John D Cressler

List of Publications by Year
in descending order

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297	4,064	185998 28	264894 42
papers	citations	h-index	g-index

297	297	297	1766
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On the Analysis and Design of Low-Loss Single-Pole Double-Throw W-Band Switches Utilizing Saturated SiGe HBTs. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 2755-2767.	2.9	132
2	Radiation Effects in SiGe Technology. IEEE Transactions on Nuclear Science, 2013, 60, 1992-2014.	1.2	127
3	Multiple-Bit Upset in 130 nm CMOS Technology. IEEE Transactions on Nuclear Science, 2006, 53, 3259-3264.	1.2	83
4	Sources of Phase Error and Design Considerations for Silicon-Based Monolithic High-Pass/Low-Pass Microwave Phase Shifters. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 4032-4040.	2.9	63
5	Silicon-Germanium as an Enabling Technology for Extreme Environment Electronics. IEEE Transactions on Device and Materials Reliability, 2010, 10, 437-448.	1.5	62
6	A 0.8 THz $f_{m MAX}$ SiGe HBT Operating at 4.3 K. IEEE Electron Device Letters, 2014, 35, 151-153.	2.2	60
7	A Silicon-Germanium Receiver for X-Band Transmit/Receive Radar Modules. IEEE Journal of Solid-State Circuits, 2008, 43, 1889-1896.	3.5	59
8	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.	3.5	57
9	A Comparison of the Degradation in RF Performance Due to Device Interconnects in Advanced SiGe HBT and CMOS Technologies. IEEE Transactions on Electron Devices, 2015, 62, 1803-1810.	1.6	50
10	An Investigation of Dose Rate and Source Dependent Effects in 200 GHz SiGe HBTs. IEEE Transactions on Nuclear Science, 2006, 53, 3166-3174.	1.2	46
11	On the Performance Limits of Cryogenically Operated SiGe HBTs and Its Relation to Scaling for Terahertz Speeds. IEEE Transactions on Electron Devices, 2009, 56, 1007-1019.	1.6	45
12	Application of RHBD Techniques to SEU Hardening of Third-Generation SiGe HBT Logic Circuits. IEEE Transactions on Nuclear Science, 2006, 53, 3400-3407.	1.2	41
13	Reliability of SiGe HBTs for Power Amplifiersâ€"Part I: Large-Signal RF Performance and Operating Limits. IEEE Transactions on Device and Materials Reliability, 2009, 9, 431-439.	1.5	40
14	Substrate Engineering Concepts to Mitigate Charge Collection in Deep Trench Isolation Technologies. IEEE Transactions on Nuclear Science, 2006, 53, 3298-3305.	1.2	39
15	Sub-1-K Operation of SiGe Transistors and Circuits. IEEE Electron Device Letters, 2009, 30, 508-510.	2.2	39
16	A New Self-Healing Methodology for RF Amplifier Circuits Based on Oscillation Principles. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 1835-1848.	2.1	39
17	An Evaluation of Transistor-Layout RHBD Techniques for SEE Mitigation in SiGe HBTs. IEEE Transactions on Nuclear Science, 2007, 54, 2044-2052.	1.2	37
18	A Low-Loss and High Isolation D-Band SPDT Switch Utilizing Deep-Saturated SiGe HBTs. IEEE Microwave and Wireless Components Letters, 2014, 24, 400-402.	2.0	37

#	Article	IF	Citations
19	A 94 GHz, 1.4 dB Insertion Loss Single-Pole Double-Throw Switch Using Reverse-Saturated SiGe HBTs. IEEE Microwave and Wireless Components Letters, 2014, 24, 56-58.	2.0	37
20	The Effects of Irradiation Temperature on the Proton Response of SiGe HBTs. IEEE Transactions on Nuclear Science, 2006, 53, 3175-3181.	1.2	36
21	Heavy Ion Microbeam- and Broadbeam-Induced Transients in SiGe HBTs. IEEE Transactions on Nuclear Science, 2009, 56, 3078-3084.	1.2	35
22	A SiGe D-Band Low-Noise Amplifier Utilizing Gain-Boosting Technique. IEEE Microwave and Wireless Components Letters, 2015, 25, 61-63.	2.0	35
23	Laser-Induced Current Transients in Silicon-Germanium HBTs. IEEE Transactions on Nuclear Science, 2008, 55, 2936-2942.	1.2	34
24	Predictive Physics-Based TCAD Modeling of the Mixed-Mode Degradation Mechanism in SiGe HBTs. IEEE Transactions on Electron Devices, 2012, 59, 2895-2901.	1.6	34
25	Design of Radiation-Hardened RF Low-Noise Amplifiers Using Inverse-Mode SiGe HBTs. IEEE Transactions on Nuclear Science, 2014, 61, 3218-3225.	1.2	34
26	The effects of operating bias conditions on the proton tolerance of SiGe HBTs. Solid-State Electronics, 2003, 47, 1729-1734.	0.8	31
27	An 8â€“16 GHz SiGe Low Noise Amplifier With Performance Tuning Capability for Mitigation of Radiation-Induced Performance Loss. IEEE Transactions on Nuclear Science, 2012, 59, 2837-2846.	1.2	31
28	CMOS reliability issues for emerging cryogenic Lunar electronics applications. Solid-State Electronics, 2006, 50, 959-963.	0.8	30
29	Proton and gamma radiation effects in a new first-generation SiGe HBT technology. Solid-State Electronics, 2006, 50, 181-190.	0.8	29
30	Reliability of SiGe HBTs for Power Amplifiers—Part II: Underlying Physics and Damage Modeling. IEEE Transactions on Device and Materials Reliability, 2009, 9, 440-448.	1.5	29
31	A 2 mW, Sub-2 dB Noise Figure, SiGe Low-Noise Amplifier For X-band High-Altitude or Space-based Radar Applications. Radio Frequency Integrated Circuits (RFIC) Symposium, IEEE, 2007, , .	0.0	28
32	Large-Signal Reliability Analysis of SiGe HBT Cascode Driver Amplifiers. IEEE Transactions on Electron Devices, 2015, 62, 1383-1389.	1.6	28
33	Operation of SiGe HBTs Down to 70 mK. IEEE Electron Device Letters, 2017, 38, 12-15.	2.2	28
34	A Generalized SiGe HBT Single-Event Effects Model for On-Orbit Event Rate Calculations. IEEE Transactions on Nuclear Science, 2007, 54, 2322-2329.	1.2	27
35	A Lightweight Organic X-Band Active Receiving Phased Array With Integrated SiGe Amplifiers and Phase Shifters. IEEE Transactions on Antennas and Propagation, 2011, 59, 100-109.	3.1	27
36	Design and On-Wafer Characterization of G -Band SiGe HBT Low-Noise Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3631-3642.	2.9	27

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37	A Class-E Tuned W-Band SiGe Power Amplifier With 40.4% Power-Added Efficiency at 93 GHz. IEEE Microwave and Wireless Components Letters, 2015, 25, 663-665.	2.0	26
38	Highly Linear High-Power 802.11ac/ax WLAN SiGe HBT Power Amplifiers With a Compact 2nd-Harmonic-Shorted Four-Way Transformer and a Thermally Compensating Dynamic Bias Circuit. IEEE Journal of Solid-State Circuits, 2020, 55, 2356-2370.	3.5	26
39	Single Event Upset Mechanisms for Low-Energy-Deposition Events in SiGe HBTs. IEEE Transactions on Nuclear Science, 2008, 55, 1581-1586.	1.2	25
40	Single Event Transient Response of SiGe Voltage References and Its Impact on the Performance of Analog and Mixed-Signal Circuits. IEEE Transactions on Nuclear Science, 2009, 56, 3469-3476.	1.2	25
41	Compact Modeling of Mutual Thermal Coupling for the Optimal Design of SiGe HBT Power Amplifiers. IEEE Transactions on Electron Devices, 2009, , .	1.6	25
42	Experimental Validation of an Equivalent LET Approach for Correlating Heavy-Ion and Laser-Induced Charge Deposition. IEEE Transactions on Nuclear Science, 2018, 65, 1724-1733.	1.2	25
43	Temperature-Dependence of Off-State Drain Leakage in X-Ray Irradiated 130 nm CMOS Devices. IEEE Transactions on Nuclear Science, 2006, 53, 3203-3209.	1.2	24
44	Using TCAD Modeling to Compare Heavy-Ion and Laser-Induced Single Event Transients in SiGe HBTs. IEEE Transactions on Nuclear Science, 2017, 64, 398-405.	1.2	24
45	Single-Event Response of the SiGe HBT Operating in Inverse-Mode. IEEE Transactions on Nuclear Science, 2012, 59, 2682-2690.	1.2	23
46	Application of a Pelletron accelerator to study total dose radiation effects on 50GHz SiGe HBTs. Nuclear Instruments & Methods in Physics Research B, 2012, 273, 43-46.	0.6	23
47	A New Wideband, Low Insertion Loss, High Linearity SiGe RF Switch. IEEE Microwave and Wireless Components Letters, 2020, 30, 985-988.	2.0	23
48	A High-Slew Rate SiGe BiCMOS Operational Amplifier for Operation Down to Deep Cryogenic Temperatures. Bipolar/BiCMOS Circuits and Technology Meeting, IEEE Proceedings of the, 2006, , .	0.0	22
49	SiGe HBT X-Band LNAs for Ultra-Low-Noise Cryogenic Receivers. IEEE Microwave and Wireless Components Letters, 2008, 18, 476-478.	2.0	22
50	A Novel Device Architecture for SEU Mitigation: The Inverse-Mode Cascode SiGe HBT. IEEE Transactions on Nuclear Science, 2009, 56, 3393-3401.	1.2	22
51	Single-Event Transient and Total Dose Response of Precision Voltage Reference Circuits Designed in a 90-nm SiGe BiCMOS Technology. IEEE Transactions on Nuclear Science, 2014, 61, 3210-3217.	1.2	22
52	Advanced SiGe BiCMOS Technology for Multi-Mrad Electronic Systems. IEEE Transactions on Device and Materials Reliability, 2014, 14, 844-848.	1.5	22
53	The Impact of Technology Scaling on the Single-Event Transient Response of SiGe HBTs. IEEE Transactions on Nuclear Science, 2017, 64, 406-414.	1.2	22
54	A True Time Delay-based SiGe Bi-directional T/R Chipset for Large-Scale Wideband Timed Array Antennas. , 2018, , .		22

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55	Proton Tolerance of SiGe Precision Voltage References for Extreme Temperature Range Electronics. IEEE Transactions on Nuclear Science, 2006, 53, 3210-3216.	1.2	21
56	SiGe BiCMOS Technology: An IC Design Platform for Extreme Environment Electronics Applications. , 2007, , .		21
57	3-D Simulation of SEU Hardening of SiGe HBTs Using Shared Dummy Collector. IEEE Transactions on Nuclear Science, 2007, 54, 2330-2337.	1.2	21
58	Design of Digital Circuits Using Inverse-Mode Cascode SiGe HBTs for Single Event Upset Mitigation. IEEE Transactions on Nuclear Science, 2010, , .	1.2	21
59	Low-loss, wideband SPDT switches and switched-line phase shifter in 180-nm RF CMOS on SOI technology. , 2014, , .		21
60	The Effects of Scaling and Bias Configuration on Operating-Voltage Constraints in SiGe HBTs for Mixed-Signal Circuits. IEEE Transactions on Electron Devices, 2007, 54, 1605-1616.	1.6	20
61	Application of advanced 200GHz Siâ€“Ge HBTs for high dose radiation environments. Solid-State Electronics, 2010, 54, 1554-1560.	0.8	20
62	Reconciling 3-D Mixed-Mode Simulations and Measured Single-Event Transients in SiGe HBTs. IEEE Transactions on Nuclear Science, 2010, 57, 3342-3348.	1.2	20
63	Total Dose and Transient Response of SiGe HBTs from a New 4th-Generation, 90 nm SiGe BiCMOS Technology. , 2012, , .		20
64	An Investigation of Single-Event Effects and Potential SEU Mitigation Strategies in Fourth-Generation, 90Ânm SiGe BiCMOS. IEEE Transactions on Nuclear Science, 2013, 60, 4175-4183.	1.2	20
65	A 6â€“20 GHz Adaptive SiGe Image Reject Mixer for a Self-Healing Receiver. IEEE Journal of Solid-State Circuits, 2012, 47, 1998-2006.	3.5	19
66	Bias- and Temperature-Dependent Accumulated Stress Modeling of Mixed-Mode Damage in SiGe HBTs. IEEE Transactions on Electron Devices, 2015, 62, 2084-2091.	1.6	19
67	A Comparison of Field and Current-Driven Hot-Carrier Reliability in NPN SiGe HBTs. IEEE Transactions on Electron Devices, 2015, 62, 2244-2250.	1.6	19
68	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.	2.0	19
69	A Compact Highly Efficient High-Power Ka-band SiGe HBT Cascode Frequency Doubler With Four-Way Input Transformer Balun. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2879-2887.	2.9	19
70	The Effects of X-Ray and Proton Irradiation on a 200 GHz/90 GHz Complementary $(npn + pnp)$ SiGe:C HBT Technology. IEEE Transactions on Nuclear Science, 2007, 54, 2190-2195.	1.2	18
71	A 12-Bit Cryogenic and Radiation-Tolerant Digital-to-Analog Converter for Aerospace Extreme Environment Applications. IEEE Transactions on Industrial Electronics, 2008, 55, 2810-2819.	5.2	18
72	The Enhanced Role of Shallow-Trench Isolation in Ionizing Radiation Damage of 65 nm RF-CMOS on SOI. IEEE Transactions on Nuclear Science, 2009, 56, 3256-3261.	1.2	18

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73	Design and Optimization of Superjunction Collectors for Use in High-Speed SiGe HBTs. IEEE Transactions on Electron Devices, 2011, 58, 1655-1662.	1.6	18
74	Best practices to ensure the stability of sige HBT cascode low noise amplifiers. , 2012, , .		18
75	An Investigation of Single Event Transient Response in 45-nm and 32-nm SOI RF-CMOS Devices and Circuits. IEEE Transactions on Nuclear Science, 2013, 60, 4405-4411.	1.2	18
76	Evaluation of Enhanced Low Dose Rate Sensitivity in Fourth-Generation SiGe HBTs. IEEE Transactions on Nuclear Science, 2014, 61, 2915-2922.	1.2	18
77	Potential Limitations on Integrated Silicon Photonic Waveguides Operating in a Heavy Ion Environment. IEEE Transactions on Nuclear Science, 2018, 65, 141-148.	1.2	18
78	Integrated Silicon Photonics for Enabling Next-Generation Space Systems. Photonics, 2021, 8, 131.	0.9	18
79	A 60-GHz SiGe Radiometer Calibration Switch Utilizing a Coupled Avalanche Noise Source. IEEE Microwave and Wireless Components Letters, 2020, 30, 417-420.	2.0	18
80	On the Frequency Limits of SiGe HBTs for TeraHertz Applications. Bipolar/BiCMOS Circuits and Technology Meeting, IEEE Proceedings of the, 2007, , .	0.0	17
81	The Effects of Proton and X-Ray Irradiation on the DC and AC Performance of Complementary (npn +) Tj ETQq1 1 0.784314 rgBT /Ove	1.2	17
82	The Application of RHBD to n-MOSFETs Intended for Use in Cryogenic-Temperature Radiation Environments. IEEE Transactions on Nuclear Science, 2007, 54, 2100-2105.	1.2	17
83	Impact of Scaling on the Inverse-Mode Operation of SiGe HBTs. IEEE Transactions on Electron Devices, 2007, 54, 1492-1501.	1.6	17
84	Optimizing Inverse-Mode SiGe HBTs for Immunity to Heavy-Ion-Induced Single-Event Upset. IEEE Electron Device Letters, 2009, 30, 511-513.	2.2	17
85	Trade-Offs Between RF Performance and Total-Dose Tolerance in 45-nm RF-CMOS. IEEE Transactions on Nuclear Science, 2011, 58, 2830-2837.	1.2	17
86	Reliability studies on NPN RF power transistors under swift heavy ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2012, 273, 36-39.	0.6	17
87	A 1.0 V, 10â€“22 GHz, 4 mW LNA Utilizing Weakly Saturated SiGe HBTs for Single-Chip, Low-Power, Remote Sensing Applications. IEEE Microwave and Wireless Components Letters, 2014, 24, 890-892.	2.0	17
88	On Commonâ€“Base Avalanche Instabilities in SiGe HBTs. IEEE Transactions on Electron Devices, 2008, 55, 1276-1285.	1.6	16
89	A Theory of Single-Event Transient Response in Cross-Coupled Negative Resistance Oscillators. IEEE Transactions on Nuclear Science, 2010, , .	1.2	16
90	An Investigation of Single-Event Effect Modeling Techniques for a SiGe RF Low-Noise Amplifier. IEEE Transactions on Nuclear Science, 2016, 63, 273-280.	1.2	16

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91	A Highly Efficient X-Band Inverse Class-F SiGe HBT Cascode Power Amplifier With Harmonic-Tuned Wilkinson Power Combiner. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1609-1613.	2.2	16
92	New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. IEEE Transactions on Nuclear Science, 2020, 67, 81-90.	1.2	16
93	SiGe BiCMOS Precision Voltage References for Extreme Temperature Range Electronics. , 2006, , .		15
94	A New Current-Sweep Method for Assessing the Mixed-Mode Damage Spectrum of SiGe HBTs. IEEE Transactions on Device and Materials Reliability, 2007, 7, 479-487.	1.5	15
95	A Comparison of the Effects of X-Ray and Proton Irradiation on the Performance of SiGe Precision Voltage References. IEEE Transactions on Nuclear Science, 2007, 54, 2238-2244.	1.2	15
96	An investigation of electron and oxygen ion damage in Si npn RF power transistors. Radiation Effects and Defects in Solids, 2009, 164, 592-603.	0.4	15
97	Accurate Modeling of Single-Event Transients in a SiGe Voltage Reference Circuit. IEEE Transactions on Nuclear Science, 2011, 58, 877-884.	1.2	15
98	An Investigation of Single-Event Transients in C-SiGe HBT on SOI Current Mirror Circuits. IEEE Transactions on Nuclear Science, 2014, 61, 3193-3200.	1.2	15
99	On the Transient Response of a Complementary (npn <formula formulatype="inline"><tex) Tj ETQq1 1 0.784314 rgBT /Overlo Transactions on Nuclear Science, 2014, 61, 3146-3153.	1.2	15
100	Impact of Technology Scaling in sub-100Ânm nMOSFETs on Total-Dose Radiation Response and Hot-Carrier Reliability. IEEE Transactions on Nuclear Science, 2014, 61, 1426-1432.	1.2	15
101	A Physics-Based Circuit Aging Model for Mixed-Mode Degradation in SiGe HBTs. IEEE Transactions on Electron Devices, 2016, 63, 2987-2993.	1.6	15
102	Collector Transport in SiGe HBTs Operating at Cryogenic Temperatures. IEEE Transactions on Electron Devices, 2018, 65, 3697-3703.	1.6	15
103	Optimizing Optical Parameters to Facilitate Correlation of Laser- and Heavy-Ion-Induced Single-Event Transients in SiGe HBTs. IEEE Transactions on Nuclear Science, 2019, 66, 359-367.	1.2	15
104	Understanding Radiation- and Hot Carrier-Induced Damage Processes in SiGe HBTs Using Mixed-Mode Electrical Stress. IEEE Transactions on Nuclear Science, 2007, 54, 1938-1945.	1.2	14
105	On the RF Properties of Weakly Saturated SiGe HBTs and Their Potential Use in Ultralow-Voltage Circuits. IEEE Electron Device Letters, 2011, 32, 3-5.	2.2	14
106	50ÂMeV Li3+ion irradiation effects on advanced 200ÂGHz SiGe HBTs. Radiation Effects and Defects in Solids, 2011, 166, 710-717.	0.4	14
107	Optical Single-Event Transients Induced in Integrated Silicon-Photonic Waveguides by Two-Photon Absorption. IEEE Transactions on Nuclear Science, 2021, 68, 785-792.	1.2	14
108	Silicon bipolar transistor: a viable candidate for high speed applications at liquid nitrogen temperature. Cryogenics, 1990, 30, 1036-1047.	0.9	13

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109	SEU Error Signature Analysis of Gbit/s SiGe Logic Circuits Using a Pulsed Laser Microprobe. IEEE Transactions on Nuclear Science, 2006, 53, 3277-3284.	1.2	13
110	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.	1.2	13
111	An Active Bi-Directional SiGe DPDT Switch With Multi-Octave Bandwidth. IEEE Microwave and Wireless Components Letters, 2016, 26, 279-281.	2.0	13
112	A Low-Loss Broadband Quadrature Signal Generation Network for High Image Rejection at Millimeter-Wave Frequencies. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5336-5346.	2.9	13
113	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.	2.9	13
114	A High-Linearity 5-bit, X-band SiGe HBT Phase Shifter. , 2006, , .		12
115	X-Ray Irradiation and Bias Effects in Fully-Depleted and Partially-Depleted SiGe HBTs Fabricated on CMOS-Compatible SOI. IEEE Transactions on Nuclear Science, 2006, 53, 3182-3186.	1.2	12
116	Analysis and understanding of unique cryogenic phenomena in state-of-the-art SiGe HBTs. Solid-State Electronics, 2006, 50, 964-972.	0.8	12
117	SiGe HBT compact modeling for extreme temperatures. , 2007, , .		12
118	Applications of heavy ion microprobe for single event effects analysis. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 443-446.	0.6	12
119	Proton-induced SEU in SiGe digital logic at cryogenic temperatures. Solid-State Electronics, 2008, 52, 1652-1659.	0.8	12
120	3-D Mixed-Mode Simulation of Single Event Transients in SiGe HBT Emitter Followers and Resultant Hardening Guidelines. IEEE Transactions on Nuclear Science, 2008, 55, 3360-3366.	1.2	12
121	Compact Modeling of the Temperature Dependence of Parasitic Resistances in SiGe HBTs Down to 30 K. IEEE Transactions on Electron Devices, 2009, 56, 2169-2177.	1.6	12
122	Influence of Interface Traps on the Temperature Sensitivity of MOSFET Drain-Current Variations. IEEE Electron Device Letters, 2010, 31, 387-389.	2.2	12
123	Total Ionizing Dose Response of Triple-Well FET-Based Wideband, High-Isolation RF Switches in a 130 nm SiGe BiCMOS Technology. IEEE Transactions on Nuclear Science, 2013, 60, 2567-2573.	1.2	12
124	Evaluating the Effects of Single Event Transients in FET-Based Single-Pole Double-Throw RF Switches. IEEE Transactions on Nuclear Science, 2014, 61, 756-765.	1.2	12
125	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.	1.2	12
126	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.	2.9	12

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127	An X-band inverse class-F SiGe HBT cascode power amplifier With harmonic-tuned output transformer. , 2017, , .		12
128	A Monolithic 5-Bit SiGe BiCMOS Receiver for X-Band Phased-Array Radar Systems. Bipolar/BiCMOS Circuits and Technology Meeting, IEEE Proceedings of the, 2007, , .	0.0	11
129	Addressing challenges in device-circuit modeling for extreme environments of space. , 2007, , .		11
130	A New Analytical Method for Robust Extraction of the Small-Signal Equivalent Circuit for SiGe HBTs Operating at Cryogenic Temperatures. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 568-574.	2.9	11
131	A Mechanism Versus SEU Impact Analysis of Collector Charge Collection in SiGe HBT Current Mode Logic. IEEE Transactions on Nuclear Science, 2009, 56, 3071-3077.	1.2	11
132	A 3–20 GHz SiGe HBT ultra-wideband LNA with gain and return loss control for multiband wireless applications. , 2010, , .		11
133	A new approach to designing electronic systems for operation in extreme environments: Part I - The SiGe Remote Sensor Interface. IEEE Aerospace and Electronic Systems Magazine, 2012, 27, 25-34.	2.3	11
134	An Ultra-Thin, High-Power, and Multilayer Organic Antenna Array With T/R Functionality in the X-Band. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 3856-3867.	2.9	11
135	Establishing Best-Practice Modeling Approaches for Understanding Single-Event Transients in Gb/s SiGe Digital Logic. IEEE Transactions on Nuclear Science, 2012, 59, 958-964.	1.2	11
136	A compact, transformer-based 60 GHz SPDT RF switch utilizing diode-connected SiGe HBTs. , 2013, , .		11
137	W-band SiGe power amplifiers. , 2014, , .		11
138	A 0.3â€“15 GHz SiGe LNA With >1 THz Gain-Bandwidth Product. IEEE Microwave and Wireless Components Letters, 2017, 27, 380-382.	2.0	11
139	Hot-Carrier-Damage-Induced Current Gain Enhancement (CGE) Effects in SiGe HBTs. IEEE Transactions on Electron Devices, 2018, 65, 2430-2438.	1.6	11
140	Total Ionizing Dose Effects in 70-GHz Bandwidth Photodiodes in a SiGe Integrated Photonics Platform. IEEE Transactions on Nuclear Science, 2019, 66, 125-133.	1.2	11
141	A comparison of npn and pnp profile design tradeoffs for complementary SiGe HBT Technology. Solid-State Electronics, 2000, 44, 1949-1954.	0.8	10
142	The Effects of Proton Irradiation on 90 nm Strained Si CMOS on SOI Devices. , 2006, , .		10
143	An Investigation of Negative Differential Resistance and Novel Collectorâ€“Current Kink Effects in SiGe HBTs Operating at Cryogenic Temperatures. IEEE Transactions on Electron Devices, 2007, 54, 504-516.	1.6	10
144	Junction Isolation Single Event Radiation Hardening of a 200 GHz SiGe:C HBT Technology Without Deep Trench Isolation. IEEE Transactions on Nuclear Science, 2009, 56, 3402-3407.	1.2	10

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145	Single Event Transient Hardness of a New Complementary (npn <formula formulatype="inline"><tex) Tj ETQq1 1 0.784314 rgBT /Ove lo on Nuclear Science, 2010, , .	1.2	10
146	Evaluating the Influence of Various Body-Contacting Schemes on Single Event Transients in 45-nm SOI CMOS. IEEE Transactions on Nuclear Science, 2010, , .	1.2	10
147	Impact of Total Ionizing Dose on a 4th Generation, 90Ânm SiGe HBT Gaussian Pulse Generator. IEEE Transactions on Nuclear Science, 2014, 61, 3050-3054.	1.2	10
148	A SiGe 8â€“18-GHz Receiver With Built-In-Testing Capability for Self-Healing Applications. IEEE Transactions on Microwave Theory and Techniques, 2014, 62, 2370-2380.	2.9	10
149	Physical Differences in Hot Carrier Degradation of Oxide Interfaces in Complementary (n-p-n+p-n-p) SiGe HBTs. IEEE Transactions on Electron Devices, 2017, 64, 37-44.	1.6	10
150	Proton response of low-frequency noise in 0.20 Î¼m 90 GHz fT UHV/CVD SiGe HBTs. Solid-State Electronics, 2003, 47, 39-44.	0.8	9
151	Impact of deep trench isolation on advanced SiGe HBT reliability in radiation environments. , 2009, , .		9
152	Re-Examining TID Hardness Assurance Test Protocols for SiGe HBTs. IEEE Transactions on Nuclear Science, 2009, 56, 3318-3325.	1.2	9
153	A monolithic, wide-temperature, charge amplification channel for extreme environments. , 2010, , .		9
154	An Investigation of DC and RF Safe Operating Area of n-p-n $+$ p-n-p SiGe HBTs on SOI. IEEE Transactions on Electron Devices, 2011, 58, 2573-2581.	1.6	9
155	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.	1.2	9
156	A Ka -Band SiGe Bootstrapped Gilbert Frequency Doubler With 26.2% PAE. IEEE Microwave and Wireless Components Letters, 2018, 28, 1122-1124.	2.0	9
157	SiGe HBT Profiles With Enhanced Inverse-Mode Operation and Their Impact on Single-Event Transients. IEEE Transactions on Nuclear Science, 2018, 65, 399-406.	1.2	9
158	High energy swift heavy ion irradiation and annealing effects on DC electrical characteristics of 200ÂGHz SiGe HBTs. Nuclear Engineering and Technology, 2019, 51, 1428-1435.	1.1	9
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