

# Adrian Ildefonso

## List of Publications by Year in descending order

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times ranked

276  
citing authors

#	ARTICLE	IF	CITATIONS
1	Review "Radiation Damage in Wide and Ultra-Wide Bandgap Semiconductors. ECS Journal of Solid State Science and Technology, 2021, 10, 055008.	1.8	56
2	Design and On-Wafer Characterization of $\alpha$ -Band SiGe HBT Low-Noise Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3631-3642.	4.6	27
3	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.	2.0	25
4	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.	2.0	24
5	The Impact of Technology Scaling on the Single-Event Transient Response of SiGe HBTs. IEEE Transactions on Nuclear Science, 2017, 64, 406-414.	2.0	22
6	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
7	New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. IEEE Transactions on Nuclear Science, 2020, 67, 81-90.	2.0	16
8	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.	2.0	15
9	Optical Single-Event Transients Induced in Integrated Silicon-Photonic Waveguides by Two-Photon Absorption. IEEE Transactions on Nuclear Science, 2021, 68, 785-792.	2.0	14
10	Review "Opportunities in Single Event Effects in Radiation-Exposed SiC and GaN Power Electronics. ECS Journal of Solid State Science and Technology, 2021, 10, 075004.	1.8	13
11	Total Ionizing Dose Effects in 70-GHz Bandwidth Photodiodes in a SiGe Integrated Photonics Platform. IEEE Transactions on Nuclear Science, 2019, 66, 125-133.	2.0	11
12	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
13	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
14	Using Bessel beams and two-photon absorption to predict radiation effects in microelectronics. Optics Express, 2019, 27, 37652.	3.4	9
15	Single-Event Transient Response of Comparator Pre-Amplifiers in a Complementary SiGe Technology. IEEE Transactions on Nuclear Science, 2017, 64, 89-96.	2.0	8
16	Utilizing SiGe HBT Power Detectors for Sensing Single-Event Transients in RF Circuits. IEEE Transactions on Nuclear Science, 2018, 65, 239-248.	2.0	8
17	Single-Event Upset Mitigation in a Complementary SiGe HBT BiCMOS Technology. IEEE Transactions on Nuclear Science, 2018, 65, 231-238.	2.0	7
18	Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. IEEE Transactions on Nuclear Science, 2020, 67, 71-80.	2.0	7

#	ARTICLE	IF	CITATIONS
19	Variability in Total-Ionizing-Dose Response of Fourth-Generation SiGe HBTs. IEEE Transactions on Nuclear Science, 2021, 68, 949-957.	2.0	7
20	Modeling Single-Event Transient Propagation in a SiGe BiCMOS Direct-Conversion Receiver. IEEE Transactions on Nuclear Science, 2017, , 1-1.	2.0	6
21	DC and RF Variability of SiGe HBTs Operating Down to Deep Cryogenic Temperatures. , 2019, , .		6
22	High Responsivity Ge Phototransistor in Commercial CMOS Si-Photonics Platform for Monolithic Optoelectronic Receivers. IEEE Electron Device Letters, 2021, 42, 196-199.	3.9	6
23	On the potential of using SiGe HBTs on SOI to support emerging applications up to 300K. , 2015, , .		5
24	On the Cryogenic RF Linearity of SiGe HBTs in a Fourth-Generation 90-nm SiGe BiCMOS Technology. IEEE Transactions on Electron Devices, 2015, 62, 1127-1135.	3.0	5
25	Total Ionizing Dose Effects on a High-Voltage (>30V) Complementary SiGe on SOI Technology. IEEE Transactions on Nuclear Science, 2017, 64, 277-284.	2.0	5
26	Mapping the Spatial Dependence of Charge-Collection Efficiency in Semiconductor Devices Using Pulsed-Laser Testing. IEEE Transactions on Nuclear Science, 2021, 68, 617-625.	2.0	5
27	Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. IEEE Transactions on Nuclear Science, 2020, 67, 91-98.	2.0	4
28	Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. IEEE Transactions on Nuclear Science, 2020, 67, 260-267.	2.0	3
29	Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. IEEE Transactions on Nuclear Science, 2020, 67, 1521-1529.	2.0	3
30	Pulsed-Laser Testing to Quantitatively Evaluate Latchup Sensitivity in Mixed-Signal ASICs. IEEE Transactions on Nuclear Science, 2022, 69, 429-435.	2.0	3
31	A 19-34 GHz SiGe HBT square-law detector with ultra-low 1/f noise for atmospheric radiometers. , 2017, , .		2
32	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
33	The effects of total ionizing dose on the transient response of SiGe BiCMOS technologies. , 2016, , .		1
34	Modeling single-event transient propagation in a SiGe BiCMOS direct-conversion receiver. , 2016, , .		1
35	Using SiGe-on-SOI HBTs to Build 300K Capable Analog Circuits. , 2018, , .		1
36	The Effects of Temperature on the Single-Event Transient Response of a High-Voltage (>30 V) Complementary SiGe-on-SOI Technology. IEEE Transactions on Nuclear Science, 2019, 66, 389-396.	2.0	1

#	ARTICLE	IF	CITATIONS
37	Mitigation of Single-Event Effects in SiGe-HBT Current-Mode Logic Circuits. Sensors, 2020, 20, 2581.	3.8	1
38	Using Machine Learning to Mitigate Single-Event Upsets in RF Circuits and Systems. IEEE Transactions on Nuclear Science, 2022, 69, 381-389.	2.0	1
39	Total-Ionizing-Dose Response of SiGe HBTs at Elevated Temperatures. IEEE Transactions on Nuclear Science, 2022, 69, 1079-1084.	2.0	1
40	Analysis of the Impact of Radiation-Induced Optical Transients on Deep-Space Optical Communications Systems using PPM. , 2021, , .		0
41	Response of Integrated Silicon Microwave <i>pin</i> Diodes to X-Ray and Fast-Neutron Irradiation. IEEE Transactions on Nuclear Science, 2022, 69, 282-289.	2.0	0