Wenhua Chen

List of Publications by Citations

141 papers	1,914 citations	24 h-index	39 g-index
179 ext. papers	2,506 ext. citations	3 avg, IF	5.1 L-index

#	Paper	IF	Citations
141	A Dual-Polarization Slot Antenna Using a Compact CPW Feeding Structure. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 191-194	3.8	118
140	Design and Linearization of Concurrent Dual-Band Doherty Power Amplifier With Frequency-Dependent Power Ranges. *IEEE Transactions on Microwave Theory and Techniques*, **2011**, 59, 2537-2546	4.1	117
139	Digital Predistortion for Concurrent Dual-Band Transmitters Using 2-D Modified Memory Polynomials. *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 281-290	4.1	99
138	. *IEEE Transactions on Microwave Theory and Techniques*, **2018**, 66, 3419-3432	4.1	89
137	A Broadband Doherty Power Amplifier Based on Continuous-Mode Technology. *IEEE Transactions on Microwave Theory and Techniques*, **2016**, 64, 4505-4517	4.1	83
136	Linearization of Concurrent Dual-Band Power Amplifier Based on 2D-DPD Technique. *IEEE Microwave and Wireless Components Letters*, **2011**, 21, 685-687	2.6	81
135	Polarization Reconfigurable Slot Antenna With a Novel Compact CPW-to-Slotline Transition for WLAN Application. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 252-255	3.8	79
134	A Concurrent Dual-Band Uneven Doherty Power Amplifier with Frequency-Dependent Input Power Division. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2014**, 61, 552-561	3.9	72
133	. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 562-565	3.8	65
132	Transmitter Architecture for CA: Carrier Aggregation in LTE-Advanced Systems. *IEEE Microwave Magazine*, **2013**, 14, 78-86	1.2	46
131	A Robust Augmented Complexity-Reduced Generalized Memory Polynomial for Wideband RF Power Amplifiers. *IEEE Transactions on Industrial Electronics*, **2014**, 61, 2389-2401	8.9	45
130	Improved Three-Stage Doherty Amplifier Design With Impedance Compensation in Load Combiner for Broadband Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 778-786	4.1	45
129	Enhanced Analysis and Design Method of Concurrent Dual-Band Power Amplifiers With Intermodulation Impedance Tuning. *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 4544-4558	4.1	43
128	A Tripolarization Antenna Fed by Proximity Coupling and Probe. *IEEE Antennas and Wireless Propagation Letters*, **2009**, 8, 465-467	3.8	31
127	Subsampling Feedback Loop Applicable to Concurrent Dual-Band Linearization Architecture. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 1990-1999	4.1	30
126	Low Feedback Sampling Rate Digital Predistortion for Wideband Wireless Transmitters. *IEEE Transactions on Microwave Theory and Techniques*, **2016**, 64, 3528-3539	4.1	29
125	Resistive Second-Harmonic Impedance Continuous Class-F Power Amplifier With Over One Octave Bandwidth for Cognitive Radios. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2013**, 3, 489-497	5.2	29

124	Linearization for Hybrid Beamforming Array Utilizing Embedded Over-the-Air Diversity Feedbacks. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 5235-5248	4.1	29
123	Novel Planar Compact Coupled-Line Single-Ended-to-Balanced Power Divider. *IEEE Transactions on Microwave Theory and Techniques*, **2017**, 65, 2953-2963	4.1	28
122	. *IEEE Transactions on Antennas and Propagation*, **2010**, 58, 3450-3457	4.9	28
121	Single-PA-feedback digital predistortion for beamforming MIMO transmitter **2016**,		28
120	A Dual-Band GaN MMIC Power Amplifier With Hybrid Operating Modes for 5G Application. *IEEE Microwave and Wireless Components Letters*, **2019**, 29, 228-230	2.6	25
119	A Fully Integrated C-Band GaN MMIC Doherty Power Amplifier With High Efficiency and Compact Size for 5G Application. *IEEE Access*, **2019**, 7, 71665-71674	3.5	25
118	Design of Compact Dual-Band Power Dividers With Frequency-Dependent Division Ratios Based on Multisection Coupled Line. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2013**, 3, 467-475	1.7	25
117	An Endfire Beam-Switchable Antenna Array Used in Vehicular Environment. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 195-198	3.8	22
116	. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 850-853	3.8	21
115	Efficient Pruning Technique of Memory Polynomial Models Suitable for PA Behavioral Modeling and Digital Predistortion. *IEEE Transactions on Microwave Theory and Techniques*, **2014**, 62, 2290-2299	4.1	19
114	A Quad-Band Doherty Power Amplifier Based on T-Section Coupled Lines. *IEEE Microwave and Wireless Components Letters*, **2016**, 26, 437-439	2.6	17
113	Convolutional Neural Network for Behavioral Modeling and Predistortion of Wideband Power Amplifiers. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, PP,	10.3	17
112	Low Computational Complexity Digital Predistortion Based on Direct Learning With Covariance Matrix. *IEEE Transactions on Microwave Theory and Techniques*, **2017**, 65, 4274-4284	4.1	16
111	A Quadband Antenna With Reconfigurable Feedings. *IEEE Antennas and Wireless Propagation Letters*, **2009**, 8, 1069-1071	3.8	16
110	An Energy-Efficient Ka / Q Dual-Band Power Amplifier MMIC in 0.1- mu m GaAs Process. *IEEE Microwave and Wireless Components Letters*, **2018**, 28, 530-532	2.6	15
109	A Band-Divided Memory Polynomial for Wideband Digital Predistortion With Limited Bandwidth Feedback. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2015**, 62, 922-926	3.5	14
108	Modified Least Squares Extraction for Volterra-Series Digital Predistorter in the Presence of Feedback Measurement Errors. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 3559-3570	4.1	14
107	A Compact Ka/Q Dual-Band GaAs MMIC Doherty Power Amplifier With Simplified Offset Lines for 5G Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 3110-3121	4.1	13

106	A novel broadband Doherty power amplifier with post-matching structure **2012**,		13
105	Compact coupled-line balun with complex impedances transformation and high isolation. *IET Microwaves, Antennas and Propagation*, **2015**, 9, 1587-1594	1.6	12
104	Doherty PAs for 5G Massive MIMO: Energy-Efficient Integrated DPA MMICs for Sub-6-GHz and mm-Wave 5G Massive MIMO Systems. *IEEE Microwave Magazine*, **2020**, 21, 78-93	1.2	12
103	Recognizing a limitation of the TBLC-activated peroxide system on low-temperature cotton bleaching. *Carbohydrate Polymers*, **2016**, 140, 1-5	10.3	12
102	New solutions of Class-E power amplifier with finite dc feed inductor at any duty ratio. *IET Circuits, Devices and Systems*, **2014**, 8, 311-321	1.1	12
101	Concurrent Multi-Band Envelope Modulated Power Amplifier Linearized Using Extended Phase-Aligned DPD. *IEEE Transactions on Microwave Theory and Techniques*, **2014**, 62, 3298-3308	4.1	12
100	A compact DVB-H antenna with varactor-tuned matching circuit. *Microwave and Optical Technology Letters*, **2010**, 52, 1786-1789	1.2	12
99	A Compact and Broadband Ka-band Asymmetrical GaAs Doherty Power Amplifier MMIC for 5G Communications **2018**,		12
98	Systematic Crest Factor Reduction and Efficiency Enhancement of Dual-Band Power Amplifier Based Transmitters. *IEEE Transactions on Broadcasting*, **2017**, 63, 111-122	4.7	11
97	A Novel Doherty Transmitter Based on Antenna Active Load Modulation. *IEEE Microwave and Wireless Components Letters*, **2015**, 25, 271-273	2.6	10
96	A Time Misalignment Tolerant 2D-Memory Polynomials Predistorter for Concurrent Dual-Band Power Amplifiers. *IEEE Microwave and Wireless Components Letters*, **2013**, 23, 501-503	2.6	10
95	An iterative pruning of 2-D digital predistortion model based on normalized polynomial terms **2013** ,		10
94	A 200 watt broadband continuous-mode doherty power amplifier for base-station applications **2017**,		10
93	Power Scalable Beam-Oriented Digital Predistortion for Compact Hybrid Massive MIMO Transmitters. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2020**, 67, 4994-5006	3.9	10
92	Multiband and Multimode Concurrent PA With Novel Intermodulation Tuning Network for Linearity Improvement. *IEEE Microwave and Wireless Components Letters*, **2018**, 28, 248-250	2.6	9
91	A robust and broadband digital predistortion utilizing negative feedback iteration **2018**,		9
90	Dual-band predistortion linearization of an envelope modulated power amplifier operated in concurrent multi-standard mode **2014**,		8
89	Two-dimensional crest factor reduction for performance improvement of concurrent dual-band power amplifiers. *Electronics Letters*, **2013**, 49, 1163-1165	1.1	8

88	Design of Planar ESPAR Antenna by Using Sidelobe Reduction Algorithm **2007**,		8
87	A compact CPW-FED circular patch antenna with pattern and polarization diversities. *Microwave and Optical Technology Letters*, **2011**, 53, 968-972	1.2	7
86	A novel compact reconfigurable polarization and pattern antenna. *Microwave and Optical Technology Letters*, **2007**, 49, 2802-2805	1.2	7
85	. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 4142-4156	4.1	7
84	Beam-Oriented Digital Predistortion for Hybrid Beamforming Array Utilizing Over-the-Air Diversity Feedbacks **2019**,		6
83	Behavioral modeling for concurrent dual-band power amplifiers using 2D hammerstein/wiener models. *International Journal of RF and Microwave Computer-Aided Engineering*, **2013**, 23, 646-654	1.5	6
82	Switched-beam antenna array based on butler matrix for 5G wireless communication **2016**,		6
81	Highly Linear and Magnetless Isolator Based on Weakly Coupled Nonreciprocal Metamaterials. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 4322-4331	4.1	6
80	A Broadband Millimeter-Wave Continuous-Mode Class-F Power Amplifier Based on the Deembedded Transistor Model. *IEEE Microwave and Wireless Components Letters*, **2020**, 30, 609-612	2.6	5
79	Reduced Cost Digital Predistortion Only With In-Phase Feedback Signal. *IEEE Microwave and Wireless Components Letters*, **2018**, 28, 257-259	2.6	5
78	A robust and low sampling rate digital predistortion algorithm for broadband PA modeling and predistortion **2014**,		5
77	Digital predistortion for 5G wideband power amplifiers using multiple band-limited feedback signals **2017**,		5
76	Compact dual-polarized antenna combining printed monopole and half-slot antenna for MIMO applications. *Digest / IEEE Antennas and Propagation Society International Symposium*, **2009**,		5
75	Design of asymmetrical spurline filter for a high power sic MESFET class-E power amplifier. *Microwave and Optical Technology Letters*, **2010**, 52, 1650-1652	1.2	5
74	Integrated Dual-Band Antenna System Design Incorporating Cell Phone Bezel. *IEEE Antennas and Wireless Propagation Letters*, **2008**, 7, 585-587	3.8	5
73	. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 3132-3145	4.1	5
72	Multi-Stream Spatial Digital Predistortion for Fully-Connected Hybrid Beamforming Massive MIMO Transmitters. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2021**, 68, 2998-3011	3.9	5
71	A Ka-Band Highly Linear Power Amplifier with a Linearization Bias Circuit **2019**,		4

70	A 160 GHz High Output Power and High Efficiency Power Amplifier in a 130-nm SiGe BiCMOS Technology **2020**,		4
69	A single feedback architecture for dual-band digital predistortion with under-sampling technique **2016**,		4
68	Linearization of a Directional Modulation Transmitter Using Low-Complexity Cascaded Digital Predistortion. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 4467-4478	4.1	4
67	A Novel Harmonics-Suppression Coupled-Line Gysel Power Divider for Complex Terminated Impedances. *Electromagnetics*, **2014**, 34, 633-658	0.8	4
66	Analysis and design of tapered slot antenna for ultra-wideband applications. *Tsinghua Science and Technology*, **2009**, 14, 1-6	3.4	4
65	A High-Efficiency 142-182-GHz SiGe BiCMOS Power Amplifier With Broadband Slotline-Based Power Combining Technique. *IEEE Journal of Solid-State Circuits*, **2021**, 1-1	5.5	4
64	A 24-29.5 GHz Voltage-Combined Doherty Power Amplifier Based on Compact Low-Loss Combiner. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 1-1	3.5	4
63	An Efficient Directional Modulation Transmitter With Novel Crest Factor Reduction Technique. *IEEE Microwave and Wireless Components Letters*, **2019**, 29, 554-556	2.6	3
62	A 210-GHz Magnetless Nonreciprocal Isolator in 130-nm SiGe BiCMOS Based on Resistor-Free Unidirectional Ring Resonators. *IEEE Microwave and Wireless Components Letters*, **2020**, 30, 524-527	2.6	3
61	A Robust and Scalable Harmonic Cancellation Digital Predistortion Technique for HF Transmitters. *IEEE Transactions on Microwave Theory and Techniques*, **2020**, 68, 2796-2807	4.1	3
60	A design methodology of envelope tracking power amplifier based on harmonic impedance tuning. *Microwave and Optical Technology Letters*, **2018**, 60, 639-642	1.2	3
59	Digital predistortion for concurrent multi-band PAs with inter-band IMD compensation **2016**,		3
58	mmWave mobile communication under hypercellular architecture. *Journal of Communications and Information Networks*, **2016**, 1, 62-76		3
57	Extraction of wideband behavioral model of power amplifier with multi groups of narrow band signals **2014**,		3
56	Low computational complexity digital pre-distortion for broadband power amplifiers **2015**,		3
55	A novel design method of concurrent dual-band power amplifiers including impedance tuning at inter-band modulation frequencies **2013**,		3
54	A novel concurrent dual-mode class-e PA using dual-band stub tapped transformer. *Microwave and Optical Technology Letters*, **2011**, 53, 171-174	1.2	3
53	Forward behavioral modeling of concurrent dual-band power amplifiers using extended real valued time delay neural networks **2012**,		3

52	Novel planar tapered-slot-fed UWB antenna. *Microwave and Optical Technology Letters*, **2008**, 50, 2280-2283	1.2	3
51	A novel switched-sector planar antenna using parasitic elements **2004**,		3
50	A Highly Linear GaN MMIC Doherty Power Amplifier Based on Phase Mismatch Induced AM-PM Compensation. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 1-1	4.1	3
49	180 GHz high-gain cascode power amplifier in a 130 nm SiGe process. *Electronics Letters*, **2020**, 56, 498-501	1.1	3
48	Theory and Design Methodology for Reverse-Modulated Dual-Branch Power Amplifiers Applied to a 4G/5G Broadband GaN MMIC PA Design. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 3120-3131	4.1	3
47	The Nested-Mode Power Amplifiers for Highly Efficient Multi-Octave Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 5114-5126	4.1	3
46	Hybrid Harmonic Cancellation Digital Predistortion With a Feedback Loop Compensation. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 68, 2222-2226	3.5	3
45	A 24 44 GHz Broadband Transmit Receive Front End in 0.13- m SiGe BiCMOS for Multistandard 5G Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 3463-3474	4.1	3
44	2-D Magnitude-Selective Affine Function-Based Digital Predistortion for Concurrent Dual-Band Terminal Power Amplifiers. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 4209-4222	4.1	3
43	A 10-3100 MHz Nested-mode Highly Efficient Power Amplifier for Multi-Octave Applications **2019**,		2
42	A Fully Integrated C-band GaN MMIC Doherty Power Amplifier with High Gain and High Efficiency for 5G Application **2019**,		2
41	Concurrent dual-band digital predistortion implemented with reduced look-up-tables. *Electronics Letters*, **2017**, 53, 802-804	1.1	2
40	A new envelope tracking technique for concurrent duan-band PAs **2012**,		2
39	Joint predistortion of IQ impairments and PA nonlinearity in concurrent dual-band transmitters **2012**,		2
38	A novel broadband VHF SiC MESFET class-E high power amplifier. *Microwave and Optical Technology Letters*, **2010**, 52, 272-276	1.2	2
37	A reconfigurable compact antenna for DVBH application **2008**,		2
36	An endfire phased array used in Wireless Access for Vehicular Environments (WAVE) **2008**,		2
35	Artificial Intelligence based Power-Temperature Inclusive Digital Pre-Distortion. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	2

34	3.5-0Hz High-Efficiency Broadband Asymmetric Doherty Power Amplifier for 5G Applications **2018**,		2
33	A 160 GHz High Output Power and High DC-to-RF Efficiency Fundamental Oscillator in a 130-nm SiGe BiCMOS Process **2021**,		2
32	A 250-310 GHz Power Amplifier with 15-dB Peak Gain in 130-nm SiGe BiCMOS Process for Terahertz Wireless System. *IEEE Transactions on Terahertz Science and Technology*, **2021**, 1-1	3.4	2
31	A Reconfigurable S-/X-Band GaN MMIC Power Amplifier. *IEEE Microwave and Wireless Components Letters*, **2022**, 1-4	2.6	2
30	A Low Complexity Moving Average Nested GMP Model for Digital Predistortion of Broadband Power Amplifiers. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2022**, 1-14	3.9	2
29	Broadband Three-Stage Pseudoload Modulated Balanced Amplifier With Power Back-Off Efficiency Enhancement. *IEEE Transactions on Microwave Theory and Techniques*, **2022**, 1-1	4.1	2
28	Analytical Design Solution for Optimal Matching of Hybrid Continuous Mode Power Amplifiers Suitable for a High-Efficiency Envelope Tracking Operation. *Electronics (Switzerland)*, **2019**, 8, 621	2.6	1
27	Advanced power amplifier technologies for multistandard and broadband wireless communications **2014**,		1
26	A Novel Design Method of RF Lens for Long-Range Wireless Power Transmission. *IEEE Antennas and Wireless Propagation Letters*, **2017**, 16, 3159-3162	3.8	1
25	A concurrent dual-band 1.9□2.6-GHz Doherty power amplifier with Intermodulation impedance tuning **2014**,		1
24	Low sampling rate digital predistortion of power amplifier assisted by bandpass RF filter **2012**,		1
23	Design of Compact Dual-Polarized Antennas for MIMO Handsets. *International Journal of Antennas and Propagation*, **2012**, 2012, 1-8	1.2	1
22	DEVELOPMENT OF LOW COST MEASUREMENT SYSTEM FOR RADIATED EMISSION EVALUATION. *Progress in Electromagnetics Research Letters*, **2011**, 20, 55-68	0.5	1
21	Development of low cost radiated emission measurement system **2010**,		1
20	High efficiency and wide band CLASS-J power amplifier using 2nd harmonic microstrip stub matching **2012**,		1
19	A robust multi-sampling rate digital predistortion for ultra-broadband power amplifiers. *Microwave and Optical Technology Letters*, **2020**, 62, 1041-1048	1.2	1
18	A Methodology and a Metric for the Assessment of the Linearizability of Broadband Nonlinear Doherty Power Amplifiers. *IEEE Microwave and Wireless Components Letters*, **2020**, 30, 764-767	2.6	1
17	Linearization of Radio-Over-Fiber Cloud-RAN Transmitters Using Pre- and Post-Distortion Techniques. *IEEE Photonics Technology Letters*, **2021**, 33, 339-342	2.2	1

List of Publications

16	A Complexity-Reduced Harmonic-Cancellation Digital Predistortion for HF Transmitters. *IEEE Microwave and Wireless Components Letters*, **2021**, 31, 529-532	2.6	1
15	300-335 GHz Highly Efficient Beam-Steerable Radiator Based on Tunable Boundary Conditions **2021**,		1
14	Broadband doherty power amplifier and linearization **2016**,		1
13	A C-band GaAs Doherty Power Amplifier MMIC with Compact Size and 1-GHz Bandwidth **2018**,		1
12	High-Efficiency Dual-Band Filtering Doherty Power Amplifier Based on Multi-Function Circuit. *IEEE Transactions on Microwave Theory and Techniques*, **2022**, 1-1	4.1	1
11	Novel Design Space of Broadband High-Efficiency Parallel-Circuit Class-EF Power Amplifiers. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2022**, 1-11	3.9	1
10	MIMO Antenna Design and Channel Modeling. *International Journal of Antennas and Propagation*, **2012**, 2012, 1-2	1.2	0
9	A Fully Integrated 3.5-/4.9-GHz Dual-Band GaN MMIC Doherty Power Amplifier Based on Multi-Resonant Circuits. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 1-1	4.1	0
8	MIMO Antenna Design and Channel Modeling 2014. *International Journal of Antennas and Propagation*, **2015**, 2015, 1-1	1.2	
7	MIMO Antenna Design and Channel Modeling 2013. *International Journal of Antennas and Propagation*, **2013**, 2013, 1-2	1.2	
6	Hexagonal patch antenna with T-shaped slot for frequency switching and conical radiation. *Microwave and Optical Technology Letters*, **2010**, 52, 2585-2588	1.2	
5	Digital Techniques for Multiband RF Transmitters **2016**, 203-242		
4	Multiband Power Amplifier Design **2016**, 157-201		
3	Multiband RF Transmitters **2016**, 59-79		
2	An 18-50-GHz □□Modulated Quasi-Continuous Digital Vector-Modulation Phase Shifter With Variable Gain Control. *IEEE Microwave and Wireless Components Letters*, **2021**, 1-4	2.6	
1	Highly Efficient Terahertz Beam-Steerable Integrated Radiator Based on Tunable Boundary Conditions. *IEEE Journal of Solid-State Circuits*, **2022**, 57, 1314-1331	5.5	