization of capacitive wireless power transfer systems for electric vehicle charging. , 2017, , .		21
39	Resonant Pulse-Shaping Power Supply for Radar Transmitters. IEEE Transactions on Power Electronics, 2014, 29, 707-718.	7.9	20
40	Monolithic multilevel GaN converter for envelope tracking in RF power amplifiers. , 2016, , .		19
41	Ka-Band Miniaturized Quasi-Planar High-Q Resonators. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 1272-1279.	4.6	18
42	Micro-Coaxial Impedance Transformers. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 2908-2914.	4.6	18
43	Microwave Class-E Power Amplifiers: A Brief Review of Essential Concepts in High-Frequency Class-E PAs and Related Circuits. IEEE Microwave Magazine, 2018, 19, 54-66.	0.8	18
44	Adaptive tuning for handheld transmitters. , 2009, , .		17
45	Efficient Multisignal 2â€“4-GHz Power Amplifier With Power Tracking. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5652-5663.	4.6	16
46	Efficient Programmable Pulse Shaping for X -Band GaN MMIC Radar Power Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 881-891.	4.6	15
47	Near- and far-field wireless power transfer. , 2017, , .		15
48	Optimal Definition of Class F for Realistic Transistor Models. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 3585-3595.	4.6	15
49	Metal-Embedded Chip Assembly Processing for Enhanced RF Circuit Performance. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3537-3546.	4.6	15
50	System considerations for efficient and linear supply modulated RF transmitters. , 2010, , .		14
51	A 1.4-GHz radiometer for internal body temperature measurements. , 2015, , .		14
52	Dynamic Dual-Gate Bias Modulation for Linearization of a High-Efficiency Multistage PA. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2483-2494.	4.6	14
53	A Novel 3-Way Dual-Band Doherty Power Amplifier for Enhanced Concurrent Operation. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4041-4058.	4.6	14
54	Efficient and Linear Amplification of Spectrally Confined Pulsed AM Radar Signals. IEEE Microwave and Wireless Components Letters, 2012, 22, 279-281.	3.2	13

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55	Two-stage high-efficiency X-Band GaN MMIC PA/ rectifier. , 2015, , .		13
56	Multi-Frequency Measurements for Supply Modulated Transmitters. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 2931-2941.	4.6	13
57	Microstrip Ferrite Circulator Design With Control of Magnetization Distribution. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 1217-1226.	4.6	13
58	Class-E Power Amplifier in a Polar EDGE Transmitter. , 2006, , .		12
59	Micro-coaxial lines for active hybrid-monolithic circuits. , 2009, , .		12
60	Broadband Diplexed Power Amplifier. IEEE Microwave and Wireless Components Letters, 2020, 30, 1073-1076.	3.2	12
61	Ka-band surface-mount directional coupler fabricated using micro-rectangular coaxial transmission lines. , 2008, , .		11
62	Bow-tie rectenna arrays. , 2015, , .		11
63	Broadband RF Energy-Harvesting Arrays. Proceedings of the IEEE, 2022, 110, 74-88.	21.3	11
64	A high-efficiency linear polar transmitter for EDGE. , 2008, , .		10
65	Envelope tracking transmitter system analysis method. , 2010, , .		10
66	Low-power electronics for energy harvesting sensors. Wireless Power Transfer, 2014, 1, 35-43.	1.1	10
67	Load Modulation Measurements of X-Band Outphasing Power Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 4119-4129.	4.6	10
68	Isotrap Pulsed IV Characterization of GaN HEMTs for PA Design. IEEE Microwave and Wireless Components Letters, 2018, 28, 672-674.	3.2	10
69	Effective Constitutive Parameters of High-Temperature Superconducting Split-Ring Resonator Arrays. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-7.	1.7	9
70	Supply-Modulated Radar Transmitters With Amplitude-Modulated Pulses. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 2953-2964.	4.6	9
71	Efficiency enhancement and linearization of GaN PAs using reduced-bandwidth supply modulation. , 2017, , .		9
72	Frequency Selective Ferrite Circulators with Quasi-Elliptic Transmission Response. , 2018, , .		9

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73	Class-E Rectifiers and Power Converters: The Operation of the Class-E Topology as a Power Amplifier and a Rectifier with Very High Conversion Efficiencies. IEEE Microwave Magazine, 2018, 19, 67-78.	0.8	9
74	Continuous Broadband GaAs and GaN MMIC Phase Shifters. IEEE Microwave and Wireless Components Letters, 2022, 32, 56-59.	3.2	9
75	Nonlinear modeling of class-E microwave power amplifiers. International Journal of RF and Microwave Computer-Aided Engineering, 1999, 9, 93-103.	1.2	8
76	Design-Oriented Modelling of Microstrip Ferrite Circulators. , 2018, , .		8
77	Power Amplifiers With Frequency-Selective Matching Networks. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 697-708.	4.6	8
78	Efficiency and linearity of power amplifiers with external harmonic injection. , 2012, , .		7
79	A harmonically-terminated two-gram low-power rectenna on a flexible substrate. , 2013, , .		7
80	A 1.4 GHz MMIC Active Cold Noise Source. , 2013, , .		7
81	X-band 10W MMIC high-gain power amplifier with up to 60% PAE. , 2014, , .		7
82	Capacitive wireless powering for electric vehicles with near-field phased arrays. , 2017, , .		7
83	Correlation Radiometry for Subcutaneous Temperature Measurements. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2022, 6, 230-237.	3.4	7
84	Additive Phase Noise in Linear and High-Efficiency X-Band Power Amplifiers. , 2006, , .		6
85	A 65-W high-efficiency UHF GaN power amplifier. , 2008, , .		6
86	GaAs MMIC tunable directional coupler. , 2012, , .		6
87	W-Band Micro-Fabricated Coaxially-Fed Frequency Scanned Slot Arrays. IEEE Transactions on Antennas and Propagation, 2013, 61, 2324-2328.	5.1	6
88	RF energy harvester in the proximity of an aircraft radar altimeter. , 2016, , .		6
89	Patch-Probe Excitation for Ultrahigh Magnetic Field Wide-Bore MRI. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 2547-2557.	4.6	6
90	Power-Combined Rectenna Array for X-Band Wireless Power Transfer. , 2020, , .		6

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91	Broadband Small-Aperture High-Gain Ridge Horn Antenna Array Element. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 708-712.	4.0	6
92	Linearity of X-band Class-E Power Amplifiers in a Digital Polar Transmitter. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	5
93	Testing passive UHF tag performance evolution. , 2011, , .		5
94	Microwave class-E power amplifiers. , 2017, , .		5
95	An Efficient Linearized Octave-Bandwidth Power Amplifier for Carrier Aggregation. , 2018, , .		5
96	Harvesting of aircraft radar altimeter sidelobes for low-power sensors. , 2018, , .		5
97	Bandwidth design of ferrite-based circulators. , 2018, , .		5
98	A Concurrent 2.2/3.9-GHz Dual-Band GaN Power Amplifier. , 2019, , .		5
99	Excitation and RF Field Control of a Human-Size 10.5-T MRI System. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 1184-1196.	4.6	5
100	Octave Bandwidth High-Performance Microstrip-to-Double-Ridge-Waveguide Transition. IEEE Microwave and Wireless Components Letters, 2020, 30, 637-640.	3.2	5
101	0.01â€“22-GHz Feedback-Stabilized Single-Supply GaAs Cascode Distributed Amplifiers. IEEE Microwave and Wireless Components Letters, 2021, 31, 1291-1294.	3.2	5
102	An Octave Bandwidth RF Harvesting Tee-Shirt. , 2019, , .		5
103	Reference modulation for calibrated measurements of tag backscatter. , 2011, , .		4
104	X-band outphasing power amplifier with internal load modulation measurements. , 2014, , .		4
105	A fully monolithically integrated 4.6 GHz DC-DC converter. , 2016, , .		4
106	Low-Profile Switched-Beam Antenna Backed by an Artificial Magnetic Conductor for Efficient Close-to-Metal Operation. IEEE Transactions on Antennas and Propagation, 2016, 64, 1307-1316.	5.1	4
107	Bandwidth-reduced supply modulation of a high-efficiency X-band GaN MMIC PA for multiple wideband signals. , 2017, , .		4
108	A 4-W K-Band 40% PAE Three-Stage MMIC Power Amplifier. , 2018, , .		4

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109	Linearization of a 500-W L-band GaN Doherty Power Amplifier by Dual-Pulse Trap Characterization. , 2019, , .		4
110	Gaussian Pulse Characterization of RF Power Amplifiers. IEEE Microwave and Wireless Components Letters, 2021, 31, 417-420.	3.2	4
111	A W-Band GaN MMIC Continuous 90Â° Reflective Phase Shifter. , 2022, , .		4
112	RFPA supply modulator using wide-bandwidth linear amplifier with a GaN HEMT output stage. , 2013, , .		3
113	Antenna probes for power reception from deep tissues for wearable microwave thermometry. , 2017, , .		3
114	Sensitivity and noise in THz electro-optic upconversion radiometers. Scientific Reports, 2020, 10, 9403.	3.3	3
115	Electromagnetic-Wave Fun Using Simple Take-Home Experiments [Education Corner]. IEEE Antennas and Propagation Magazine, 2020, 62, 100-106.	1.4	3
116	Analysis of Process Variations in W-Band GaN MMIC PAs Using Nonparametric Statistics. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2304-2318.	4.6	3
117	Tunable Impedance-Matching Filters. IEEE Microwave and Wireless Components Letters, 2021, 31, 993-996.	3.2	3
118	A Microwave Quantum-Defined Millivolt Source. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 5404-5416.	4.6	3
119	Active and Passive Components for Broadband Transmit Phased Arrays: Broadband Transmit Front-End Components. IEEE Microwave Magazine, 2022, 23, 56-74.	0.8	3
120	Dual-polarization large scan angle broadband thick-metal FSS. , 2007, , .		2
121	Low-cost 63% efficient 2.5-kW UHF power amplifier for a wind profiler radar. , 2012, , .		2
122	Active baseband drain-supply terminal load-pull of an X-band GaN MMIC PA. , 2015, , .		2
123	Dual Gate and Drain Supply Modulation of an X-Band PA. , 2019, , .		2
124	Non-Linear Diode Rectifier Analysis for Multi-Tone Wireless Power Harvesting. , 2019, , .		2
125	Efficiency and linearity enhancement of a twoâ€stage Xâ€band PA through simultaneous gate and drain supply modulation. IET Microwaves, Antennas and Propagation, 2020, 14, 1347-1354.	1.4	2
126	A 2 Gb/s ΔΣ Directly Driven Wireless Link. , 2007, , .		1

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127	Polar phase-conjugating active arrays for spectrally-efficient linear wireless links. , 2010, , .		1
128	Terahertz metrology and instrumentation. , 2012, , .		1
129	Linearization of efficient harmonically-injected PAs. , 2013, , .		1
130	X-Band outphasing power amplifier with internal load modulation measurements. , 2014, , .		1
131	V- and W-band Two-Way Waveguide Splitters Fabricated by Metal Additive Manufacturing. , 2018, , .		1
132	A 6â€“12 GHz Reconfigurable Transformer-Based Outphasing Combiner in 250-nm GaAs. , 2019, , .		1
133	GaN MMIC RF Switches for In-Band Full-Duplex Phased Array Calibration. , 2022, , .		1
134	Analysis and Design of Oscillator Grids and Arrays. , 0, , 301-332.		0
135	Passive Millimeter-Wave Ranging Using Discrete Lenses with Wave-Front Coding. , 2001, , .		0
136	G-band frequency-steering antenna array design and measurements. , 2011, , .		0
137	4W X-band high efficiency MMIC PA with output harmonic injection. , 2014, , .		0
138	Multi-frequency large-signal analysis using describing functions. , 2016, , .		0
139	10.5-T MRI volume excitation using traveling-wave microstrip probes. , 2017, , .		0
140	Design of ungrounded CPW GaN-on-Si MMICs. , 2018, , .		0
141	Design of ungrounded CPW GaN-on-Si MMICs. , 2018, , .		0
142	SCALABLE MICROWAVE WASTE-TO-FUEL CONVERSION. , 0, , .		0