ZhaoXu Xu

List of Publications by Year in descending order

121 papers	1,724 citations	361045 20 h-index	315357 38 g-index
122 all docs	122 docs citations	122 times ranked	1477 citing authors

#	Article	IF	Citations
1	Eight-Port Orthogonally Dual-Polarized Antenna Array for 5G Smartphone Applications. IEEE Transactions on Antennas and Propagation, 2016, 64, 3820-3830.	3.1	286
2	SIW Multibeam Array for 5G Mobile Devices. IEEE Access, 2016, 4, 2788-2796.	2.6	151
3	Compact Eight-Band Frequency Reconfigurable Antenna for LTE/WWAN Tablet Computer Applications. IEEE Transactions on Antennas and Propagation, 2014, 62, 471-475.	3.1	111
4	Decoupled Hepta-Band Antenna Array for WWAN/LTE Smartphone Applications. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 999-1002.	2.4	64
5	Analysis and Design of Ultra-Wideband mm-Wave Injection-Locked Frequency Dividers Using Transformer-Based High-Order Resonators. IEEE Journal of Solid-State Circuits, 2018, 53, 2177-2189.	3.5	55
6	A 60-GHz 19.8-mW Current-Reuse Active Phase Shifter With Tunable Current-Splitting Technique in 90-nm CMOS. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 1572-1584.	2.9	54
7	Decoupled Planar WWAN Antennas With T-Shaped Protruded Ground for Smartphone Applications. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 483-486.	2.4	50
8	Low-Profile Narrow-Frame Antenna for Seven-Band WWAN/LTE Smartphone Applications. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 463-466.	2.4	46
9	Decoupled Closely Spaced Heptaband Antenna Array for WWAN/LTE Smartphone Applications. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 31-34.	2.4	45
10	Analysis and Equivalent-Circuit Model for CMOS On-Chip Multiple Coupled Inductors in the Millimeter-Wave Region. IEEE Transactions on Electron Devices, 2015, 62, 3957-3964.	1.6	40
11	Small-Size Multiresonant Octaband Antenna for LTE/WWAN Smartphone Applications. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 619-622.	2.4	36
12	Compact 2-D Scanning Multibeam Array Utilizing the SIW Three-Way Couplers at 28 GHz. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1915-1919.	2.4	36
13	A Broadband and Equivalent-Circuit Model for Millimeter-Wave On-Chip M:N Six-Port Transformers and Baluns. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 3109-3121.	2.9	35
14	An Injection-Current-Boosting Locking-Range Enhancement Technique for Ultra-Wideband mm-Wave Injection-Locked Frequency Triplers. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3174-3186.	2.9	31
15	Millimeter-Wave Passives in 45-nm Digital CMOS. IEEE Electron Device Letters, 2010, 31, 1080-1082.	2.2	30
16	Analysis and Design of Inductorless Wideband Low-Noise Amplifier With Noise Cancellation Technique. IEEE Access, 2017, 5, 9389-9397.	2.6	30
17	A 62-90 GHz High Linearity and Low Noise CMOS Mixer Using Transformer-Coupling Cascode Topology. IEEE Access, 2018, 6, 19338-19344.	2.6	27
18	A CMOS K-Band 6-bit Attenuator With Low Phase Imbalance for Phased Array Applications. IEEE Access, 2017, 5, 19657-19661.	2.6	25

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19	A 256-QAM 39 GHz Dual-Channel Transceiver Chipset with LTCC Package for 5G Communication in 65 nm CMOS. , 2018, , .		25
20	Compact 4-port MIMO antenna system for 5G mobile terminal. , 2017, , .		23
21	An On-Chip Frequency-Reconfigurable Antenna For Q-Band Broadband Applications. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2232-2235.	2.4	21
22	A Ku band 4-Element phased array transceiver in 180 nm CMOS. , 2017, , .		20
23	Blind Nonlinear Self-Interference Cancellation for Wireless Full-Duplex Transceivers. IEEE Access, 2018, 6, 37725-37737.	2.6	20
24	A 60-GHz Variable Gain Phase Shifter With 14.8-dB Gain Tuning Range and 6-Bit Phase Resolution Across â˜’25 Â°Câ€“110 Â°C. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2371-2385.	2.9	19
25	A 21-to-41-GHz High-Gain Low Noise Amplifier With Triple-Coupled Technique for Multiband Wireless Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1857-1861.	2.2	19
26	A 37â€“40-GHz Low-Phase-Imbalance CMOS Attenuator With Tail-Capacitor Compensation Technique. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3400-3409.	3.5	18
27	An Improved Ultrawideband Open-Short De-Embedding Method Applied up to 220 GHz. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 269-276.	1.4	17
28	A 19.5% Efficiency 51â€“73-GHz High-Output Power Frequency Doubler in 65-nm CMOS. IEEE Microwave and Wireless Components Letters, 2019, 29, 818-821.	2.0	17
29	A Compact Ka-Band Active Integrated Antenna With a GaAs Amplifier in a Ceramic Package. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2416-2419.	2.4	15
30	A 21.7-to-41.7-GHz Injection-Locked LO Generation With a Narrowband Low-Frequency Input for Multiband 5G Communications. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 170-183.	2.9	15
31	A Hybrid Integrated High-Gain Antenna With an On-Chip Radiator Backed by Off-Chip Ground for System-on-Chip Applications. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 114-122.	1.4	13
32	Characterization of CVD graphene permittivity and conductivity in micro-/millimeter wave frequency range. AIP Advances, 2016, 6, 095014.	0.6	12
33	A 27.5â€“43.5 GHz high linearity up-conversion CMOS mixer for 5G communication. , 2017, , .		12
34	A K-Band Frequency Tripler Using Transformer-Based Self-Mixing Topology With Peaking Inductor. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1688-1696.	2.9	12
35	A Wideband CMOS Frequency Quadrupler With Transformer-Based Tail Feedback Loop. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1153-1157.	2.2	12
36	A 220-GHz Compact Equivalent Circuit Model of CMOS Transistors. IEEE Microwave and Wireless Components Letters, 2017, 27, 651-653.	2.0	11

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37	An Improved RF MOSFET Model Accounting Substrate Coupling Among Terminals. IEEE Microwave and Wireless Components Letters, 2018, 28, 138-140.	2.0	11
38	A 39 GHz MIMO Transceiver Based on Dynamic Multi-Beam Architecture for 5G Communication with 150 Meter Coverage. , 2018, , .		11
39	Fully Coupled Electrothermal Simulation of Large RRAM Arrays in the â€œThermal-Houseâ€• IEEE Access, 2019, 7, 3897-3908.	2.6	11
40	A 5-Gb/s 66 dB CMOS Variable-Gain Amplifier With Reconfigurable DC-Offset Cancellation for Multi-Standard Applications. IEEE Access, 2018, 6, 54139-54146.	2.6	10
41	Multimode orbital angular momentum antenna based on fourâ€arm planar spiral. Electronics Letters, 2019, 55, 875-876.	0.5	10
42	A 62â€“85-GHz High Linearity Upconversion Mixer With 18-GHz IF Bandwidth. IEEE Microwave and Wireless Components Letters, 2019, 29, 219-221.	2.0	10
43	A SiGe Power Amplifier With Double Gain Peaks Based on the Control of Stationary Points of Impedance Transformation. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2279-2290.	2.9	9
44	Stereoscopic Image Quality Assessment Based on Depth and Texture Information. IEEE Systems Journal, 2017, 11, 2829-2838.	2.9	8
45	A K-/Ka-Band Broadband Low-Noise Amplifier Based on the Multiple Resonant Frequency Technique. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 3202-3211.	3.5	8
46	A 60-GHz 1.2 V 21 dBm power amplifier with a fully symmetrical 8-way transformer power combiner in 90 nm CMOS. , 2014, , .		7
47	A 60-GHz vector summing phase shifter with digital tunable current-splitting and current-reuse techniques in 90 nm CMOS. , 2015, , .		7
48	An Architecture for Capturing the Nonlinear Distortion of Analog Self-Interference Cancellers in Full-Duplex Radios. IEEE Microwave and Wireless Components Letters, 2017, 27, 845-847.	2.0	7
49	A 24 GHz CMOS mixer using symmetrical design methodology with I/Q imbalance calibration. , 2017, , .		7
50	An Improved Small-Signal Equivalent Circuit Model Considering Channel Current Magnetic Effect. IEEE Microwave and Wireless Components Letters, 2018, 28, 804-806.	2.0	7
51	Analysis and Design of High-Harmonic-Rejection Multi-Ratio mm-Wave Frequency Multipliers. IEEE Journal of Solid-State Circuits, 2022, 57, 260-277.	3.5	7
52	RF CMOS Transistor Equivalent Circuit Model up to 66 GHz. , 2018, , .		6
53	A Scalable Model of On-Chip Inductor Including Tunable Dummy Metal Density Factor. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 296-305.	1.4	6
54	A Ka-Band CMOS Variable Gain Amplifier with High Gain Resolution and Low Phase Variation. , 2020, , .		6

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55	A Ku-Band Eight-Element Phased-Array Transmitter With Built-in Self-Test Capability in 180-nm CMOS Technology. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 694-705.	2.1	6
56	A Ku-band Phased Array in Package Integrating Four 180 nm CMOS Transceivers with On-chip Antennas. , 2018, , .		5
57	An Improved Surface Potential-Based High-Order Channel Length Modulation Model. , 2019, , .		5
58	Multi-bias Small Signal Circuit Model for FinFET Transistors. , 2019, , .		5
59	A 10â€mW 3.9â€dB NF transformerâ€based Vâ€band lowâ€noise amplifier in 65â€nm CMOS. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2576.	1.2	5
60	An improved wideband equivalent circuit model for integrated spiral inductors in CMOS technology. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2640.	1.2	5
61	An Improved Surface-Potential-Based Model for MOSFETs Considering the Carrier Gaussian Distribution. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 4082-4090.	2.9	5
62	An Improved Large-Signal Equivalent Circuit Model for Partially Depleted Silicon-on-Insulator MOSFET. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2972-2980.	2.9	5
63	A 780-MHz low power transceiver for wireless nodes applications in Internet of Things. , 2013, , .		4
64	CMOS 90 nm multi-bias transistor model Up to 66 GHz. , 2017, , .		4
65	A 27.5â€43.5 GHz 65â€nm CMOS upâ€conversion mixer with 0.42 dBm OP_{1dB} for 5G applications. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2550.	1.2	4
66	A 68.5~90 GHz High-Gain Power Amplifier With Capacitive Stability Enhancement Technique in 0.13 Î¼m SiGe BiCMOS. IEEE Transactions on Microwave Theory and Techniques, 2020, , 1-1.	2.9	4
67	A V-band inverse class F power amplifier with 16.3% PAE in 65nm CMOS. , 2016, , .		3
68	Multiple antennas for future 4G/5G smartphone applications. , 2016, , .		3
69	A highly-applicable supply modulator with a highly-linear envelope detector for WCDMA envelope-tracking applications. , 2016, , .		3
70	An Improved Small Signal Equivalent Circuit Modeling Based On 65nm CMOS Technology. , 2019, , .		3
71	Differential lowâ€loss T/R switch for phase array application in 0.18â€Î¼m CMOS technology. IET Microwaves, Antennas and Propagation, 2019, 13, 813-818.	0.7	3
72	An improved openâ€short equivalent circuit model for CMOS transistors deâ€embedding. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2589.	1.2	3

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73	A millimeterâ€wave scalable small signal model of RF CMOS transistor against number of fingers. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2608.	1.2	3
74	Analysis and design of transformer-based CMOS ultra-wideband millimeter-wave circuits for wireless applications: a review. Frontiers of Information Technology and Electronic Engineering, 2020, 21, 97-115.	1.5	3
75	A 33â€“41-GHz SiGe-BiCMOS Digital Step Attenuator With Minimized Unit Impedance Variation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 568-579.	2.1	3
76	3D Image Quality Assessment Based on Texture Information. , 2014, , .		2
77	Complete model for CMOS transistors up to 66GHz. , 2016, , .		2
78	45-GHz and 60-GHz 90 nm CMOS power amplifiers with a fully symmetrical 8-way transformer power combiner. Science China Information Sciences, 2017, 60, 1.	2.7	2
79	A package-level driver amplifier with 134% relative bandwidth. , 2017, , .		2
80	An asynchronous dual switch envelope tracking supply modulator with 86% efficiency. IEICE Electronics Express, 2018, 15, 20180206-20180206.	0.3	2
81	66 GHz biasâ€dependent equivalent circuit model for CMOS transistor based on 90 nanometers CMOS technology. Microwave and Optical Technology Letters, 2018, 60, 1808-1812.	0.9	2
82	A 15-27 GHz Low Conversion Loss and High Isolation Resistive Ring Mixer for Direct Conversion Receiver. , 2019, , .		2
83	A New GSG Pad Compact Model for Skin and Proximity Effect. , 2019, , .		2
84	A Low Noise VCO with Common-Tail Inductor in 180nm CMOS Technology. , 2019, , .		2
85	A high gain CMOS LNA for Ka-Band Communication System. , 2019, , .		2
86	Millimeter wave balun design and optimization based on compensation matching capacitors and active S parameter. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2644.	1.2	2
87	A Harmonic-Tuned VCO With an Intrinsic-High-Q F₂₃ Inductor in 65-nm CMOS. IEEE Microwave and Wireless Components Letters, 2020, 30, 981-984.	2.0	2
88	Temperature-Dependent Threshold Voltage Extraction of FinFETs Using Noise Measurements. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3442-3451.	2.9	2
89	A magnetically resonant coupling system for wireless power transmission. , 2012, , .		1
90	A Q-band CMOS LNA exploiting transformer feedback and noise-cancelling. Science China Information Sciences, 2015, 58, 1-10.	2.7	1

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91	A suspended stripline bandpass filter using hybrid transmission line stepped impedance resonator. Microwave and Optical Technology Letters, 2016, 58, 892-895.	0.9	1
92	A package-level wideband driver amplifier with 134% fractional bandwidth. IEICE Electronics Express, 2018, 15, 20180179-20180179.	0.3	1
93	An Empirical Nonlinear Capacitance Model for SOI Transistor. , 2018, , .		1
94	Single-Fed OAM antenna based on half-mode substrate integrated waveguide. , 2018, , .		1
95	A 700 MHz-920 MHz CMOS Power Amplifier for LTE Applications. , 2018, , .		1
96	A 2.9 GHz CMOS Phase-Locked Loop with Improved Ring Oscillator. , 2019, , .		1
97	AKa-Band Power Amplifier with 22.9 dBm Psat, 22.5 dBm OP1dB and 21% PAE in 130 nm SiGe BiCMOS. , 2019, , .		1
98	A 5.8 GHz Implicit Class-F VCO in 180-nm CMOS Technology. , 2019, , .		1
99	A High Linearity Low Noise Amplifier for 5G Front-End Modules. , 2019, , .		1
100	A Complementary Oscillator Using a Current-Limiting Tail Resistor in 180nm CMOS. , 2021, , .		1
101	The investigation of the signal radiation mechanism of different <scp>GSG</scp> â€pads connection methods. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 0, , .	1.2	1
102	Multiple coupling inductors model based on four-port measurement. , 2012, , .		0
103	Quality Assessment for Stereoscopic Image Based on DCT Frequency Information. , 2013, , .		0
104	Video Quality Assessment Metric Based on Spatio-temporal Motion Information. , 2013, , .		0
105	A 60GHz CMOS power amplifier with fully symmetrical distributed active transformer. , 2014, , .		0
106	A novel suspended stripline bandpass filter using hybrid transmission line stepped impedance resonator. , 2015, , .		0
107	A suspended stripline bandpass filter using novel resonant cell and nonresonating node(NRN). , 2016, , .		0
108	Suspended stripline bandpass filter using HTLSIR with controllable Tz. Electronics Letters, 2018, 54, 29-31.	0.5	0

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109	A 4-Gb/s CMOS Modulator with High Isolation and Large Output Power for Q-Band Applications. , 2018, , .		0
110	A K-/Ka-Band 21.4 dBm Power Amplifier with Four-Way Twisted Combiner in $0.13 mumathrm{m}$ SiGe BiCMOS. , 2019, , .		0
111	An Improved 220-GHz Small-Signal Equivalent Circuit Model Considering Stray Capacitance Effect. , 2019, , .		0
112	A 2.4 GHz Passive IQ Mixer Using Phase Adjustable Polyphase Filter. , 2019, , .		0
113	A Low Noise Self-Mixing-VCO Based on Coupled Class-F2 Oscillators. , 2019, , .		0
114	A linearized power amplifier with nonlinear feedback architecture. Microwave and Optical Technology Letters, 2020, 62, 1552-1556.	0.9	0
115	A Novel Circularly Polarized Half-Mode/Quarter-Mode SIW Antenna. , 2021, , .		0
116	A Millimeter-wave Ultra-Wideband Non-Uniform Distributed Power Amplifier with Improved Efficiency. , 2020, , .		0
117	Model of CPW Transmission Lines with different widths of ground. , 2021, , .		0
118	A 3.65-4.10 GHz Class-C VCO with 189.1 dBc/Hz FoM Based on Low Electromagnetic Coupling. , 2021, , .		0
119	A 3-GHz Inverse-Coupled Current-Reuse VCO Implemented by 1:1 Transformer. IEEE Microwave and Wireless Components Letters, 2022, 32, 434-436.	2.0	0
120	A noise circulating <scp>VCO</scp> with an intrinsic injection locking tripler. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 0, , .	1.2	0
121	A Wide-Band Divide-By-2 Injection-Locked Frequency Divider Based on Dual-Resonance Tank. , 2021, , .		0