Hossein Hashemi

List of Publications by Year
in descending order

70 papers	1,505 citations	430874 18 h-index	377865 34 g-index
70 all docs	70 docs citations	70 times ranked	1344 citing authors

#	Article	IF	Citations
1	A Review of Silicon Photonics LiDAR. , 2022, , .		4
2	Energy efficient neural stimulator with dynamic supply modulation. Electronics Letters, 2021, 57, 173-174.	1.0	2
3	mm-Wave Mixer-First Receiver With Selective Passive Wideband Low-Pass Filtering. IEEE Journal of Solid-State Circuits, 2021, 56, 1454-1463.	5.4	13
4	A Bidirectional Neural Interface SoC With Adaptive IIR Stimulation Artifact Cancelers. IEEE Journal of Solid-State Circuits, 2021, 56, 2142-2157.	5.4	16
5	A Review of Semiconductor-Based Monolithic Optical Phased Array Architectures. IEEE Open Journal of the Solid-State Circuits Society, 2021, 1, 222-234.	2.7	9
6	mm-Wave Mixer-First Receiver with Passive Elliptic Low-pass Filter. , 2020, , .		7
7	Low-power thermo-optic silicon modulator geometrically optimized for photonic integrated circuits. , 2020, , .		0
8	RF Filter Synthesis Based on Passively Coupled N-Path Resonators. IEEE Journal of Solid-State Circuits, 2019, 54, 2475-2486.	5.4	37
9	A Chopper Stabilized, Current Feedback, Neural Recording Amplifier. IEEE Solid-State Circuits Letters, 2019, 2, 17-20.	2.0	28
10	Low-power thermo-optic silicon modulator for large-scale photonic integrated systems. Optics Express, 2019, 27, 13430.	3.4	67
11	Frequency and Power Scaling in mm-Wave Colpitts Oscillators. IEEE Journal of Solid-State Circuits, 2018, 53, 1338-1347.	5.4	10
12	A Monolithically Integrated Large-Scale Optical Phased Array in Silicon-on-Insulator CMOS. IEEE Journal of Solid-State Circuits, 2018, 53, 275-296.	5.4	206
13	Geometric Loss Reduction in Tight Bent Waveguides for Silicon Photonics. , 2018, , .		4
14	Distributed Injection-Locked Frequency Dividers. IEEE Journal of Solid-State Circuits, 2017, 52, 2083-2093.	5.4	19
15	Millimeter-wave power amplifiers & transmitters. , 2017, , .		7
16	Watt-Level mm-Wave Power Amplification With Dynamic Load Modulation in a SiGe HBT Digital Power Amplifier. IEEE Journal of Solid-State Circuits, 2017, 52, 371-388.	5.4	30
17	Analysis and synthesis of passive coupled-switched-capacitor-resonator-based RF filters. , 2016, , .		3
18	Wideband mm-wave phase shifters based on constant-impedance tunable transmission lines. , 2016, , .		0

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19	Passive coupled-switched-capacitor-resonator-based reconfigurable RF front-end filters and duplexers. , 2016, , .		16
20	A 3.9 mW, 35–44/41–59.5 GHz distributed injection locked frequency divider. , 2015, , .		0
21	Event-driven implantable neural recording integrated system using level-crossing detectors. , 2015, , .		2
22	An FBAR/CMOS Frequency/Phase Discriminator and Phase Noise Reduction System. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 1658-1665.	4.6	16
23	Dual-Carrier Aggregation Receiver With Reconfigurable Front-End RF Signal Conditioning. IEEE Journal of Solid-State Circuits, 2015, 50, 1874-1888.	5.4	23
24	Monolithic optical phased-array transceiver in a standard SOI CMOS process. Optics Express, 2015, 23, 6509.	3.4	179
25	Reconfigurable Receiver With Radio-Frequency Current-Mode Complex Signal Processing Supporting Carrier Aggregation. IEEE Journal of Solid-State Circuits, 2015, 50, 3032-3046.	5.4	42
26	Watt-level mm-wave digital polar transmitters using switching power amplifiers in SiGe HBT. , 2014, , .		1
27	Reconfigurable Quantization of Oversampled Signals Under Discrete-Time Filtering. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 3193-3205.	5.4	2
28	Reconfigurable blocker-resilient receiver with concurrent dual-band carrier aggregation. , 2014, , .		10
29	Wirelessly Powered Passive Systems With Dynamic Energy Storage Mechanism. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 1012-1021.	4.6	21
30	A 0.5-to-3 GHz Software-Defined Radio Receiver Using Discrete-Time RF Signal Processing. IEEE Journal of Solid-State Circuits, 2014, 49, 1097-1111.	5.4	48
31	A low-noise FBAR-CMOS frequency/phase discriminator for phase noise measurement and cancellation. , 2013, , .		3
32	A triple-stacked Class-E mm-wave SiGe HBT power amplifier. , 2013, , .		9
33	True-Time-Delay-Based Multi-Beam Arrays. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 3072-3082.	4.6	45
34	A 0.5-to-3 GHz software-defined radio receiver using sample domain signal processing. , 2013, , .		7
35	An UWB CMOS impulse radar. , 2013, , .		2
36	Hardware-driven compressive sampling for fast target localization using single-chip UWB radar sensor. , 2013, , .		0

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37	An 800 MSPS quadrature DDFS and integrated nonlinear DAC-filter with <15 ns instantaneous frequency hopping time. , 2013, , .		4
38	Passive Subharmonic Generation Using Memoryless Nonlinear Circuits. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 4053-4065.	4.6	0
39	Analysis and Design of Low Phase-Noise Oscillators With Nonlinear Resonators. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 3749-3760.	4.6	11
40	A 22.4 dBm Two-Way Wilkinson Power-Combined Q-Band SiGe Class-E Power Amplifier with 23% Peak PAE. , 2012, , .		7
41	An electronically controlled semiconductor laser phased array. , 2012, , .		1
42	A 20 dBm Q-band SiGe Class-E power amplifier with 31% peak PAE. , 2012, , .		14
43	A 130-nm CMOS 100-Hzâ€“6-GHz Reconfigurable Vector Signal Analyzer and Software-Defined Receiver. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 1375-1389.	4.6	26
44	A wirelessly-powered passive RF CMOS transponder with dynamic energy storage and sensitivity enhancement. , 2011, , .		9
45	Experimental demonstration of self-localized Ultra Wideband indoor mobile robot navigation system. , 2010, , .		22
46	A 10-Gb/s Inductorless Transimpedance Amplifier. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 926-930.	3.0	52
47	Design Methodology and Architectures to Reduce the Semiconductor Laser Phase Noise Using Electrical Feedforward Schemes. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 3290-3303.	4.6	17
48	Wideband Multi-Mode CMOS VCO Design Using Coupled Inductors. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 1830-1843.	5.4	89
49	Phase noise in a synchronized concurrent dual-frequency oscillator. , 2009, , .		3
50	A low power ka-band receiver front-end in 0.13Î¼m sige bicmos for space transponders. , 2009, , .		4
51	Challenges and opportunities in ultra-wideband antenna-array transceivers for imaging. , 2009, , .		12
52	A 1.8mW Wideband 57dBΩ transimpedance amplifier in 0.13µm CMOS. , 2009, , .		10
53	Effect of Process Mismatches on Integrated CMOS Phased Arrays Based on Multiphase Tuned Ring Oscillators. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 1305-1315.	4.6	5
54	Injection Locking in Concurrent Dual-Frequency Oscillators. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 1834-1845.	4.6	13

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55	Concurrent Dual-Frequency Oscillators and Phase-Locked Loops. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 1846-1860.	4.6	17
56	Phase-Controlled Apertures Using Heterodyne Optical Phase-Locked Loops. IEEE Photonics Technology Letters, 2008, 20, 897-899.	2.5	11
57	Toward a Sub-Decibel Noise Figure Broadband Monolithic LNA in Silicon. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 2389-2398.	4.6	4
58	A Variable-Phase Ring Oscillator and PLL Architecture for Integrated Phased Array Transceivers. IEEE Journal of Solid-State Circuits, 2008, 43, 2446-2463.	5.4	22
59	A 1.3–6 GHz triple-mode CMOS VCO using coupled inductors. , 2008, , .		17
60	A 0.13μm CMOS 4-channel UWB timed array transmitter chipset with sub-200ps switches and all-digital timing circuitry. , 2008, , .		12
61	A 4-channel 24-27 GHz UWB phased array transmitter in 0.13 μm CMOS for vehicular radar. , 2007, , .		11
62	Regenerative Frequency Divider with Synchronous Fractional Outputs. , 2007, , .		2
63	Frequency Switching in Dual-Resonance Oscillators. IEEE Journal of Solid-State Circuits, 2007, 42, 571-582.	5.4	53
64	An Integrated Ultra-Wideband Timed Array Receiver in 0.13 $mu{hbox{m}}$ CMOS Using a Path-Sharing True Time Delay Architecture. IEEE Journal of Solid-State Circuits, 2007, 42, 2834-2850.	5.4	111
65	A heterodyne phase locked loop with GHz acquisition range for coherent locking of semiconductor lasers in 0.13 μm CMOS. , 2007, , .		4
66	A Rigorous Phase Noise Analysis of Tuned Ring Oscillators. , 2007, , .		5
67	A Differential X/Ku-Band Low Noise Amplifier in 0.13-mum CMOS Technology. IEEE Microwave and Wireless Components Letters, 2007, 17, 888-890.	3.2	14
68	A Nonlinear Transient Analysis of Regenerative Frequency Dividers. IEEE Transactions on Circuits and Systems I: Regular Papers, 2007, 54, 2646-2660.	5.4	11
69	Inductor- and Transformer-based Integrated RF Oscillators: A Comparative Study. , 2006, , .		15
70	Maximum frequency of operation of CMOS Static Frequency dividers: Theory and Design techniques. , 2006, , .		9