Ali M Niknejad

List of Publications by Year
in descending order

66	2,463	361413	223800
papers	citations	20 h-index	46 g-index

67	67	67	2225
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A 90 nm CMOS Low-Power 60 GHz Transceiver With Integrated Baseband Circuitry. IEEE Journal of Solid-State Circuits, 2009, 44, 3434-3447.	5.4	327
2	A 94 GHz mm-Wave-to-Baseband Pulsed-Radar Transceiver with Applications in Imaging and Gesture Recognition. IEEE Journal of Solid-State Circuits, 2013, 48, 1055-1071.	5.4	165
3	Fully Integrated CMOS Power Amplifier With Efficiency Enhancement at Power Back-Off. IEEE Journal of Solid-State Circuits, 2008, 43, 600-609.	5.4	155
4	A 240 GHz Fully Integrated Wideband QPSK Transmitter in 65 nm CMOS. IEEE Journal of Solid-State Circuits, 2015, 50, 2256-2267.	5.4	152
5	A 240 GHz Fully Integrated Wideband QPSK Receiver in 65 nm CMOS. IEEE Journal of Solid-State Circuits, 2015, 50, 2268-2280.	5.4	128
6	A W-Band Low-Noise PLL With a Fundamental VCO in SiGe for Millimeter-Wave Applications. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 2390-2404.	4.6	108
7	Design of Energy- and Cost-Efficient Massive MIMO Arrays. Proceedings of the IEEE, 2016, 104, 586-606.	21.3	107
8	A 94-GHz 4TXâ€“4RX Phased-Array FMCW Radar Transceiver With Antenna-in-Package. IEEE Journal of Solid-State Circuits, 2017, 52, 1245-1259.	5.4	90
9	A 90 GHz Hybrid Switching Pulsed-Transmitter for Medical Imaging. IEEE Journal of Solid-State Circuits, 2010, 45, 2667-2681.	5.4	81
10	A Fully-Integrated Efficient CMOS Inverse Class-D Power Amplifier for Digital Polar Transmitters. IEEE Journal of Solid-State Circuits, 2012, 47, 1113-1122.	5.4	80
11	A Power-Harvesting Pad-Less Millimeter-Sized Radio. IEEE Journal of Solid-State Circuits, 2015, 50, 962-977.	5.4	77
12	Design and Analysis of a Stage-Scaled Distributed Power Amplifier. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1274-1283.	4.6	66
13	A 60 GHz Drain-Source Neutralized Wideband Linear Power Amplifier in 28 nm CMOS. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 2253-2262.	5.4	64
14	Design of a CMOS Tapered Cascaded Multistage Distributed Amplifier. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 938-947.	4.6	50
15	30 GHz CMOS Low Noise Amplifier. , 2007, , .		46
16	BSIM — Industry standard compact MOSFET models. , 2012, , .		41
17	The Speedâ€“Power Trade-Off in the Design of CMOS True-Single-Phase-Clock Dividers. IEEE Journal of Solid-State Circuits, 2010, , .	5.4	39
18	Analysis and Design of Integrated Active Cancellation Transceiver for Frequency Division Duplex Systems. IEEE Journal of Solid-State Circuits, 2017, 52, 2038-2054.	5.4	38

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19	A 4-Port-Inductor-Based VCO Coupling Method for Phase Noise Reduction. IEEE Journal of Solid-State Circuits, 2011, 46, 1772-1781.	5.4	36
20	Transformer-Coupled Power Amplifier Stability and Power Back-Off Analysis. IEEE Transactions on Circuits and Systems II: Express Briefs, 2008, 55, 507-511.	3.0	26
21	Broadband variable passive delay elements based on an inductance multiplication technique. , 2008, , .		25
22	A 60 GHz Power Amplifier in 90nm CMOS Technology. , 2007, , .		24
23	A three-stage cascaded distributed amplifier with GBW exceeding 1.5THz. , 2012, , .		22
24	CMOS Microflow Cytometer for Magnetic Label Detection and Classification. IEEE Journal of Solid-State Circuits, 2017, 52, 543-555.	5.4	22
25	A Gain Boosting Array Technique for Weakly-Coupled Wireless Power Transfer. IEEE Transactions on Power Electronics, 2017, 32, 7130-7139.	7.9	22
26	A tapered cascaded multi-stage distributed amplifier with 370GHz GBW in 90nm CMOS. , 2008, , .		20
27	Bifurcation Analysis in Weakly-Coupled Inductive Power Transfer Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 727-738.	5.4	20
28	A 57â€“74-GHz Tail-Switching Injection-Locked Frequency Tripler in 28-nm CMOS. IEEE Solid-State Circuits Letters, 2019, 2, 115-118.	2.0	19
29	A Low-Power 70â€“100-GHz Mixer-First RX Leveraging Frequency-Translational Feedback. IEEE Journal of Solid-State Circuits, 2020, 55, 2043-2054.	5.4	18
30	On the Noise Optimization of CMOS Common-Source Low-Noise Amplifiers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 654-667.	5.4	16
31	BSIM — Industry standard compact MOSFET models. , 2012, , .		16
32	10-35GHz Passive Mixer-First Receiver Achieving +14dBm in-band IIP3 for Digital Beam-forming Arrays. , 2020, , .		16
33	A 37.5â€“45 GHz Superharmonic-Coupled QVCO With Tunable Phase Accuracy in 28 nm CMOS. IEEE Journal of Solid-State Circuits, 2019, 54, 2754-2764.	5.4	14
34	Inductive Wireless Power Transfer and Uplink Design for a CMOS Tag With 0.01 mm2Coil Size. IEEE Microwave and Wireless Components Letters, 2016, 26, 852-854.	3.2	13
35	Equation-Based Optimization for Inductive Power Transfer to a Miniature CMOS Rectenna. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2393-2408.	4.6	12
36	Microfluidic Packaging Integration with Electronic-Photonic Biosensors Using 3D Printed Transfer Molding. Biosensors, 2020, 10, 177.	4.7	12

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37	A Wideband All-Digital CMOS RF Transmitter on HDI Interposers With High Power and Efficiency. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 4724-4743.	4.6	11
38	RF-Powered-Tag Intermodulation Uplink With Three-Tone Transmitter for Enhanced Uplink Power. IEEE Journal of Radio Frequency Identification, 2019, 3, 56-66.	2.3	11
39	CMOS Low Noise Amplifier with Capacitive Feedback Matching. , 2007, , .		10
40	An E-band QPSK Transmitter Element in 28-nm CMOS with Multistate Power Amplifier for Digitally-Modulated Phased Arrays. , 2018, , .		10
41	A 71-to-86-GHz 16-Element by 16-Beam Multi-User Beamforming Integrated Receiver Sub-Array for Massive MIMO. IEEE Journal of Solid-State Circuits, 2021, 56, 3811-3826.	5.4	10
42	Design of High-Linearity Mixer-First Receivers for mm-Wave Digital MIMO Arrays. IEEE Journal of Solid-State Circuits, 2021, 56, 3375-3387.	5.4	9
43	A 60 GHz high-Q tapered transmission line resonator in 90nm CMOS. , 2008, , .		8
44	A 65-nm CMOS Wideband TDD Front-End With Integrated T/R Switching via PA Re-Use. IEEE Journal of Solid-State Circuits, 2017, 52, 1768-1782.	5.4	8
45	Novel Inductive Wireless Power Transfer Uplink Utilizing Rectifier Third-Order Nonlinearity. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 319-331.	4.6	8
46	A 57â€“74-GHz Tail-Switching Injection-Locked Frequency Tripler in 28-nm CMOS. , 2019, , .		8
47	A Dual-Injection Technique for mm-Wave Injection-Locked Frequency Multipliers. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 5417-5428.	4.6	8
48	Lab-on-Chip for Everyone: Introducing an Electronic-Photonic Platform for Multiparametric Biosensing Using Standard CMOS Processes. IEEE Open Journal of the Solid-State Circuits Society, 2021, 1, 198-208.	2.7	8
49	Single-Antenna FDD Reader Design and Communication to a Commercial UHF RFID Tag. IEEE Microwave and Wireless Components Letters, 2018, 28, 630-632.	3.2	7
50	Fully Integrated Electronicâ€“Photonic Biosensor for Label-Free Real-Time Molecular Sensing in Advanced Zero-Change CMOS-SOI Process. IEEE Solid-State Circuits Letters, 2021, 4, 198-201.	2.0	7
51	A 10-Mb/s Uplink Utilizing Rectifier Third-Order Intermodulation in a Miniature CMOS Tag. IEEE Microwave and Wireless Components Letters, 2017, 27, 1031-1033.	3.2	6
52	A 0.25â€“1.7-GHz, 3.9â€“13.7-mW Power-Scalable, â^'10-dBm Harmonic Blocker-Tolerant Mixer-First RF-to-Digital Receiver for Massive MIMO Applications. IEEE Solid-State Circuits Letters, 2018, 1, 38-41.	2.0	6
53	Analysis and Design of Submilliwatt Interference-Tolerant Receivers Leveraging N-Path Filter-Based Translational Positive Feedback. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 3496-3509.	4.6	6
54	A scalable-low cost architecture for high gain beamforming antennas. , 2010, , .		5

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55	Inductive Power Transfer Uplink Using Rectifier Second-Order Nonlinearity. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 2073-2085.	5.4	5
56	Design and Demonstration of a Scalable Massive MIMO Uplink at E-Band. , 2020, , .		5
57	A 0.4-to-4-GHz All-Digital RF Transmitter Package With a Band-Selecting Interposer Combining Three Wideband CMOS Transmitters. IEEE Transactions on Microwave Theory and Techniques, 2018, , 1-18.	4.6	3
58	Ultralow-Power Radio Frequency Beamformer Using Transmission-Line Transformers and Tunable Passives. IEEE Microwave and Wireless Components Letters, 2019, 29, 158-160.	3.2	3
59	A Wideband 100 GHz Low Noise Amplifier with Slowâ€Wave CPW in 65 nm LP CMOS. Microwave and Optical Technology Letters, 2013, 55, 1954-1957.	1.4	2
60	Narrowband communication with free-running 2.4GHz ring oscillators. , 2017, , .		2
61	Analysis of Ultralow Power Radio Frequency Beamforming Using Transmission-Line Transformers and Tunable Passives. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 2473-2488.	4.6	2
62	Design of an Inductor-Less 72-GHz 2:1 CMOS CML Frequency Divider With Dual-Core VCO. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2752-2756.	3.0	2
63	Theory and Design of N-Push BJT Clamping Harmonic Generator for Silicon Terahertz ICs. IEEE Microwave and Wireless Components Letters, 2012, 22, 639-641.	3.2	1
64	Noise Measure Revisited for Design of Amplifiers Close to Activity Limits. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 2276-2283.	5.4	1
65	A 90GHz pulsed-transmitter with near-field/far-field energy cancellation using a dual-loop antenna. , 2011, , .		0
66	Low-Leakage Constellation Formation Exploiting Combination Redundancy in a Digitally Modulated mmW Phased Array. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2580-2598.	4.6	0