Ickhyun Song

List of Publications by Year
in descending order

69	861	687363 13	677142 22
papers	citations	h-index	g-index

69	69	69	816
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Voltage-Controlled Oscillator Utilizing Inverse-Mode SiGe-HBT Biasing Circuit for the Mitigation of Single-Event Effects. IEEE Transactions on Nuclear Science, 2022, 69, 1242-1248.	2.0	2
2	Emulating UAV Motion by Utilizing Robotic Arm for mmWave Wireless Channel Characterization. IEEE Transactions on Antennas and Propagation, 2021, 69, 6691-6701.	5.1	8
3	Highly-Efficient CMOS Rectifier for Wide Range of Input RF Power in Energy-Harvesting Systems. , 2021, , .		2
4	Investigation of f _T-Doubler Technique to Improve RF Performance of Inverse-Mode SiGe HBTs. IEEE Microwave and Wireless Components Letters, 2020, 30, 873-875.	3.2	5
5	Design and Analysis of fT-Doubler-Based RF Amplifiers in SiGe HBT Technology. Electronics (Switzerland), 2020, 9, 772.	3.1	1
6	Mitigation of Single-Event Effects in SiGe-HBT Current-Mode Logic Circuits. Sensors, 2020, 20, 2581.	3.8	1
7	A Simple and Accurate Modeling Method of Channel Thermal Noise Using BSIM4 Noise Models. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 4351-4358.	2.7	3
8	Self-Heating and Electrothermal Properties of Advanced Sub-5-nm Node Nanoplate FET. IEEE Electron Device Letters, 2020, 41, 977-980.	3.9	27
9	Performance analysis of SiGe-HBT-based transimpedance amplifiers with nonconstant gain-bandwidth technique. Analog Integrated Circuits and Signal Processing, 2020, 104, 289-297.	1.4	2
10	A Two-Way Wideband Active SiGe BiCMOS Power Divider/Combiner for Reconfigurable Phased Arrays With Controllable Beam Width. IEEE Access, 2020, 8, 2578-2589.	4.2	2
11	A Perspective on Terahertz Next-Generation Wireless Communications. Technologies, 2019, 7, 43.	5.1	90
12	A 2-20 GHz SiGe Amplitude Control Circuit with Differential Signal Selectivity for Wideband Reconfigurable Electronics. , 2019, , .		1
13	Best Practices for Using Electrostatic Discharge Protection Techniques for Single-Event Transient Mitigation. IEEE Transactions on Nuclear Science, 2019, 66, 240-247.	2.0	3
14	p-n-p-Based RF Switches for the Mitigation of Single-Event Transients in a Complementary SiGe BiCMOS Platform. IEEE Transactions on Nuclear Science, 2018, 65, 391-398.	2.0	6
15	An Electrostatic Discharge Protection Circuit Technique for the Mitigation of Single-Event Transients in SiGe BiCMOS Technology. IEEE Transactions on Nuclear Science, 2018, 65, 426-431.	2.0	4
16	Design and Analysis of a Low Loss, Wideband Digital Step Attenuator With Minimized Amplitude and Phase Variations. IEEE Journal of Solid-State Circuits, 2018, 53, 2202-2213.	5.4	57
17	Cryogenic Characterization of RF Low-Noise Amplifiers Utilizing Inverse-Mode SiGe HBTs for Extreme Environment Applications. IEEE Transactions on Device and Materials Reliability, 2018, 18, 613-619.	2.0	0
18	A 1â€“20 GHz Distributed, Stacked SiGe Power Amplifier. , 2018, , .		1

#	Article	IF	Citations
19	A SiGe-BiCMOS Wideband Active Bidirectional Digital Step Attenuator With Bandwidth Tuning and Equalization. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 3866-3876.	4.6	13
20	SiGe HBT Profiles With Enhanced Inverse-Mode Operation and Their Impact on Single-Event Transients. IEEE Transactions on Nuclear Science, 2018, 65, 399-406.	2.0	9
21	A True Time Delay-based SiGe Bi-directional T/R Chipset for Large-Scale Wideband Timed Array Antennas. , 2018, , .		22
22	A 28-GHz Switchless, SiGe Bidirectional Amplifier Using Neutralized Common-Emitter Differential Pair. IEEE Microwave and Wireless Components Letters, 2018, 28, 717-719.	3.2	6
23	On the Application of Inverse-Mode SiGe HBTs in RF Receivers for the Mitigation of Single-Event Transients. IEEE Transactions on Nuclear Science, 2017, 64, 1142-1150.	2.0	9
24	Modeling Single-Event Transient Propagation in a SiGe BiCMOS Direct-Conversion Receiver. IEEE Transactions on Nuclear Science, 2017, , 1-1.	2.0	6
25	The Use of Inverse-Mode SiGe HBTs as Active Gain Stages in Low-Noise Amplifiers for the Mitigation of Single-Event Transients. IEEE Transactions on Nuclear Science, 2017, 64, 359-366.	2.0	8
26	Modeling single-event transient propagation in a SiGe BiCMOS direct-conversion receiver. , 2016, , .		1
27	A SiGe-BiCMOS Wideband (2â€“22 GHz) Active Power Divider/Combiner Circuit Supporting Bidirectional Operation. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 4676-4684.	4.6	12
28	A 2â€“22 GHz wideband active bi-directional power divider/combiner in 130 nm SiGe BiCMOS technology. , 2016, , .		3
29	An Investigation of the Use of Inverse-Mode SiGe HBTs as Switching Pairs for SET-Mitigated RF Mixers. IEEE Transactions on Nuclear Science, 2016, 63, 1099-1108.	2.0	13
30	A Compact, Wideband Lumped-Element Wilkinson Power Divider/Combiner Using Symmetric Inductors with Embedded Capacitors. IEEE Microwave and Wireless Components Letters, 2016, 26, 595-597.	3.2	19
31	Inverse classâ€‹<scp>F</scp><scp>X</scp>â€‹band <scp>S</scp>i<scp>G</scp>e <scp>HBT</scp> power amplifier with 44% <scp>PAE</scp> and 24.5 d<scp>B</scp>m peak output power. Microwave and Optical Technology Letters, 2016, 58, 2868-2871.	1.4	1
32	Wideband active bi-directional SiGe digital step attenuator using an active DPDT switch. , 2016, , .		1
33	A Compact, Active SiGe Power Divider With Multi-Octave Bandwidth. IEEE Microwave and Wireless Components Letters, 2016, 26, 945-947.	3.2	6
34	An Active Bi-Directional SiGe DPDT Switch With Multi-Octave Bandwidth. IEEE Microwave and Wireless Components Letters, 2016, 26, 279-281.	3.2	13
35	An Investigation of Single-Event Effect Modeling Techniques for a SiGe RF Low-Noise Amplifier. IEEE Transactions on Nuclear Science, 2016, 63, 273-280.	2.0	16
36	Advantages of utilizing throughâ€‹siliconâ€‹vias in <scp>SiGe</scp> HBT RF lowâ€‹noise amplifier design. Microwave and Optical Technology Letters, 2015, 57, 2703-2706.	1.4	1

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37	Optimization of SiGe HBT RF Switches for Single-Event Transient Mitigation. IEEE Transactions on Nuclear Science, 2015, 62, 3057-3063.	2.0	8
38	An Investigation of the SET Response of Devices and Differential Pairs in a 32-nm SOI CMOS Technology. IEEE Transactions on Nuclear Science, 2015, 62, 2643-2649.	2.0	1
39	Single-Event Effects in a W-Band (75-110ÂGHz) Radar Down-Conversion Mixer Implemented in 90Ânm, 300ÂGHz SiGe HBT Technology. IEEE Transactions on Nuclear Science, 2015, 62, 2657-2665.	2.0	12
40	The Role of Negative Feedback Effects on Single-Event Transients in SiGe HBT Analog Circuits. IEEE Transactions on Nuclear Science, 2015, 62, 2599-2605.	2.0	4
41	Impact of Total Ionizing Dose on a 4th Generation, 90Ânm SiGe HBT Gaussian Pulse Generator. IEEE Transactions on Nuclear Science, 2014, 61, 3050-3054.	2.0	10
42	An Investigation of Single-Event Transients in C-SiGe HBT on SOI Current Mirror Circuits. IEEE Transactions on Nuclear Science, 2014, 61, 3193-3200.	2.0	15
43	Systematic methodology for applying Mason's signal flow graph to analysis of feedback circuits. , 2014, , .		1
44	Evaluation of Enhanced Low Dose Rate Sensitivity in Fourth-Generation SiGe HBTs. IEEE Transactions on Nuclear Science, 2014, 61, 2915-2922.	2.0	18
45	Design of Radiation-Hardened RF Low-Noise Amplifiers Using Inverse-Mode SiGe HBTs. IEEE Transactions on Nuclear Science, 2014, 61, 3218-3225.	2.0	34
46	A 34–110 GHz wideband, asymmetric, broadside-coupled Marchand balun in 180 nm SiGe BiCMOS technology. , 2014, , .		5
47	An investigation of the temperature dependent linearity of weakly-saturated, electrically-matched SiGe NPN and PNP HBTs. , 2014, , .		0
48	A complementary SiGe HBT on SOI low dropout voltage regulator utilizing a nulling resistor. , 2014, , .		0
49	A 20nm 1.8V 8Gb PRAM with 40MB/s program bandwidth. , 2012, , .		202
50	A 58nm 1.8V 1Gb PRAM with 6.4MB/s program BW. , 2011, , .		29
51	Low power sizeâ€efficient CMOS UWB lowâ€noise amplifier design. Microwave and Optical Technology Letters, 2009, 51, 494-496.	1.4	0
52	0.7 V supply highly linear subthreshold lowâ€noise amplifier design for 2.4 GHz wireless sensor network applications. Microwave and Optical Technology Letters, 2009, 51, 1316-1320.	1.4	5
53	f_{max} Improvement by Controlling Extrinsic Parasitics in Circuit-Level MOS Transistor. IEEE Electron Device Letters, 2009, 30, 1323-1325.	3.9	18
54	Application of the Compact Channel Thermal Noise Model of Short Channel MOSFETs to CMOS RFIC Design. IEICE Transactions on Electronics, 2009, E92-C, 627-634.	0.6	1

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55	Optimization of cascode configuration in CMOS low-noise amplifier. Microwave and Optical Technology Letters, 2008, 50, 646-649.	1.4	13
56	Small size low noise amplifier with suppressed noise from gate resistance. Microwave and Optical Technology Letters, 2008, 50, 2300-2304.	1.4	0
57	A low power low noise amplifier with subthreshold operation in 130 nm CMOS technology. Microwave and Optical Technology Letters, 2008, 50, 2762-2764.	1.4	1
58	Accurate Extraction of Effective Channel Length and Source/Drain Series Resistance in Ultrashort-Channel MOSFETs by Iteration Method. IEEE Transactions on Electron Devices, 2008, 55, 2779-2784.	3.0	23
59	A 2.4 GHz CMOS ultra low power low noise amplifier design with 65 nm CMOS technology. , 2008, , .		1
60	A Simple Figure of Merit of RF MOSFET for Low-Noise Amplifier Design. IEEE Electron Device Letters, 2008, 29, 1380-1382.	3.9	35
61	Design optimization of a 10 GHz low noise amplifier with gate drain capacitance consideration in 65 nm CMOS technology. , 2008, , .		6
62	Suppression of Digital Noise Coupling on LNA in 0.13-μm RFCMOS Technology by Global Guard Rings. , 2008, , .		1
63	Characterization of Sensitivity and Resolution of Silicon Resistive Probe. Japanese Journal of Applied Physics, 2008, 47, 1717-1722.	1.5	4
64	8â€…mW 17/24â€…GHz dual-band CMOS low-noise amplifier for ISM-band application. Electronics Letters, 2008, 44, 1353.	1.0	20
65	FN Stress Induced Degradation on Random Telegraph Signal Noise in Deep Submicron NMOSFETs. IEICE Transactions on Electronics, 2008, E91-C, 776-779.	0.6	4
66	Suppression of Digital Noise Coupling on LNA in 0.13-μm RFCMOS Technology by Global Guard Rings. , 2008, , .		0
67	2.4 GHz ISM-Band Receiver Design in a 0.18 $mu{hbox{m}}$ Mixed Signal CMOS Process. IEEE Microwave and Wireless Components Letters, 2007, 17, 736-738.	3.2	6
68	Analytic approach to power-constrained CMOS low-noise amplifier design with figure of merit consideration. , 2007, , .		1
69	A New Noise Parameter Model of Short-Channel MOSFETs. Radio Frequency Integrated Circuits (RFIC) Symposium, IEEE, 2007, , .	0.0	9