

# Hua Wang

## List of Publications by Year in descending order

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182  
papers

4,330  
citations

136950  
32  
h-index

161849  
54  
g-index

184  
all docs

184  
docs citations

184  
times ranked

3006  
citing authors

#	ARTICLE	IF	CITATIONS
1	Digital transmitter design for mobile devices. IEEE Communications Magazine, 2013, 51, 114-123.	6.1	529
2	A CMOS Broadband Power Amplifier With a Transformer-Based High-Order Output Matching Network. IEEE Journal of Solid-State Circuits, 2010, 45, 2709-2722.	5.4	163
3	A 28-/37-/39-GHz Linear Doherty Power Amplifier in Silicon for 5G Applications. IEEE Journal of Solid-State Circuits, 2019, 54, 1586-1599.	5.4	120
4	A Review of Technologies and Design Techniques of Millimeter-Wave Power Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 2957-2983.	4.6	104
5	A Concurrent Dual-Beam Phased-Array Doppler Radar Using MIMO Beamforming Techniques for Short-Range Vital-Signs Monitoring. IEEE Transactions on Antennas and Propagation, 2019, 67, 2390-2404.	5.1	89
6	A Millimeter-Wave Fully Integrated Passive Reflection-Type Phase Shifter With Transformer-Based Multi-Resonance Loads for 360° Phase Shifting. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 1406-1419.	5.4	85
7	Design of A Transformer-Based Reconfigurable Digital Polar Doherty Power Amplifier Fully Integrated in Bulk CMOS. IEEE Journal of Solid-State Circuits, 2015, 50, 1094-1106.	5.4	79
8	A Scalable 6-to-18 GHz Concurrent Dual-Band Quad-Beam Phased-Array Receiver in CMOS. IEEE Journal of Solid-State Circuits, 2008, 43, 2660-2673.	5.4	76
9	2.1 A 28GHz/37GHz/39GHz multiband linear Doherty power amplifier for 5G massive MIMO applications. , 2017, , .		76
10	A Transformer-Based Poly-Phase Network for Ultra-Broadband Quadrature Signal Generation. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 4444-4457.	4.6	75
11	Millimeter-Wave Continuous-Mode Power Amplifier for 5G MIMO Applications. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 3088-3098.	4.6	71
12	A Multi-Modality CMOS Sensor Array for Cell-Based Assay and Drug Screening. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 801-814.	4.0	65
13	Synthetic Ultra-High-Resolution Millimeter-Wave Imaging for Skin Cancer Detection. IEEE Transactions on Biomedical Engineering, 2019, 66, 61-71.	4.2	61
14	A 24.5–43.5-GHz Ultra-Compact CMOS Receiver Front End With Calibration-Free Instantaneous Full-Band Image Rejection for Multiband 5G Massive MIMO. IEEE Journal of Solid-State Circuits, 2020, 55, 1177-1186.	5.4	50
15	1024-Pixel CMOS Multimodality Joint Cellular Sensor/Stimulator Array for Real-Time Holistic Cellular Characterization and Cell-Based Drug Screening. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 80-94.	4.0	48
16	A 28-GHz Flip-Chip Packaged Chireix Transmitter With On-Antenna Outphasing Active Load Modulation. IEEE Journal of Solid-State Circuits, 2019, 54, 1243-1253.	5.4	48
17	Phase Noise and Fundamental Sensitivity of Oscillator-Based Reactance Sensors. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2215-2229.	4.6	47
18	A Multi-Phase Sub-Harmonic Injection Locking Technique for Bandwidth Extension in Silicon-Based THz Signal Generation. IEEE Journal of Solid-State Circuits, 2015, 50, 1861-1873.	5.4	47

#	ARTICLE	IF	CITATIONS
19	A Broadband Mixed-Signal CMOS Power Amplifier With a Hybrid Class-G Doherty Efficiency Enhancement Technique. IEEE Journal of Solid-State Circuits, 2016, 51, 598-613.	5.4	47
20	A Millimeter-Wave Dual-Feed Square Loop Antenna for 5G Communications. IEEE Transactions on Antennas and Propagation, 2017, 65, 6317-6328.	5.1	47
21	9.5 A dual-band digital-WiFi 802.11a/b/g/n transmitter SoC with digital I/Q combining and diamond profile mapping for compact die area and improved efficiency in 40nm CMOS. , 2016, , .		46
22	A Super-Resolution Mixed-Signal Doherty Power Amplifier for Simultaneous Linearity and Efficiency Enhancement. IEEE Journal of Solid-State Circuits, 2019, 54, 3421-3436.	5.4	45
23	A Coupler-Based Differential mm-Wave Doherty Power Amplifier With Impedance Inverting and Scaling Baluns. IEEE Journal of Solid-State Circuits, 2020, 55, 1212-1223.	5.4	45
24	Millimeter-Wave Power Amplifier Integrated Circuits for High Dynamic Range Signals. IEEE Journal of Microwaves, 2021, 1, 299-316.	6.5	45
25	A Highly Linear Dual-Band Mixed-Mode Polar Power Amplifier in CMOS with An Ultra-Compact Output Network. IEEE Journal of Solid-State Circuits, 2016, 51, 1756-1770.	5.4	43
26	A Wideband CMOS Linear Digital Phase Rotator. , 2007, , .		41
27	A magnetic cell-based sensor. Lab on A Chip, 2012, 12, 4465.	6.0	41
28	A Highly-Efficient Multi-Band Multi-Mode All-Digital Quadrature Transmitter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1321-1330.	5.4	41
29	A continuous-mode harmonically tuned 19-to-29.5GHz ultra-linear PA supporting 18Gb/s at 18.4% modulation PAE and 43.5% peak PAE. , 2018, , .		41
30	Antenna Impedance Variation Compensation by Exploiting a Digital Doherty Power Amplifier Architecture. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 580-597.	4.6	40
31	A CMOS Wideband Current-Mode Digital Polar Power Amplifier With Built-In AM-PM Distortion Self-Compensation. IEEE Journal of Solid-State Circuits, 2018, 53, 340-356.	5.4	39
32	4.8 A Highly Linear Super-Resolution Mixed-Signal Doherty Power Amplifier for High-Efficiency mm-Wave 5G Multi-Gb/s Communications. , 2019, , .		39
33	A Multifeed Antenna for High-Efficiency On-Antenna Power Combining. IEEE Transactions on Antennas and Propagation, 2017, 65, 6937-6951.	5.1	37
34	A Reconfigurable Hybrid Series/Parallel Doherty Power Amplifier With Antenna VSWR Resilient Performance for MIMO Arrays. IEEE Journal of Solid-State Circuits, 2020, 55, 3335-3348.	5.4	37
35	A handheld magnetic sensing platform for antigen and nucleic acid detection. Analyst, The, 2014, 139, 1403-1411.	3.5	36
36	A Linear High-Efficiency Millimeter-Wave CMOS Doherty Radiator Leveraging Multi-Feed On-Antenna Active Load Modulation. IEEE Journal of Solid-State Circuits, 2018, 53, 3587-3598.	5.4	36

#	ARTICLE	IF	CITATIONS
37	A Noise Circulating Oscillator. IEEE Journal of Solid-State Circuits, 2019, 54, 696-708.	5.4	33
38	17.7 A packaged 90-to-300GHz transmitter and 115-to-325GHz coherent receiver in CMOS for full-band continuous-wave mm-wave hyperspectral imaging. , 2017, , .		32
39	21.2 A 27-to-41GHz MIMO Receiver with N-Input-N-Output Using Scalable Cascadable Autonomous Array-Based High-Order Spatial Filters for Instinctual Full-FoV Multi-Blocker/Signal Management. , 2019, , .		32
40	A Full Field-of-View Self-Steering Beamformer for 5G mm-Wave Fiber-Wireless Mobile Fronthaul. Journal of Lightwave Technology, 2020, 38, 1221-1229.	4.6	32
41	Fully integrated parity-time-symmetric electronics. Nature Nanotechnology, 2022, 17, 262-268.	31.5	32
42	2.8 A broadband CMOS digital power amplifier with hybrid Class-G Doherty efficiency enhancement. , 2015, , .		31
43	Multi-parametric cell profiling with a CMOS quad-modality cellular interfacing array for label-free fully automated drug screening. Lab on A Chip, 2018, 18, 3037-3050.	6.0	31
44	A Buffer-Less Wideband Frequency Doubler in 45-nm CMOS-SOI With Transistor Multiport Waveform Shaping Achieving 25% Drain Efficiency and 46GHz Instantaneous Bandwidth. IEEE Solid-State Circuits Letters, 2019, 2, 25-28.	2.0	31
45	A CMOS Highly Linear Doherty Power Amplifier With Multigated Transistors. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 1883-1891.	4.6	31
46	A Broadband Linear Ultra-Compact mm-Wave Power Amplifier With Distributed-Balun Output Network: Analysis and Design. IEEE Journal of Solid-State Circuits, 2021, 56, 2308-2323.	5.4	31
47	24.2 A Reconfigurable Series/Parallel Quadrature-Coupler-Based Doherty PA in CMOS SOI with VSWR Resilient Linearity and Back-Off PAE for 5G MIMO Arrays. , 2020, , .		30
48	A K-band 5-bit digital linear phase rotator with folded transformer based ultra-compact quadrature generation. , 2014, , .		29
49	A Reconfigurable Vernier Time-to-Digital Converter With 2-D Spiral Comparator Array and Second-Order $\Delta\Sigma$ Linearization. IEEE Journal of Solid-State Circuits, 2018, 53, 738-749.	5.4	29
50	A Millimeter-Wave Polarization-Division-Duplex Transceiver Front-End With an On-Chip Multifeed Self-Interference-Canceling Antenna and an All-Passive Reconfigurable Canceller. IEEE Journal of Solid-State Circuits, 2018, 53, 3628-3639.	5.4	29
51	A Full-FoV Autonomous Hybrid Beamformer Array With Unknown Blockers Rejection and Signals Tracking for Low-Latency 5G mm-Wave Links. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2964-2974.	4.6	28
52	A High-Power Broadband Multi-Primary DAT-Based Doherty Power Amplifier for mm-Wave 5G Applications. IEEE Journal of Solid-State Circuits, 2021, 56, 1668-1681.	5.4	28
53	Intracellular cardiomyocytes potential recording by planar electrode array and fibroblasts co-culturing on multi-modal CMOS chip. Biosensors and Bioelectronics, 2019, 144, 111626.	10.1	27
54	A 24.7dBm all-digital RF transmitter for multimode broadband applications in 40nm CMOS. , 2013, , .		26

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55	A CMOS Multi-Modal Electrochemical and Impedance Cellular Sensing Array for Massively Paralleled Exoelectrogen Screening. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 221-234.	4.0	26
56	A Fully Differential Ultra-Compact Broadband Transformer-Based Wilkinson Power Divider. IEEE Microwave and Wireless Components Letters, 2016, 26, 255-257.	3.2	25
57	An All-Passive Negative Feedback Network for Broadband and Wide Field-of-View Self-Steering Beam-Forming With Zero DC Power Consumption. IEEE Journal of Solid-State Circuits, 2017, 52, 1260-1273.	5.4	25
58	5G mm-Wave front-end-module design with advanced SOI process. , 2017, , .		25
59	4.6 A mm-Wave 3-Way Linear Doherty Radiator with Multi Antenna Coupling and On-Antenna Current-Scaling Series Combiner for Deep Power Back-Off Efficiency Enhancement. , 2019, , .		25
60	A Transformer-Based Broadband Front-End Combo in Standard CMOS. IEEE Journal of Solid-State Circuits, 2012, 47, 1810-1819.	5.4	23
61	The Wireless Workhorse: Mixed-Signal Power Amplifiers Leverage Digital and Analog Techniques to Enhance Large-Signal RF Operations. IEEE Microwave Magazine, 2015, 16, 36-63.	0.8	23
62	A high-efficiency 5G K/Ka-band stacked power amplifier in 45nm CMOS SOI process supporting 9Gb/s 64-QAM modulation with 22.4% average PAE. , 2017, , .		23
63	A 23-to-30GHz hybrid beamforming MIMO receiver array with closed-loop multistage front-end beamformers for full-FoV dynamic and autonomous unknown signal tracking and blocker rejection. , 2018, , .		23
64	A Mm-Wave Wideband MIMO RX With Instinctual Array-Based Blocker/Signal Management for Ultralow-Latency Communication. IEEE Journal of Solid-State Circuits, 2019, 54, 3553-3564.	5.4	23
65	Towards Energy-Efficient 5G Mm-Wave links: Exploiting broadband Mm-Wave doherty power amplifier and multi-feed antenna with direct on-antenna power combining. , 2017, , .		22
66	4.9 A 60GHz CMOS Power Amplifier with Cascaded Asymmetric Distributed-Active-Transformer Achieving Watt-Level Peak Output Power with 20.8% PAE and Supporting 2Gsym/s 64-QAM Modulation. , 2019, , .		22
67	A CMOS 1.2-V Hybrid Current- and Voltage-Mode Three-Way Digital Doherty PA With Built-In Phase Nonlinearity Compensation. IEEE Journal of Solid-State Circuits, 2020, 55, 525-535.	5.4	22
68	24.1 A 24-to-30GHz Watt-Level Broadband Linear Doherty Power Amplifier with Multi-Primary Distributed-Active-Transformer Power-Combining Supporting 5G NR FR2 64-QAM with >19dBm Average P <sub>out</sub> and >19% Average PAE. , 2020, , .		22
69	A fully differential ultra-compact broadband transformer based quadrature generation scheme. , 2013, , .		21
70	<math>\frac{W}{L}</math>-Band Micromachined Antipodal Vivaldi Antenna Using SIW and CPW Structures. IEEE Transactions on Antennas and Propagation, 2018, 66, 6352-6357.	5.1	21
71	A Continuous-Mode 23.5-41GHz Hybrid Class-F/F-I Power Amplifier with 46% Peak PAE for 5G Massive MIMO Applications. , 2018, , .		21
72	A 15-55 GHz Low-Loss Ultra-Compact Folded Inductor-Based Multi-Section Wilkinson Power Divider for Multi-Band 5G Applications. , 2019, , .		21

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73	A 24-GHz 360° Full-Span Differential Vector Modulator Phase Rotator With Transformer-Based Poly-Phase Quadrature Network. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 2623-2635.	3.1	21
74	A 5.2-to-13GHz class-AB CMOS power amplifier with a 25.2dBm peak output power at 21.6% PAE. , 2010, , .		20
75	24.6 An Instantaneously Broadband Ultra-Compact Highly Linear PA with Compensated Distributed-Balun Output Network Achieving >17.8dBm P <sub>1dB</sub> and >36.6% PAE <sub>P1dB</sub> over 24 to 40GHz and Continuously Supporting 64-/256-QAM 5G NR Signals over 24 to 42GHz. , 2020, , .		20
76	Magnetic Sensors for Diagnostic Medicine: CMOS-Based Magnetic Particle Detectors for Medical Diagnosis Applications. IEEE Microwave Magazine, 2013, 14, 110-130.	0.8	19
77	A +2.3dBm 124&#x2013;158GHz Class-C frequency quadrupler with folded-transformer based multi-phase driving. , 2015, , .		19
78	A Compact Broadband Mixed-Signal Power Amplifier in Bulk CMOS With Hybrid Class-G and Dynamic Load Trajectory Manipulation. IEEE Journal of Solid-State Circuits, 2017, 52, 1463-1478.	5.4	19
79	A Coupler-Based Differential Doherty Power Amplifier with Built-In Baluns for High Mm-Wave Linear-Yet-Efficient Gbit/s Amplifications. , 2019, , .		19
80	A &#x2013;27.3dBm transformer-based digital Doherty polar power amplifier fully integrated in bulk CMOS. , 2014, , .		18
81	A multi-feed antenna for antenna-level power combining. , 2016, , .		18
82	A MM-Wave Current-Mode Inverse Outphasing Transmitter Front-End: A Circuit Duality of Conventional Voltage-Mode Outphasing. IEEE Journal of Solid-State Circuits, 2021, 56, 1732-1744.	5.4	18
83	A 43&#x2013;97-GHz Mixer-First Front-End With Quadrature Input Matching and On-Chip Image Rejection. IEEE Journal of Solid-State Circuits, 2021, 56, 705-714.	5.4	18
84	A Cascaded Self-Similar Rat-Race Hybrid Coupler Architecture and its Compact Fully Integrated Ka-band Implementation. , 2018, , .		17
85	24.3 A 28GHz Current-Mode Inverse-Outphasing Transmitter Achieving 40%/31% PA Efficiency at P <sub>sat</sub> /6dB PBO and Supporting 15Gbit/s 64-QAM for 5G Communication. , 2020, , .		17
86	Broadband Active Load-Modulation Power Amplification Using Coupled-Line Baluns: A Multifrequency Role-Exchange Coupler Doherty Amplifier Architecture. IEEE Journal of Solid-State Circuits, 2021, 56, 3109-3122.	5.4	17
87	26.3 A mm-Wave Power Amplifier for 5G Communication Using a Dual-Drive Topology Exhibiting a Maximum PAE of 50% and Maximum DE of 60% at 30GHz. , 2021, , .		16
88	Impedance Characterization and Modeling of Subcellular to Micro-sized Electrodes with Varying Materials and PEDOT:PSS Coating for Bioelectrical Interfaces. ACS Applied Electronic Materials, 2021, 3, 5226-5239.	4.3	16
89	Multi-Feed Antenna and Electronics Co-Design: An E-Band Antenna-LNA Front End With On-Antenna Noise-Canceling and <i>G <sub>a</sub> ,~</i>-Boosting. IEEE Journal of Solid-State Circuits, 2020, 55, 3362-3375.	5.4	15
90	A Bi-Directional Multi-Band, Multi-Beam mm-Wave Beamformer for 5G Fiber Wireless Access Networks. Journal of Lightwave Technology, 2021, 39, 1116-1124.	4.6	15

#	ARTICLE	IF	CITATIONS
91	A frequency-shift based CMOS magnetic biosensor with spatially uniform sensor transducer gain. , 2010, , .		14
92	28.4 A CMOS Multimodality In-Pixel Electrochemical and Impedance Cellular Sensing Array for Massively Paralleled Synthetic Exoelectrogen Characterization. , 2020, , .		14
93	26.1 A 26-to-60GHz Continuous Coupler-Doherty Linear Power Amplifier for Over-An-Octave Back-Off Efficiency Enhancement. , 2021, , .		13
94	11.7 A multimodality CMOS sensor array for cell-based assay and drug screening. , 2015, , .		12
95	A high-density CMOS multi-modality joint sensor/stimulator array with 1024 pixels for holistic real-time cellular characterization. , 2016, , .		12
96	A 62-to-68GHz linear 6Gb/s 64QAM CMOS doherty radiator with 27.5%/20.1% PAE at peak/6dB-back-off output power leveraging high-efficiency multi-feed antenna-based active load modulation. , 2018, , .		12
97	Broadband, Linear, and High-Efficiency Mm-Wave PAs in Silicon â€• Overcoming Device Limitations by Architecture/Circuit Innovations. , 2019, , .		12
98	A bidirectional lens-free digital-bits-in/-out 0.57mm <sup>2</sup> Terahertz nano-radio in CMOS with 49.3mW peak power consumption supporting 50cm Internet-of-Things communication. , 2017, , .		11
99	A 64GHz full-duplex transceiver front-end with an on-chip multifeed self-interference-canceling antenna and an all-passive canceler supporting 4Gb/s modulation in one antenna footprint. , 2018, , .		11
100	An ultra-broadband compact mm-wave butler matrix in CMOS for array-based MIMO systems. , 2013, , .		10
101	A millimeter-wave fully differential transformer-based passive reflective-type phase shifter. , 2015, , .		10
102	A broadband compact low-loss 4Å—4 Butler Matrix in CMOS with stacked transformer based quadrature couplers. , 2016, , .		10
103	17.3 A 60GHz on-chip linear radiator with single-element 27.9dBm P <sub>sat</sub> and 33.1dBm peak EIRP using multifeed antenna for direct on-antenna power combining. , 2017, , .		10
104	A 21952-Pixel Multi-Modal CMOS Cellular Sensor Array with 1568-Pixel Parallel Recording and 4-Point Impedance Sensing. , 2019, , .		10
105	A CMOS 21 952-Pixel Multi-Modal Cell-Based Biosensor With Four-Point Impedance Sensing for Holistic Cellular Characterization. IEEE Journal of Solid-State Circuits, 2021, 56, 2438-2451.	5.4	10
106	Performance of V-Band On-Chip Antennas in GlobalFoundries 45nm CMOS SOI Process for Mm-Wave 5G Applications. , 2018, , .		9
107	A 24.5-43.5GHz Compact RX with Calibration-Free 32-56dB Full-Frequency Instantaneously Wideband Image Rejection Supporting Multi-Gb/s 64-QAM/256-QAM for Multi-Band 5G Massive MIMO. , 2019, , .		9
108	An Artificial-Intelligence (AI) Assisted Mm-Wave Doherty Power Amplifier with Rapid Mixed-Mode In-Field Performance Optimization. , 2019, , .		9



#	ARTICLE	IF	CITATIONS
109	A 22-37 GHz Broadband Compact Linear Mm-Wave Power Amplifier Supporting 64-/256-/512-QAM Modulations for 5G Communications. , 2020, , .		9
110	A Single-Ended Coupler-Based VSWR Resilient Joint mm-Wave True Power Detector and Impedance Sensor. IEEE Microwave and Wireless Components Letters, 2021, 31, 812-815.	3.2	9
111	A 26-to-39GHz Broadband Ultra-Compact High-Linearity Switchless Hybrid N/PMOS Bi-Directional PA/LNA Front-End for Multi-Band 5G Large-Scaled MIMO System. , 2022, , .		9
112	Fully integrated frequency and phase generation for a 6&#x2013;18GHz tunable multi-band phased-array receiver in CMOS. , 2008, , .		8
113	A new wave of CMOS power amplifier innovations: Fusing digital and analog techniques with large signal RF operations. , 2014, , .		8
114	A 2&#x2013;24GHz 360&#x00B0; full-span differential vector modulator phase rotator with transformer-based poly-phase quadrature network. , 2015, , .		8
115	A transformer-based poly-phase network for ultra-broadband quadrature signal generation. , 2015, , .		8
116	A CMOS 22k-pixel single-cell resolution multi-modality real-time cellular sensing array. , 2017, , .		8
117	A 28GHz Packaged Chireix Transmitter with Direct on-Antenna Outphasing Load Modulation Achieving 56%/38% PA Efficiency at Peak/6dB Back-Off Output Power. , 2018, , .		8
118	Experimental RF Characterization of Ferroelectric Hafnium Zirconium Oxide Material at GHz for Microwave Applications. , 2021, , .		8
119	A passive quadrature generation scheme for integrated RF systems. , 2013, , .		7
120	A highly linear dual-band mixed-mode polar power amplifier in CMOS with an ultra-compact output network. , 2015, , .		7
121	An ultra-compact folded inductor based mm-wave rat-race coupler in CMOS. , 2016, , .		7
122	An N-way transformer based Wilkinson power divider in CMOS. , 2016, , .		7
123	Interdigitated microelectronic bandage augments hemostasis and clot formation at low applied voltage<i>in vitro</i>and<i>in vivo</i>. Lab on A Chip, 2018, 18, 2985-2993.	6.0	7
124	A 1.2 V Single Supply Hybrid Current-/Voltage-Mode Three-Way Digital Doherty PA with Built-In Large-Signal Phase Compensation Achieving Less-Than 5Â° AM-PM. , 2019, , .		7
125	In-Field Performance Optimization for mm-Wave Mixed-Signal Doherty Power Amplifiers: A Bandit Approach. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 5302-5315.	5.4	7
126	Mixer-First Extremely Wideband 43&#x2013;97 GHz RX Frontend with Broadband Quadrature Input Matching and Current Mode Transformer-Based Image Rejection for Massive MIMO Applications. , 2020, , .		7



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127	4.2 An E-Band High-Linearity Antenna-LNA Front-End with 4.8dB NF and 2.2dBm IIP3 Exploiting Multi-Feed On-Antenna Noise-Canceling and Gm-Boosting. , 2020, , .		7
128	A 5GHz all-passive negative feedback network for RF front-end self-steering beam-forming with zero DC power consumption. , 2016, , .		6
129	Electrodeâ€“Electrolyte Interface Impedance Characterization of Ultra-Miniaturized Microelectrode Arrays Over Materials and Geometries for Sub-Cellular and Cellular Sensing and Stimulation. IEEE Transactions on Nanobioscience, 2019, 18, 248-252.	3.3	6
130	Integrated biosensors in CMOS. , 2011, , .		5
131	An RF receiver with an integrated adaptive notch filter for multi-standard applications. , 2013, , .		5
132	Cell culture and cell based sensor on CMOS. , 2014, , .		5
133	A compact broadband mixed-signal power amplifier in bulk CMOS with hybrid Class-G and dynamic load trajectory manipulation operations. , 2016, , .		5
134	3-D Integrated Electronic Microplate Platform for Low-Cost Repeatable Biosensing Applications. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1827-1833.	2.5	5
135	Mixed-signal Doherty power amplifiers in CMOS. , 2016, , .		5
136	Ka Band FEM Design Comparison with 45nm RFSOI CMOS and High Performance SiGe BiCMOS. , 2018, , .		5
137	A Mm-Wave Transmitter MIMO with Constellation Decomposition Array (CDA) for Keyless Physically Secured High-Throughput Links. , 2021, , .		5
138	A low-power and ultra-compact W-band transmitter front-end in 90 nm SiGe BiCMOS technology. , 2014, , .		4
139	Residual Network Based Direct Synthesis of EM Structures: A Study on One-to-One Transformers. , 2020, , .		4
140	Deep Learning Assisted End-to-End Synthesis of mm-Wave Passive Networks with 3D EM Structures: A Study on A Transformer-Based Matching Network. , 2021, , .		4
141	A 25â€“34-GHz Eight-Element MIMO Transmitter for Keyless High Throughput Directionally Secure Communication. IEEE Journal of Solid-State Circuits, 2022, 57, 1244-1256.	5.4	4
142	Single-Ended Quadrature Coupler-Based VSWR Resilient Joint mm-Wave True Power Detector and Impedance Sensor. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 2802-2814.	4.6	4
143	A multi-phase sub-harmonic injection locking technique for bandwidth extension in silicon-based THz signal generation. , 2014, , .		3
144	A microfabricated electronic microplate platform for low-cost repeatable biosensing applications. , 2015, , .		3

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145	A transformer-based inverted complementary cross-coupled VCO with a 193.3dBc/Hz FoM and 13kHz $1/f^{>3}</sup>$ noise corner. , 2016, , .		3
146	A fully packaged D-band MIMO transmitter using high-density flip-chip interconnects on LCP substrate. , 2016, , .		3
147	13.8 A 24dBm 2-to-4.3GHz wideband digital Power Amplifier with built-in AM-PM distortion self-compensation. , 2017, , .		3
148	A noise circulating cross-coupled VCO with a 195.6dBc/Hz FoM and 50kHz $1/f^{>3}</sup>$ noise corner. , 2018, , .		3
149	A bidirectional lens-free digital-bits-in/-out 0.57mm <sup>2</sup> terahertz nano-radio in CMOS with 49.3mW Peak power consumption supporting 50cm Internet-of-Things communication. , 2018, , .		3
150	Concurrent Multi-Directional Beam-Forming Receiving Network for Full-FoV High-Efficiency Wireless Power Transfer. , 2019, , .		3
151	A 4-channel Beamformer for 9-Gb/s MMW 5G Fixedwireless Access over 25-km SMF with Bit-loading OFDM. , 2019, , .		3
152	A Broadband Mm-Wave VSWR-Resilient Joint True-Power Detector and Impedance Sensor Supporting Single-Ended Antenna Interfaces. , 2022, , .		3
153	A highly-efficient multi-band multi-mode digital quadrature transmitter with 2D pre-distortion. , 2013, , .		2
154	Fabrication of and cell growth on $\epsilon$ -silicon membranes <sup>™</sup> with high density TSVs for bio-sensing applications. , 2015, , .		2
155	Live demonstration: A multi-modality CMOS sensor array for cell-based assay and drug screening. , 2015, , .		2
156	A Highly Linear Doherty Power Amplifier with Multigated Transistors Supporting 80MSymbol/s 256-QAM. , 2018, , .		2
157	Guest Editorial Antenna-in-Package, Antenna-on-Chip, Antenna-IC Interface: Joint Design and Cointegration. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2345-2350.	4.0	2
158	An Ultra-Wideband Edge-Fed Octagonal Four-Arm Archimedean Spiral Antenna. , 2019, , .		2
159	A 26–32-GHz Dual-Polarization Receiver Front-End With Rapid-Response Mixed-Signal Polarization Alignment for Ultrareliable Low-Latency Communications. IEEE Solid-State Circuits Letters, 2021, 4, 222-225.	2.0	2
160	A 150 GHz Lens-Free Large FoV Regenerative 2 × 2 Transceiver Array With 31% DC-to-EIRP Efficiency and $\sim 70$ dBm Sensitivity for a 70 cm Bidirectional Peer-to-Peer Link. IEEE Journal of Solid-State Circuits, 2022, 57, 2102-2113.	5.4	2
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