

Ronald D Schrimpf

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1158085/publications.pdf>

Version: 2024-02-01

676
papers

19,823
citations

15880

67
h-index

38517

99
g-index

678
all docs

678
docs citations

678
times ranked

6062
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of Heavy-Ion-Induced Leakage Current in SiC Power Devices. IEEE Transactions on Nuclear Science, 2022, 69, 248-253.	1.2	4
2	Effects of Layer-to-Layer Coupling on the Total-Ionizing-Dose Response of 3-D-Sequentially Integrated FD-SOI MOSFETs. IEEE Transactions on Nuclear Science, 2022, 69, 1420-1427.	1.2	3
3	Total-Ionizing-Dose Effects on Polycrystalline-Si Channel Vertical-Charge-Trapping Nand Devices. IEEE Transactions on Nuclear Science, 2022, 69, 314-320.	1.2	4
4	TID Effects in Highly Scaled Gate-All-Around Si Nanowire CMOS Transistors Irradiated to Ultrahigh Doses. IEEE Transactions on Nuclear Science, 2022, 69, 1444-1452.	1.2	11
5	Negative-Bias-Stress and Total-Ionizing-Dose Effects in Deeply Scaled Ge-GAA Nanowire pFETs. IEEE Transactions on Nuclear Science, 2022, 69, 299-306.	1.2	1
6	Radiation Effects in AlGaN/GaN HEMTs. IEEE Transactions on Nuclear Science, 2022, 69, 1105-1119.	1.2	32
7	Effects of Ion-Induced Displacement Damage on GaN/AlN MEMS Resonators. IEEE Transactions on Nuclear Science, 2022, 69, 216-224.	1.2	4
8	Radiation-Induced Transient Response Mechanisms in Photonic Waveguides. IEEE Transactions on Nuclear Science, 2022, 69, 546-557.	1.2	2
9	Simulation of Pulsed Laser-Induced Testing in Microelectronic Devices. IEEE Transactions on Nuclear Science, 2021, , 1-1.	1.2	2
10	Impact of Surface Recombination on Single-Event Charge Collection in an SOI Technology. IEEE Transactions on Nuclear Science, 2021, 68, 305-311.	1.2	7
11	3-D Full-Band Monte Carlo Simulation of Hot-Electron Energy Distributions in Gate-All-Around Si Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2021, 68, 2556-2563.	1.6	11
12	Impacts of Through-Silicon Vias on Total-Ionizing-Dose Effects and Low-Frequency Noise in FinFETs. IEEE Transactions on Nuclear Science, 2021, 68, 740-747.	1.2	10
13	Total Ionizing Dose Responses of 22-nm FDSOI and 14-nm Bulk FinFET Charge-Trap Transistors. IEEE Transactions on Nuclear Science, 2021, 68, 677-686.	1.2	13
14	Total-Ionizing-Dose Response of Highly Scaled Gate-All-Around Si Nanowire CMOS Transistors. IEEE Transactions on Nuclear Science, 2021, 68, 687-696.	1.2	17
15	Modeling COTS System TID Response With Monte Carlo Sampling and Transistor Swapping Experiments. IEEE Transactions on Nuclear Science, 2021, 68, 1008-1013.	1.2	0
16	Observation of Low-Energy Proton Direct Ionization in a 72-Layer 3-D NAND Flash Memory. IEEE Transactions on Nuclear Science, 2021, 68, 835-841.	1.2	5
17	Charge Trapping and Transconductance Degradation in Irradiated 3-D Sequentially Integrated FDSOI MOSFETs. IEEE Transactions on Nuclear Science, 2021, 68, 707-715.	1.2	5
18	Single-Event-Induced Charge Collection in Ge-Channel pMOS FinFETs. IEEE Transactions on Nuclear Science, 2021, 68, 807-814.	1.2	3

#	ARTICLE	IF	CITATIONS
19	Comparison of Single-Event Transients in an Epitaxial Silicon Diode Resulting From Heavy-Ion-, Focused X-Ray-, and Pulsed Laser-Induced Charge Generation. IEEE Transactions on Nuclear Science, 2021, 68, 626-633.	1.2	5
20	Single-Event Transient Response of Vertical and Lateral Waveguide-Integrated Germanium Photodiodes. IEEE Transactions on Nuclear Science, 2021, 68, 801-806.	1.2	7
21	A System-Level Modeling Approach for Simulating Radiation Effects in Successive-Approximation Analog-to-Digital Converters. IEEE Transactions on Nuclear Science, 2021, 68, 1465-1472.	1.2	2
22	Effects of Breakdown Voltage on Single-Event Burnout Tolerance of High-Voltage SiC Power MOSFETs. IEEE Transactions on Nuclear Science, 2021, 68, 1430-1435.	1.2	28
23	Effects of Charge Generation and Trapping on the X-ray Response of Strained AlGaIn/GaN HEMTs. , 2021, , .		1
24	Radiation Effects and Low-Frequency Noise in AlGaIn/GaN HEMTs. , 2021, , .		0
25	Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. IEEE Transactions on Nuclear Science, 2020, 67, 57-62.	1.2	5
26	Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes. IEEE Transactions on Nuclear Science, 2020, 67, 135-139.	1.2	19
27	Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. IEEE Transactions on Nuclear Science, 2020, 67, 253-259.	1.2	13
28	Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. IEEE Transactions on Nuclear Science, 2020, 67, 38-43.	1.2	8
29	Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With $\text{HfO}_2/\text{Al}_2\text{O}_3$ Dielectrics. IEEE Transactions on Nuclear Science, 2020, 67, 210-220.	1.2	26
30	Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. IEEE Transactions on Nuclear Science, 2020, 67, 22-28.	1.2	67
31	The Impact of Proton-Induced Single Events on Image Classification in a Neuromorphic Computing Architecture. IEEE Transactions on Nuclear Science, 2020, 67, 108-115.	1.2	10
32	Development of a Flight-Program-Ready Radiation Model-Based Assurance Platform. , 2020, , .		2
33	Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs. IEEE Transactions on Nuclear Science, 2020, 67, 353-357.	1.2	11
34	Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With $\text{SiO}_2/\text{HfO}_2$ Gate Dielectrics. IEEE Transactions on Nuclear Science, 2020, 67, 245-252.	1.2	29
35	DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options. IEEE Transactions on Nuclear Science, 2020, 67, 1125-1132.	1.2	3
36	Total-Ionizing-Dose Effects on 3D Sequentially Integrated, Fully Depleted Silicon-on-Insulator MOSFETs. IEEE Electron Device Letters, 2020, 41, 637-640.	2.2	12

#	ARTICLE	IF	CITATIONS
37	Total-Ionizing-Dose Effects in InGaAs MOSFETs With High- κ Gate Dielectrics and InP Substrates. IEEE Transactions on Nuclear Science, 2020, 67, 1312-1319.	1.2	4
38	Charge Transport in Vertical GaN Schottky Barrier Diodes: A Refined Physical Model for Conductive Dislocations. IEEE Transactions on Electron Devices, 2020, 67, 841-846.	1.6	21
39	Worst-Case Bias for High Voltage, Elevated-Temperature Stress of AlGaIn/GaN HEMTs. IEEE Transactions on Device and Materials Reliability, 2020, 20, 420-428.	1.5	12
40	Sensitive-Volume Model of Single-Event Latchup for a 180-nm SRAM Test Structure. IEEE Transactions on Nuclear Science, 2020, 67, 2015-2020.	1.2	3
41	Defect Dehydrogenation in Si-MOS and Compound-Semiconductor-Based Devices. , 2020, , .		1
42	Enhanced Charge Collection in SiC Power MOSFETs Demonstrated by Pulse-Laser Two-Photon Absorption SEE Experiments. IEEE Transactions on Nuclear Science, 2019, 66, 1694-1701.	1.2	19
43	Simulation of Transistor-Level Radiation Effects on System-Level Performance Parameters. IEEE Transactions on Nuclear Science, 2019, 66, 1634-1641.	1.2	5
44	Dopant-Type and Concentration Dependence of Total-Ionizing-Dose Response in Piezoresistive Micromachined Cantilevers. IEEE Transactions on Nuclear Science, 2019, 66, 397-404.	1.2	1
45	Estimating Terrestrial Neutron-Induced SEB Cross Sections and FIT Rates for High-Voltage SiC Power MOSFETs. IEEE Transactions on Nuclear Science, 2019, 66, 337-343.	1.2	37
46	Gate Bias and Length Dependences of Total Ionizing Dose Effects in InGaAs FinFETs on Bulk Si. IEEE Transactions on Nuclear Science, 2019, 66, 1599-1605.	1.2	17
47	Low-frequency noise and defects in copper and ruthenium resistors. Applied Physics Letters, 2019, 114, .	1.5	13
48	Comparison of Total-Ionizing-Dose Effects in Bulk and SOI FinFETs at 90 and 295 K. IEEE Transactions on Nuclear Science, 2019, 66, 911-917.	1.2	17
49	Electron Transport Properties of $\text{Al}_x\text{Ga}_{1-x}\text{N}$ Transistors Based on F. Physical Review Applied, 2019, 11, .	1.5	23
50	Probing heavy ion radiation effects in silicon carbide (SiC) via 3D integrated multimode vibrating diaphragms. Applied Physics Letters, 2019, 114, .	1.5	7
51	Damage Separation in a Bipolar Junction Transistor Following Irradiation With 250-MeV Protons. IEEE Transactions on Nuclear Science, 2019, 66, 795-800.	1.2	5
52	Monte Carlo Simulation of Displacement Damage in Graphene. IEEE Transactions on Nuclear Science, 2019, 66, 1730-1737.	1.2	3
53	Understanding the Average Electron-Hole Pair-Creation Energy in Silicon and Germanium Based on Full-Band Monte Carlo Simulations. IEEE Transactions on Nuclear Science, 2019, 66, 444-451.	1.2	16
54	Total Ionizing Dose Effects and Proton-Induced Displacement Damage on MoS_2 -Interlayer- MoS_2 Tunneling Junctions. IEEE Transactions on Nuclear Science, 2019, 66, 420-427.	1.2	6

#	ARTICLE	IF	CITATIONS
55	Laser-Induced Single-Event Transients in Black Phosphorus MOSFETs. IEEE Transactions on Nuclear Science, 2019, 66, 384-388.	1.2	3
56	Pulsed-Laser Induced Single-Event Transients in InGaAs FinFETs on Bulk Silicon Substrates. IEEE Transactions on Nuclear Science, 2019, 66, 376-383.	1.2	8
57	Using MRED to Screen Multiple-Node Charge-Collection Mitigated SOI Layouts. IEEE Transactions on Nuclear Science, 2019, 66, 233-239.	1.2	6
58	Methodology for Identifying Radiation Effects in Robotic Systems With Mechanical and Control Performance Variations. IEEE Transactions on Nuclear Science, 2019, 66, 184-189.	1.2	2
59	Total-Ionizing-Dose Response of MoS ₂ Transistors With ZrO ₂ and h-BN Gate Dielectrics. IEEE Transactions on Nuclear Science, 2019, 66, 1584-1591.	1.2	6
60	Dose-Rate Dependence of the Total-Ionizing-Dose Response of GaN-Based HEMTs. IEEE Transactions on Nuclear Science, 2019, 66, 170-176.	1.2	24
61	Pulsed Laser-Induced Single-Event Transients in InGaAs FinFETs with sub-10-nm Fin Widths. , 2019, , .		1
62	Single-Event Burnout of SiC Junction Barrier Schottky Diode High-Voltage Power Devices. IEEE Transactions on Nuclear Science, 2018, 65, 256-261.	1.2	63
63	Dose-Rate Effects on the Total-Ionizing-Dose Response of Piezoresistive Micromachined Cantilevers. IEEE Transactions on Nuclear Science, 2018, 65, 58-63.	1.2	4
64	Defects and Low-Frequency Noise in Irradiated Black Phosphorus MOSFETs With HfO ₂ Gate Dielectrics. IEEE Transactions on Nuclear Science, 2018, 65, 1227-1238.	1.2	39
65	Total-Ionizing-Dose Response of Nb ₂ O ₅ -Based MIM Diodes for Neuromorphic Computing Applications. IEEE Transactions on Nuclear Science, 2018, 65, 78-83.	1.2	4
66	Analysis of TPA Pulsed-Laser-Induced Single-Event Latchup Sensitive-Area. IEEE Transactions on Nuclear Science, 2018, 65, 502-509.	1.2	6
67	Application of a Focused, Pulsed X-ray Beam for Total Ionizing Dose Testing of Bipolar Linear Integrated Circuits. IEEE Transactions on Nuclear Science, 2018, 65, 478-485.	1.2	3
68	Capacitance-Frequency Estimates of Border-Trap Densities in Multifin MOS Capacitors. IEEE Transactions on Nuclear Science, 2018, 65, 175-183.	1.2	12
69	Predicting Muon-Induced SEU Rates for a 28-nm SRAM Using Protons and Heavy Ions to Calibrate the Sensitive Volume Model. IEEE Transactions on Nuclear Science, 2018, 65, 712-718.	1.2	18
70	Correlation of a Bipolar-Transistor-Based Neutron Displacement Damage Sensor Methodology With Proton Irradiations. IEEE Transactions on Nuclear Science, 2018, 65, 495-501.	1.2	5
71	Scaling Effects on Single-Event Transients in InGaAs FinFETs. IEEE Transactions on Nuclear Science, 2018, 65, 296-303.	1.2	18
72	X-Ray and Proton Radiation Effects on 40 nm CMOS Physically Unclonable Function Devices. IEEE Transactions on Nuclear Science, 2018, 65, 1519-1524.	1.2	9

#	ARTICLE	IF	CITATIONS
73	Influence of LDD Spacers and H ⁺ Transport on the Total-Ionizing-Dose Response of 65-nm MOSFETs Irradiated to Ultrahigh Doses. IEEE Transactions on Nuclear Science, 2018, 65, 164-174.	1.2	73
74	Radiation-Induced Charge Trapping and Low-Frequency Noise of Graphene Transistors. IEEE Transactions on Nuclear Science, 2018, 65, 156-163.	1.2	15
75	Proton-Induced Displacement Damage and Total-Ionizing-Dose Effects on Silicon-Based MEMS Resonators. IEEE Transactions on Nuclear Science, 2018, 65, 34-38.	1.2	7
76	Fast Ionization-Front-Induced Anomalous Switching Behavior in Trigger Bipolar Transistors of Marx-Bank Circuits Under Base-Drive Conditions. IEEE Transactions on Plasma Science, 2018, 46, 2064-2071.	0.6	1
77	Dose-Rate Sensitivity of 65-nm MOSFETs Exposed to Ultrahigh Doses. IEEE Transactions on Nuclear Science, 2018, 65, 1482-1487.	1.2	28
78	Single-Event Burnout Mechanisms in SiC Power MOSFETs. IEEE Transactions on Nuclear Science, 2018, 65, 1951-1955.	1.2	94
79	Failure Estimates for SiC Power MOSFETs in Space Electronics. Aerospace, 2018, 5, 67.	1.1	23
80	Total-Ionizing-Dose Effects on Al/SiO ₂ Bimorph Electrothermal Microscanners. IEEE Transactions on Nuclear Science, 2018, 65, 2260-2267.	1.2	0
81	A TCAD evaluation of a single Bulk-BICS with integrative memory cell. Microelectronics Journal, 2018, 80, 62-68.	1.1	2
82	Molecular Dynamics Simulations of Heavy Ion Induced Defects in SiC Schottky Diodes. IEEE Transactions on Device and Materials Reliability, 2018, 18, 481-483.	1.5	12
83	Multiple Defects Cause Degradation After High Field Stress in AlGa _N /Ga _N HEMTs. IEEE Transactions on Device and Materials Reliability, 2018, 18, 364-376.	1.5	49
84	Parasitic Bipolar Action in SiC Power MOSFETs Demonstrated by Two-Photon Laser Experiment. , 2018, , .		0
85	Total-Ionizing-Dose Effects in Piezoresistive Micromachined Cantilevers. IEEE Transactions on Nuclear Science, 2017, 64, 263-268.	1.2	10
86	Total-Ionizing-Dose Effects on Piezoelectric Micromachined Ultrasonic Transducers. IEEE Transactions on Nuclear Science, 2017, 64, 233-238.	1.2	2
87	Heavy Ion Induced Degradation in SiC Schottky Diodes: Bias and Energy Deposition Dependence. IEEE Transactions on Nuclear Science, 2017, 64, 415-420.	1.2	63
88	Dependence of Ideality Factor in Lateral PNP Transistors on Surface Carrier Concentration. IEEE Transactions on Nuclear Science, 2017, , 1-1.	1.2	12
89	Understanding Charge Collection Mechanisms in InGaAs FinFETs Using High-Speed Pulsed-Laser Transient Testing With Tunable Wavelength. IEEE Transactions on Nuclear Science, 2017, 64, 2069-2078.	1.2	17
90	CubeSats and Crowd-Sourced Monitoring for Single Event Effects Hardness Assurance. IEEE Transactions on Nuclear Science, 2017, 64, 293-300.	1.2	4

#	ARTICLE	IF	CITATIONS
91	Tools for modeling radioactive contaminants in chip materials. Semiconductor Science and Technology, 2017, 32, 034001.	1.0	0
92	Heavy Ion Induced Degradation in SiC Schottky Diodes: Incident Angle and Energy Deposition Dependence. IEEE Transactions on Nuclear Science, 2017, , 1-1.	1.2	20
93	CubeSat: Real-time soft error measurements at low earth orbits. , 2017, , .		3
94	Strong Correlation Between Experiment and Simulation for Two-Photon Absorption Induced Carrier Generation. IEEE Transactions on Nuclear Science, 2017, 64, 1133-1136.	1.2	14
95	Total Ionizing Dose Effects on Strained Ge pMOS FinFETs on Bulk Si. IEEE Transactions on Nuclear Science, 2017, 64, 226-232.	1.2	28
96	Worst-Case Bias for Proton and 10-keV X-Ray Irradiation of AlGaIn/GaN HEMTs. IEEE Transactions on Nuclear Science, 2017, 64, 218-225.	1.2	46
97	1/ \$f\$ Noise in As-Processed and Proton-Irradiated AlGaIn/GaN HEMTs Due to Carrier Number Fluctuations. IEEE Transactions on Nuclear Science, 2017, 64, 181-189.	1.2	31
98	Ionizing Dose-Tolerant Enhancement-Mode Cascode for High-Voltage Power Devices. IEEE Transactions on Nuclear Science, 2017, 64, 382-387.	1.2	2
99	The study of radiation effects in emerging micro and nano electro mechanical systems (M and NEMs). Semiconductor Science and Technology, 2017, 32, 013005.	1.0	27
100	Radiation Response and Adaptive Control-Based Degradation Mitigation of MEMS Accelerometers in Ionizing Dose Environments. IEEE Sensors Journal, 2017, 17, 1132-1143.	2.4	8
101	Charge-Steering Latch Design in 16 nm FinFET Technology for Improved Soft Error Hardness. IEEE Transactions on Nuclear Science, 2017, 64, 353-358.	1.2	9
102	Memristive devices from ZnO nanowire bundles and meshes. Applied Physics Letters, 2017, 111, .	1.5	11
103	Persistent Laser-Induced Leakage in a 20 nm Charge-Pump Phase-Locked Loop (PLL). IEEE Transactions on Nuclear Science, 2017, 64, 512-518.	1.2	5
104	Total Ionizing Dose Effects on HfO ₂ -Passivated Black Phosphorus Transistors. IEEE Transactions on Nuclear Science, 2017, 64, 170-175.	1.2	19
105	Gate Bias and Geometry Dependence of Total-Ionizing-Dose Effects in InGaAs Quantum-Well MOSFETs. IEEE Transactions on Nuclear Science, 2017, 64, 239-244.	1.2	17
106	Displacement Damage in Bipolar Junction Transistors: Beyond Messenger-Spratt. IEEE Transactions on Nuclear Science, 2017, 64, 149-155.	1.2	26
107	1.8 MeV Proton Testing of Thermally Stabilized GaN HEMT RF Power Devices in Three Operational Modes. , 2017, , .		0
108	Bayesian Modeling of COTS Power MOSFET Ionizing Dose Impact on Circuit Response. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
109	RadFxSat: A Flight Campaign for Recording Single-Event Effects in Commercial Off-the-Shelf Microelectronics. , 2017, , .		2
110	1/f noise in GaN/AlGaIn HEMTs. , 2016, , .		2
111	Incident angle effect on heavy ion induced reverse leakage current in SiC Schottky diodes. , 2016, , .		5
112	Total ionizing dose effects in passivated and unpassivated AlGaIn/GaN HEMTs. , 2016, , .		4
113	High-Field Stress, Low-Frequency Noise, and Long-Term Reliability of AlGaIn/GaN HEMTs. IEEE Transactions on Device and Materials Reliability, 2016, 16, 282-289.	1.5	25
114	Charge Transport Mechanisms in Heavy-Ion Driven Leakage Current in Silicon Carbide Schottky Power Diodes. IEEE Transactions on Device and Materials Reliability, 2016, 16, 208-212.	1.5	27
115	Correlation of proton irradiation induced threshold voltage shifts to deep level traps in AlGaIn/GaN heterostructures. Journal of Applied Physics, 2016, 119, .	1.1	35
116	Modeling Erratic Behavior Due to High Current Filamentation in Bipolar Structures Under Dynamic Avalanche Conditions. IEEE Transactions on Electron Devices, 2016, , 1-8.	1.6	4
117	Degradation and annealing effects caused by oxygen in AlGaIn/GaN high electron mobility transistors. Applied Physics Letters, 2016, 109, .	1.5	22
118	Effects of Negative-Bias-Temperature-Instability on Low-Frequency Noise in SiGe $\{p\}$ MOSFETs. IEEE Transactions on Device and Materials Reliability, 2016, 16, 541-548.	1.5	16
119	Electrical Effects of a Single Extended Defect in MOSFETs. IEEE Transactions on Electron Devices, 2016, 63, 3069-3075.	1.6	9
120	Estimation of single-event transient pulse characteristics for predictive analysis. , 2016, , .		4
121	Temperature dependence of soft-error rates for FF designs in 20-nm bulk planar and 16-nm bulk FinFET technologies. , 2016, , .		24
122	Introduction of Interfacial Charges to Black Phosphorus for a Family of Planar Devices. Nano Letters, 2016, 16, 6870-6878.	4.5	69
123	Pulsed-laser transient testing with tunable wavelength and high resolution for high mobility MOSFETs. , 2016, , .		0
124	On the assessment of electrically active defects in high-mobility materials and devices. , 2016, , .		0
125	Hot-Carrier Degradation in GaN HEMTs Due to Substitutional Iron and Its Complexes. IEEE Transactions on Electron Devices, 2016, 63, 1486-1494.	1.6	27
126	Thermal stability of deep level defects induced by high energy proton irradiation in n-type GaN. Journal of Applied Physics, 2015, 118, .	1.1	23

#	ARTICLE	IF	CITATIONS
127	Efficient Reliability Testing of Emerging Memory Technologies Using Multiple Radiation Sources. Physics Procedia, 2015, 66, 568-575.	1.2	0
128	Proton irradiation-induced traps causing $V_{T<inf>T</inf>}$ instabilities and RF degradation in GaN HEMTs. , 2015, , .		5
129	Rapid non-destructive detection of sub-surface Cu in silicon-on-insulator wafers by optical second harmonic generation. , 2015, , .		1
130	Bayesian Inference Modeling of Total Ionizing Dose Effects on System Performance. IEEE Transactions on Nuclear Science, 2015, 62, 2517-2524.	1.2	5
131	Charge Collection Mechanisms of Ge-Channel Bulk p-MOSFETs and n-MOSFETs . IEEE Transactions on Nuclear Science, 2015, 62, 2725-2731.	1.2	8
132	SEB Hardened Power MOSFETs With High-K Dielectrics. IEEE Transactions on Nuclear Science, 2015, 62, 2830-2836.	1.2	24
133	Total Ionizing Dose Effects on Ge Channel p-MOSFETs with Raised $\text{Si}_{0.55}\text{Ge}_{0.45}$ Source/Drain. IEEE Transactions on Nuclear Science, 2015, 62, 2412-2416.	1.2	7
134	Estimation of Single-Event-Induced Collected Charge for Multiple Transistors Using Analytical Expressions. IEEE Transactions on Nuclear Science, 2015, 62, 2853-2859.	1.2	3
135	Proton Irradiation as a Screen for Displacement-Damage Sensitivity in Bipolar Junction Transistors. IEEE Transactions on Nuclear Science, 2015, 62, 2498-2504.	1.2	8
136	Vanderbilt Pelletron - Low Energy Protons and Other Ions for Radiation Effects on Electronics. , 2015, , .		14
137	Electron-Induced Single Event Upsets in 28Ånm and 45Ånm Bulk SRAMs. IEEE Transactions on Nuclear Science, 2015, 62, 2709-2716.	1.2	23
138	Effects of Applied Bias and High Field Stress on the Radiation Response of GaN/AlGaIn HEMTs. IEEE Transactions on Nuclear Science, 2015, 62, 2423-2430.	1.2	84
139	Two-Photon Absorption Induced Single-Event Effects: Correlation Between Experiment and Simulation. IEEE Transactions on Nuclear Science, 2015, 62, 2867-2873.	1.2	18
140	Charge Collection Mechanisms in GaAs MOSFETs. IEEE Transactions on Nuclear Science, 2015, 62, 2752-2759.	1.2	10
141	Effects of Proton-Induced Displacement Damage on Gallium Nitride HEMTs in RF Power Amplifier Applications. IEEE Transactions on Nuclear Science, 2015, 62, 2417-2422.	1.2	53
142	Proton irradiation effects on deep level states in Mg-doped p-type GaN grown by ammonia-based molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	1.5	32
143	Self-Healing of Proton Damage in Lithium Niobate (LiNbO_3). IEEE Transactions on Nuclear Science, 2015, 62, 542-547.	1.2	1
144	System Health Awareness in Total-Ionizing Dose Environments. IEEE Transactions on Nuclear Science, 2015, 62, 1674-1681.	1.2	2

#	ARTICLE	IF	CITATIONS
145	Limitations of LET in Predicting the Radiation Response of Advanced Devices. IEEE Transactions on Nuclear Science, 2015, 62, 1558-1567.	1.2	1
146	Role of Fe impurity complexes in the degradation of GaN/AlGaIn high-electron-mobility transistors. Applied Physics Letters, 2015, 106, .	1.5	45
147	Quantum Mechanical Modeling of Radiation-Induced Defect Dynamics in Electronic Devices. IEEE Transactions on Nuclear Science, 2015, 62, 2169-2180.	1.2	20
148	Effects of Energy-Deposition Variability on Soft Error Rate Prediction. IEEE Transactions on Nuclear Science, 2015, 62, 2181-2186.	1.2	6
149	Activation Energies for Oxide- and Interface-Trap Charge Generation Due to Negative-Bias Temperature Stress of Si-Capped SiGe-pMOSFETs. IEEE Transactions on Device and Materials Reliability, 2015, 15, 352-358.	1.5	9
150	Geometry-Aware Single-Event Enabled Compact Models for Sub-50Ånm Partially Depleted Silicon-on-Insulator Technologies. IEEE Transactions on Nuclear Science, 2015, 62, 1589-1598.	1.2	17
151	Physical Processes and Applications of the Monte Carlo Radiative Energy Deposition (MRED) Code. IEEE Transactions on Nuclear Science, 2015, 62, 1441-1461.	1.2	50
152	Influence of supply voltage on the multi-cell upset soft error sensitivity of dual- and triple-well 28 nm CMOS SRAMs. , 2015, , .		11
153	Bias Dependence of Single-Event Upsets in 16Ånm FinFET D-Flip-Flops. IEEE Transactions on Nuclear Science, 2015, 62, 2578-2584.	1.2	43
154	Physical Mechanisms Affecting the Reliability of GaN-based High Electron Mobility Transistors. Materials Research Society Symposia Proceedings, 2015, 1792, 1.	0.1	0
155	Dynamic Modeling of Radiation-Induced State Changes in HfO_2/Hf 1T1R RRAM. IEEE Transactions on Nuclear Science, 2014, 61, 3497-3503.	1.2	13
156	State and Angular Dependence of Single-Event Upsets in an Asymmetric RC-Hardened SRAM Using Deep Trench Capacitors. IEEE Transactions on Nuclear Science, 2014, 61, 3068-3073.	1.2	1
157	Heavy-Ion and Laser Induced Charge Collection in SiGe Channel pMOSFETs . IEEE Transactions on Nuclear Science, 2014, 61, 3187-3192.	1.2	15
158	Single-Event Transient Response of InGaAs MOSFETs. IEEE Transactions on Nuclear Science, 2014, 61, 3550-3556.	1.2	20
159	TID and Displacement Damage Resilience of 1T1R HfO_2/Hf Resistive Memories. IEEE Transactions on Nuclear Science, 2014, 61, 2972-2978.	1.2	27
160	RF Performance of Proton-Irradiated AlGaIn/GaN HEMTs. IEEE Transactions on Nuclear Science, 2014, 61, 2959-2964.	1.2	21
161	Electrical Stress and Total Ionizing Dose Effects on MoS_2 Transistors. IEEE Transactions on Nuclear Science, 2014, 61, 2862-2867.	1.2	20
162	Soft errors and NBTI in SiGe pMOS transistors. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
163	Total Ionizing Dose Effects on hBN Encapsulated Graphene Devices. IEEE Transactions on Nuclear Science, 2014, 61, 2868-2873.	1.2	27
164	Geometry Dependence of Total-Dose Effects in Bulk FinFETs. IEEE Transactions on Nuclear Science, 2014, 61, 2951-2958.	1.2	54
165	Total-Ionizing-Dose Induced Timing Window Violations in CMOS Microcontrollers. IEEE Transactions on Nuclear Science, 2014, 61, 2979-2984.	1.2	4
166	Irradiation and Temperature Effects for a 32Ånm RF Silicon-on-Insulator CMOS Process. IEEE Transactions on Nuclear Science, 2014, 61, 3037-3042.	1.2	8
167	Bias Dependence of Total Ionizing Dose Effects in SiGe-MOS FinFETs. IEEE Transactions on Nuclear Science, 2014, 61, 2834-2838.	1.2	57
168	Defects in GaN based transistors. Proceedings of SPIE, 2014, , .	0.8	5
169	Gate Bias Dependence of Defect-Mediated Hot-Carrier Degradation in GaN HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 1316-1320.	1.6	40
170	Total-Ionizing-Dose Response of Narrow, Long Channel 45Ånm PDSOI Transistors. IEEE Transactions on Nuclear Science, 2014, 61, 2945-2950.	1.2	18
171	Impact of Technology Scaling on SRAM Soft Error Rates. IEEE Transactions on Nuclear Science, 2014, 61, 3512-3518.	1.2	74
172	Single- and Multiple-Event Induced Upsets in HfO_2/Hf 1T1R RRAM. IEEE Transactions on Nuclear Science, 2014, 61, 1717-1725.	1.2	37
173	Advanced SiGe BiCMOS Technology for Multi-Mrad Electronic Systems. IEEE Transactions on Device and Materials Reliability, 2014, 14, 844-848.	1.5	22
174	An Analytical Model to Quantify Decay Chain Disequilibrium—Application to the Thorium Decay Chain. IEEE Transactions on Nuclear Science, 2014, 61, 1414-1419.	1.2	2
175	Impact of Technology Scaling in sub-100Ånm nMOSFETs on Total-Dose Radiation Response and Hot-Carrier Reliability. IEEE Transactions on Nuclear Science, 2014, 61, 1426-1432.	1.2	15
176	Total-ionizing-dose effects and reliability of carbon nanotube FET devices. Microelectronics Reliability, 2014, 54, 2355-2359.	0.9	7
177	Comparison between trap and self-heating induced mobility degradation in AlGaIn/GaN HEMTs. Microelectronics Reliability, 2014, 54, 570-574.	0.9	10
178	Bias-Temperature Instabilities in Silicon Carbide MOS Devices. , 2014, , 661-675.		5
179	Total ionizing dose effects and reliability of graphene-based non-volatile memory devices. , 2013, , .		2
180	Radiation Effects in Advanced Multiple Gate and Silicon-on-Insulator Transistors. IEEE Transactions on Nuclear Science, 2013, 60, 1970-1991.	1.2	114

#	ARTICLE	IF	CITATIONS
181	Radiation Effects on the Photoluminescence of Rare-Earth Doped Pyrochlore Powders. IEEE Transactions on Nuclear Science, 2013, 60, 2444-2449.	1.2	7
182	Analytical Method to Evaluate Soft Error Rate Due to Alpha Contamination. IEEE Transactions on Nuclear Science, 2013, 60, 4059-4066.	1.2	6
183	The Impact of Depletion Region Potential Modulation on Ion-Induced Current Transient Response. IEEE Transactions on Nuclear Science, 2013, 60, 4150-4158.	1.2	18
184	Time-Domain Reflectometry Measurements of Total-Ionizing-Dose Degradation of n MOSFETs. IEEE Transactions on Nuclear Science, 2013, 60, 4470-4475.	1.2	25
185	Sensitivity of High-Frequency RF Circuits to Total Ionizing Dose Degradation. IEEE Transactions on Nuclear Science, 2013, 60, 4498-4504.	1.2	20
186	The Impact of X-Ray and Proton Irradiation on HfO_2/Hf -Based Bipolar Resistive Memories. IEEE Transactions on Nuclear Science, 2013, 60, 4540-4546.	1.2	58
187	Radiation Effects on LiNbO_3 Memristors for Neuromorphic Computing Applications. IEEE Transactions on Nuclear Science, 2013, 60, 4555-4562.	1.2	15
188	Proton-Induced Transient Charge Collection in GaAs and InAlSb/InAs-Based FETs. IEEE Transactions on Nuclear Science, 2013, 60, 2651-2659.	1.2	9
189	Proton-Induced Dehydrogenation of Defects in AlGaIn/GaN HEMTs. IEEE Transactions on Nuclear Science, 2013, 60, 4080-4086.	1.2	136
190	Effects of High Electric Fields on the Magnitudes of Current Steps Produced by Single Particle Displacement Damage. IEEE Transactions on Nuclear Science, 2013, 60, 4094-4102.	1.2	73
191	Electron-Induced Single-Event Upsets in Static Random Access Memory. IEEE Transactions on Nuclear Science, 2013, 60, 4122-4129.	1.2	121
192	Experimental Characterization of Radiation-Induced Charge Sharing. IEEE Transactions on Nuclear Science, 2013, 60, 4159-4165.	1.2	17
193	Charge Collection Mechanisms in AlGaIn/GaN MOS High Electron Mobility Transistors. IEEE Transactions on Nuclear Science, 2013, 60, 4439-4445.	1.2	25
194	SEL-Sensitive Area Mapping and the Effects of Reflection and Diffraction From Metal Lines on Laser SEE Testing. IEEE Transactions on Nuclear Science, 2013, 60, 2550-2558.	1.2	21
195	Bias Dependence of Total-Dose Effects in Bulk FinFETs. IEEE Transactions on Nuclear Science, 2013, 60, 4476-4482.	1.2	35
196	Experimental Estimation of the Window of Vulnerability for Logic Circuits. IEEE Transactions on Nuclear Science, 2013, 60, 2691-2696.	1.2	5
197	Radiation effects and reliability: Physical mechanisms and rate prediction. , 2013, , .		0
198	An efficient technique to select logic nodes for single event transient pulse-width reduction. Microelectronics Reliability, 2013, 53, 114-117.	0.9	9

#	ARTICLE	IF	CITATIONS
199	Origins of Low-Frequency Noise and Interface Traps in 4H-SiC MOSFETs. IEEE Electron Device Letters, 2013, 34, 117-119.	2.2	37
200	Temperature Dependence and Postirradiation Annealing Response of the $1/f$ Noise of 4H-SiC MOSFETs. IEEE Transactions on Electron Devices, 2013, 60, 2361-2367.	1.6	69
201	From Displacement Damage to ELDRS: Fifty Years of Bipolar Transistor Radiation Effects at the NSREC. IEEE Transactions on Nuclear Science, 2013, 60, 1731-1739.	1.2	31
202	Role of bias conditions in the hot carrier degradation of AlGaIn/GaN high electron mobility transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 794-798.	0.8	9
203	(Invited) Interface and Border Traps in Ge pMOSFETs. ECS Transactions, 2013, 50, 189-203.	0.3	0
204	Fin Width and Gate Length Dependences of Charge Pumping and DCIV Currents in Floating-Body SOI MOSFETs. ECS Transactions, 2013, 50, 237-248.	0.3	2
205	Neutron-induced single-event-transient effects in ultrathin-body fully-depleted silicon-on-insulator MOSFETs. , 2013, , .		6
206	Impact of proton irradiation on deep level states in n-GaN. Applied Physics Letters, 2013, 103, .	1.5	59
207	Modeling of radiation-induced single event transients in SOI FinFETs. , 2013, , .		29
208	Radial characteristics of heavy-ion track structure and implications of delta-ray events for microelectronics. Applied Physics Letters, 2012, 101, 053509.	1.5	6
209	Oxygen-related border traps in MOS and GaN devices. , 2012, , .		1
210	Total ionizing dose effects on ultra thin buried oxide floating body memories. , 2012, , .		1
211	Heavy-Ion-Induced Current Transients in Bulk and SOI FinFETs. IEEE Transactions on Nuclear Science, 2012, 59, 2674-2681.	1.2	43
212	Bias-Temperature Instabilities in 4H-SiC Metal-Oxide-Semiconductor Capacitors. IEEE Transactions on Device and Materials Reliability, 2012, 12, 391-398.	1.5	28
213	Effects of charge confinement and angular strikes in 40 nm dual- and triple-well bulk CMOS SRAMs. , 2012, , .		6
214	Electrical Stress and Total Ionizing Dose Effects on Graphene-Based Non-Volatile Memory Devices. IEEE Transactions on Nuclear Science, 2012, 59, 2974-2978.	1.2	16
215	Mechanisms Separating Time-Dependent and True Dose-Rate Effects in Irradiated Bipolar Oxides. IEEE Transactions on Nuclear Science, 2012, 59, 3069-3076.	1.2	25
216	Charge Pumping Measurements of Radiation-Induced Interface-Trap Density in Floating-Body SOI FinFETs. IEEE Transactions on Nuclear Science, 2012, 59, 3062-3068.	1.2	12

#	ARTICLE	IF	CITATIONS
217	Single Particle Displacement Damage in Silicon. IEEE Transactions on Nuclear Science, 2012, 59, 3054-3061.	1.2	81
218	The Effects of Proton-Defect Interactions on Radiation-Induced Interface-Trap Formation and Annealing. IEEE Transactions on Nuclear Science, 2012, 59, 3087-3092.	1.2	37
219	Effect of Carrier Transport in Oxides Surrounding Active Devices on SEU in 45 nm SOI SRAM. IEEE Transactions on Nuclear Science, 2012, 59, 728-734.	1.2	4
220	Radiation-Induced Oxide Charge in Low- and High-H ₂ Environments. IEEE Transactions on Nuclear Science, 2012, 59, 755-759.	1.2	16
221	Single-event transient sensitivity to gate bias in InAlSb/InAs/AlGaSb high electron mobility transistors. , 2012, , .		1
222	Radiation hardness aspects of advanced FinFET and UTBOX devices. , 2012, , .		1
223	Total-ionizing-dose radiation response of 32 nm partially and 45 nm fully-depleted SOI devices. , 2012, , .		14
224	Impact of Back-Gate Bias and Device Geometry on the Total Ionizing Dose Response of 1-Transistor Floating Body RAMs. IEEE Transactions on Nuclear Science, 2012, 59, 2966-2973.	1.2	18
225	Efficient Method for Estimating the Characteristics of Radiation-Induced Current Transients. IEEE Transactions on Nuclear Science, 2012, 59, 2704-2709.	1.2	9
226	Comparison of Charge Pumping and $\frac{1}{f}$ Noise in Irradiated Ge pMOSFETs. IEEE Transactions on Nuclear Science, 2012, 59, 735-741.	1.2	47
227	The Significance of High-Level Carrier Generation Conditions for Charge Collection in Irradiated Devices. IEEE Transactions on Nuclear Science, 2012, 59, 2710-2721.	1.2	8
228	Statistical Analysis of Soft Error Rate in Digital Logic Design Including Process Variations. IEEE Transactions on Nuclear Science, 2012, 59, 2811-2817.	1.2	10
229	Effectiveness of SEL Hardening Strategies and the Latchup Domino Effect. IEEE Transactions on Nuclear Science, 2012, 59, 2642-2650.	1.2	38
230	Single-Event Transient Sensitivity of InAlSb/InAs/AlGaSb High Electron Mobility Transistors. IEEE Transactions on Nuclear Science, 2012, 59, 2691-2696.	1.2	15
231	Ozone-exposure and annealing effects on graphene-on-SiO ₂ transistors. Applied Physics Letters, 2012, 101, .	1.5	38
232	Charge pumping and DCIV currents in SOI FinFETs. Solid-State Electronics, 2012, 78, 75-79.	0.8	8
233	The impact of device width on the variability of post-irradiation leakage currents in 90 and 65 nm CMOS technologies. Microelectronics Reliability, 2012, 52, 2521-2526.	0.9	14
234	Surface Reactions and Defect Formation in Irradiated Graphene Devices. IEEE Transactions on Nuclear Science, 2012, 59, 3039-3044.	1.2	12

#	ARTICLE	IF	CITATIONS
235	Soft errors in advanced CMOS technologies. , 2012, , .		2
236	Reliability of III-V devices – The defects that cause the trouble. Microelectronic Engineering, 2012, 90, 3-8.	1.1	30
237	Characterizing, modeling, and simulating soft error susceptibility in cell-based designs in highly scaled technologies. , 2011, , .		7
238	Laser- and Heavy Ion-Induced Charge Collection in Bulk FinFETs. IEEE Transactions on Nuclear Science, 2011, 58, 2563-2569.	1.2	58
239	Impact of Spacecraft-Shell Composition on 1 GeV/Nucleon ^{56}Fe Ion-Fragmentation and Dose Reduction. IEEE Transactions on Nuclear Science, 2011, 58, 3126-3133.	1.2	15
240	Evaluation of ELDRS Mechanisms Using Dose Rate Switching Experiments on Gated Lateral PNP Transistors. IEEE Transactions on Nuclear Science, 2011, 58, 2953-2960.	1.2	12
241	Uranium and Thorium Contribution to Soft Error Rate in Advanced Technologies. IEEE Transactions on Nuclear Science, 2011, 58, 1098-1103.	1.2	11
242	Single-Event Charge Collection and Upset in 40-nm Dual- and Triple-Well Bulk CMOS SRAMs. IEEE Transactions on Nuclear Science, 2011, 58, 2761-2767.	1.2	39
243	ELDRS: Optimization Tools for the Switched Dose Rate Technique. IEEE Transactions on Nuclear Science, 2011, 58, 2998-3003.	1.2	3
244	Single-Event Transient Measurements in nMOS and pMOS Transistors in a 65-nm Bulk CMOS Technology at Elevated Temperatures. IEEE Transactions on Device and Materials Reliability, 2011, 11, 179-186.	1.5	39
245	High Energy Electron-Induced Transients In a Shielded Focal Plane Array. IEEE Transactions on Nuclear Science, 2011, 58, 899-905.	1.2	0
246	Effect of Ionizing Radiation on Defects and $1/f$ Noise in Ge pMOSFETs. IEEE Transactions on Nuclear Science, 2011, 58, 764-769.	1.2	12
247	The Use of Electron-Beam Lithography for Localized Micro-Beam Irradiations. IEEE Transactions on Nuclear Science, 2011, 58, 1104-1111.	1.2	4
248	Charge pumping and DCIV currents in SOI FinFETs. , 2011, , .		0
249	Effect of the Uranium Decay Chain Disequilibrium on Alpha Disintegration Rate. IEEE Transactions on Nuclear Science, 2011, 58, 2793-2797.	1.2	5
250	Radiation-induced oxide charge in low- and high- H_2 environments. , 2011, , .		1
251	Comparison of charge pumping and $1/f$ noise in irradiated Ge pMOSFETs. , 2011, , .		0
252	Alpha-Particle and Focused-Ion-Beam-Induced Single-Event Transient Measurements in a Bulk 65-nm CMOS Technology. IEEE Transactions on Nuclear Science, 2011, 58, 1093-1097.	1.2	12

#	ARTICLE	IF	CITATIONS
253	A Quantitative Model for ELDRS and $\{m H\}_{2}$ Degradation Effects in Irradiated Oxides Based on First Principles Calculations. IEEE Transactions on Nuclear Science, 2011, 58, 2937-2944.	1.2	58
254	SEU Prediction From SET Modeling Using Multi-Node Collection in Bulk Transistors and SRAMs Down to the 65 nm Technology Node. IEEE Transactions on Nuclear Science, 2011, 58, 1338-1346.	1.2	63
255	Bias-Temperature Instabilities and Radiation Effects on SiC MOSFETs. ECS Transactions, 2011, 35, 369-380.	0.3	5
256	Pulsed laser-induced transient currents in bulk and silicon-on-insulator FinFETs. , 2011, , .		12
257	Low-Energy X-ray and Ozone-Exposure Induced Defect Formation in Graphene Materials and Devices. IEEE Transactions on Nuclear Science, 2011, 58, 2961-2967.	1.2	56
258	Reliability-limiting defects in AlGaIn/GaN HEMTs. , 2011, , .		3
259	High fluence 1.8MeV proton irradiation effects on n-type MOS capacitors. Microelectronics Reliability, 2011, 51, 2093-2096.	0.9	11
260	Degradation in InAs ϵ -AlSb HEMTs Under Hot-Carrier Stress. IEEE Transactions on Electron Devices, 2011, 58, 1499-1507.	1.6	4
261	Modeling of Ionizing Radiation-Induced Degradation in Multiple Gate Field Effect Transistors. IEEE Transactions on Nuclear Science, 2011, 58, 499-505.	1.2	88
262	Radiation hardness of FDSOI and FinFET technologies. , 2011, , .		28
263	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
264	Fin Width and Bias Dependence of the Response of Triple-Gate MOSFETs to Total Dose Irradiation. IEEE Transactions on Nuclear Science, 2011, 58, 2871-2875.	1.2	34
265	Including Radiation Effects and Dependencies on Process-Related Variability in Advanced Foundry SPICE Models Using a New Physical Model and Parameter Extraction Approach. IEEE Transactions on Nuclear Science, 2011, 58, 2876-2882.	1.2	9
266	Effects of Bias on the Irradiation and Annealing Responses of 4H-SiC MOS Devices. IEEE Transactions on Nuclear Science, 2011, 58, 2925-2929.	1.2	37
267	Mechanisms of Interface Trap Buildup and Annealing During Elevated Temperature Irradiation. IEEE Transactions on Nuclear Science, 2011, 58, 2930-2936.	1.2	19
268	The sensitivity of radiation-induced leakage to STI topology and sidewall doping. Microelectronics Reliability, 2011, 51, 889-894.	0.9	27
269	Radiation effects in new materials for nano-devices. Microelectronic Engineering, 2011, 88, 1259-1264.	1.1	36
270	1/f Noise in GaN HEMTs grown under Ga-rich, N-rich, and NH ₃ -rich conditions. Microelectronics Reliability, 2011, 51, 212-216.	0.9	58

#	ARTICLE	IF	CITATIONS
271	Radiation-Induced Defect Evolution and Electrical Degradation of AlGaIn/GaN High-Electron-Mobility Transistors. IEEE Transactions on Nuclear Science, 2011, 58, 2918-2924.	1.2	69
272	Impact of process variability on the radiation-induced soft error of nanometer-scale srams in hold and read conditions. , 2011, , .		6
273	Temperature-dependence and microscopic origin of low frequency $1/f$ noise in GaN/AlGaIn high electron mobility transistors. Applied Physics Letters, 2011, 99, .	1.5	44
274	Radiation Effects in 3D Integrated SOI SRAM Circuits. IEEE Transactions on Nuclear Science, 2011, 58, 2845-2854.	1.2	16
275	Dehydrogenation of defects and hot-electron degradation in GaN high-electron-mobility transistors. Journal of Applied Physics, 2011, 109, .	1.1	114
276	SET Characterization in Logic Circuits Fabricated in a 3DIC Technology. IEEE Transactions on Nuclear Science, 2011, 58, 2555-2562.	1.2	16
277	Effects of scaling on muon-induced soft errors. , 2011, , .		58
278	Atomic-scale origins of bias-temperature instabilities in SiC/SiO ₂ structures. Applied Physics Letters, 2011, 98, .	1.5	31
279	Room-temperature diffusive phenomena in semiconductors: The case of AlGaIn. Physical Review B, 2011, 84, .	1.1	32
280	(Invited) Radiation Hardness of SiGe and Ge-Based CMOS Technologies. ECS Transactions, 2011, 39, 17-30.	0.3	0
281	Applications Of Monte Carlo Radiation Transport Simulation Techniques For Predicting Single Event Effects In Microelectronics. , 2011, , .		0
282	Response of a 0.25 μ m thin-film silicon-on-sapphire CMOS technology to total ionizing dose. Journal of Instrumentation, 2010, 5, C11021-C11021.	0.5	7
283	Monte Carlo Simulation of Single Event Effects. IEEE Transactions on Nuclear Science, 2010, 57, 1726-1746.	1.2	178
284	Effects of fin width on memory windows in FinFET ZRAMs. Solid-State Electronics, 2010, 54, 1155-1159.	0.8	7
285	Performance, reliability, radiation effects, and aging issues in microelectronics – From atomic-scale physics to engineering-level modeling. Solid-State Electronics, 2010, 54, 841-848.	0.8	24
286	Electrical-stress-induced degradation in AlGaIn/GaN high electron mobility transistors grown under gallium-rich, nitrogen-rich, and ammonia-rich conditions. Applied Physics Letters, 2010, 96, .	1.5	50
287	Novel Energy-Dependent Effects Revealed in GeV Heavy-Ion-Induced Transient Measurements of Antimony-Based III-V HEMTs. IEEE Transactions on Nuclear Science, 2010, , .	1.2	14
288	Total Ionizing Dose Effects on FinFET-Based Capacitor-Less 1T-DRAMs. IEEE Transactions on Nuclear Science, 2010, , .	1.2	18

#	ARTICLE	IF	CITATIONS
289	Including the Effects of Process-Related Variability on Radiation Response in Advanced Foundry Process Design Kits. IEEE Transactions on Nuclear Science, 2010, , .	1.2	19
290	Effects of Halo Doping and Si Capping Layer Thickness on Total-Dose Effects in Ge p-MOSFETs. IEEE Transactions on Nuclear Science, 2010, 57, 1933-1939.	1.2	15
291	Effects of Processing and Radiation Bias on Leakage Currents in Ge pMOSFETs. IEEE Transactions on Nuclear Science, 2010, , .	1.2	9
292	Process Dependence of Proton-Induced Degradation in GaN HEMTs. IEEE Transactions on Nuclear Science, 2010, , .	1.2	49
293	Mobility Modeling Considerations for Radiation Effects Simulations in Silicon. IEEE Transactions on Nuclear Science, 2010, 57, 2318-2326.	1.2	4
294	Impact of body tie and Source/Drain contact spacing on the hot carrier reliability of 45-nm RF-CMOS. , 2010, , .		6
295	Recoverable degradation in InAs/AlSb high-electron mobility transistors: The role of hot carriers and metastable defects in AlSb. Journal of Applied Physics, 2010, 108, 114505.	1.1	5
296	Theory of hot-carrier-induced phenomena in GaN high-electron-mobility transistors. Applied Physics Letters, 2010, 96, .	1.5	45
297	Process and Contamination Effects on the Single-Event Response of AlSb/InAs HEMTs. IEEE Transactions on Nuclear Science, 2010, , .	1.2	2
298	Monte Carlo simulation of radiation effects in microelectronics. , 2010, , .		3
299	Total-ionizing-dose radiation response of partially-depleted SOI devices. , 2010, , .		8
300	Digital Control for Radiation-Hardened Switching Converters in Space. IEEE Transactions on Aerospace and Electronic Systems, 2010, 46, 761-770.	2.6	14
301	The Impact of Delta-Rays on Single-Event Upsets in Highly Scaled SOI SRAMs. IEEE Transactions on Nuclear Science, 2010, , .	1.2	52
302	Muon-Induced Single Event Upsets in Deep-Submicron Technology. IEEE Transactions on Nuclear Science, 2010, , .	1.2	75
303	Scaling Trends in SET Pulse Widths in Sub-100 nm Bulk CMOS Processes. IEEE Transactions on Nuclear Science, 2010, , .	1.2	50
304	Contribution of Control Logic Upsets and Multi-Node Charge Collection to Flip-Flop SEU Cross-Section in 40-nm CMOS. IEEE Transactions on Nuclear Science, 2010, , .	1.2	6
305	Defect Interactions of H_2 in SiO_2 : Implications for ELDRS and Latent Interface Trap Buildup. IEEE Transactions on Nuclear Science, 2010, , .	1.2	18
306	Design and evaluation of SOI devices for radiation environments. , 2010, , .		9

#	ARTICLE	IF	CITATIONS
307	Layout-Related Stress Effects on Radiation-Induced Leakage Current. IEEE Transactions on Nuclear Science, 2010, , .	1.2	15
308	Increased Single-Event Transient Pulsewidths in a 90-nm Bulk CMOS Technology Operating at Elevated Temperatures. IEEE Transactions on Device and Materials Reliability, 2010, 10, 157-163.	1.5	20
309	Contribution of low-energy (≪ 10 MeV) neutrons to upset rate in a 65 nm SRAM. , 2010, , .		16
310	Bias Effects on Total Dose-Induced Degradation of Bipolar Linear Microcircuits for Switched Dose-Rate Irradiation. IEEE Transactions on Nuclear Science, 2010, 57, 1950-1957.	1.2	19
311	Total Dose Effects on the Performance of Irradiated Capacitorless MSDRAM Cells. IEEE Transactions on Nuclear Science, 2010, , .	1.2	4
312	Hydrogenâ€ˆdopant interactions in SiGe and strained Si. Applied Physics Letters, 2010, 96, .	1.5	4
313	Heavy Ion Testing With Iron at 1 GeV/amu. IEEE Transactions on Nuclear Science, 2010, 57, 2948-2954.	1.2	11
314	Gate Bias Dependence of Single Event Charge Collection in AlSb/InAs HEMTs. IEEE Transactions on Nuclear Science, 2010, 57, 1856-1860.	1.2	16
315	Independent Measurement of SET Pulse Widths From N-Hits and P-Hits in 65-nm CMOS. IEEE Transactions on Nuclear Science, 2010, , .	1.2	33
316	Monte Carlo Simulations to Evaluate the Contribution of Si Bulk, Interconnects, and Packaging to Alpha-Soft Error Rates in Advanced Technologies. IEEE Transactions on Nuclear Science, 2010, , .	1.2	17
317	Selection of Well Contact Densities for Latchup-Immune Minimal-Area ICs. IEEE Transactions on Nuclear Science, 2010, , .	1.2	20
318	Electrical stress induced degradation in InAs - AlSb HEMTS. , 2010, , .		0
319	Single event transient pulse width measurements in a 65-nm bulk CMOS technology at elevated temperatures. , 2010, , .		13
320	Two-Dimensional Markov Chain Analysis of Radiation-Induced Soft Errors in Subthreshold Nanoscale CMOS Devices. IEEE Transactions on Nuclear Science, 2010, , .	1.2	4
321	The Role of Irradiation Bias on the Time-Dependent Dielectric Breakdown of 130-nm MOSFETs Exposed to X-rays. IEEE Transactions on Nuclear Science, 2009, 56, 3244-3249.	1.2	11
322	Total Ionizing Dose Effects on Ge pMOSFETs With High-\$k\$ Gate Stack: On/Off Current Ratio. IEEE Transactions on Nuclear Science, 2009, 56, 1926-1930.	1.2	13
323	Laser-Induced Current Transients in Strained-Si Diodes. IEEE Transactions on Nuclear Science, 2009, 56, 3203-3209.	1.2	10
324	Effects of fin width on memory windows in FinFET ZRAMs. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
325	Temperature Stress Response of Germanium MOS Vapacitors with HfO ₂ /HfSiON Gate Dielectric. ECS Transactions, 2009, 19, 803-814.	0.3	4
326	Performance, Reliability, Radiation Effects, and Aging Issues in Microelectronics - From Atomic-Scale Physics to Engineering-Level Modeling. ECS Transactions, 2009, 19, 319-337.	0.3	1
327	Moisture Effects on the 1/F Noise Of Mos Devices. ECS Transactions, 2009, 19, 363-377.	0.3	2
328	Modeling the Radiation Response of Fully-Depleted SOI n-Channel MOSFETs. IEEE Transactions on Nuclear Science, 2009, 56, 2247-2250.	1.2	28
329	Heavy Ion Testing and Single Event Upset Rate Prediction Considerations for a DICE Flip-Flop. IEEE Transactions on Nuclear Science, 2009, 56, 3130-3137.	1.2	44
330	Impact of Proton Irradiation-Induced Bulk Defects on Gate-Lag in GaN HEMTs. IEEE Transactions on Nuclear Science, 2009, 56, 3192-3195.	1.2	28
331	Heavy ion testing at the galactic cosmic ray energy peak. , 2009, , .		6
332	Heavy Ion Microbeam- and Broadbeam-Induced Transients in SiGe HBTs. IEEE Transactions on Nuclear Science, 2009, 56, 3078-3084.	1.2	35
333	The Role of Atomic Displacements in Ion-Induced Dielectric Breakdown. IEEE Transactions on Nuclear Science, 2009, 56, 3210-3217.	1.2	21
334	ELDRS in Bipolar Linear Circuits: A Review. IEEE Transactions on Nuclear Science, 2009, 56, 1894-1908.	1.2	128
335	Temperature Dependence of Digital Single-Event Transients in Bulk and Fully-Depleted SOI Technologies. IEEE Transactions on Nuclear Science, 2009, 56, 3115-3121.	1.2	36
336	Impact of Low-Energy Proton Induced Upsets on Test Methods and Rate Predictions. IEEE Transactions on Nuclear Science, 2009, 56, 3085-3092.	1.2	223
337	Charge Generation by Secondary Particles From Nuclear Reactions in BEOL Materials. IEEE Transactions on Nuclear Science, 2009, 56, 3172-3179.	1.2	94
338	Radioactive Nuclei Induced Soft Errors at Ground Level. IEEE Transactions on Nuclear Science, 2009, 56, 3437-3441.	1.2	25
339	The Effects of Nuclear Fragmentation Models on Single Event Effect Prediction. IEEE Transactions on Nuclear Science, 2009, 56, 3158-3164.	1.2	14
340	Heavy-Ion-Induced Digital Single Event Transients in a 180 nm Fully Depleted SOI Process. IEEE Transactions on Nuclear Science, 2009, 56, 3483-3488.	1.2	21
341	General Framework for Single Event Effects Rate Prediction in Microelectronics. IEEE Transactions on Nuclear Science, 2009, 56, 3098-3108.	1.2	56
342	Fin-Width Dependence of Ionizing Radiation-Induced Subthreshold-Swing Degradation in 100-nm-Gate-Length FinFETs. IEEE Transactions on Nuclear Science, 2009, 56, 3250-3255.	1.2	76

#	ARTICLE	IF	CITATIONS
343	Charge Trapping Properties of 3C- and 4H-SiC MOS Capacitors With Nitrided Gate Oxides. IEEE Transactions on Nuclear Science, 2009, 56, 3185-3191.	1.2	24
344	Gate bias dependence of single event charge collection in AlSb/InAs HEMTs. , 2009, , .		0
345	The Use of a Dose-Rate Switching Technique to Characterize Bipolar Devices. IEEE Transactions on Nuclear Science, 2009, 56, 3347-3353.	1.2	31
346	The Effects of Aging and Hydrogen on the Radiation Response of Gated Lateral PNP Bipolar Transistors. IEEE Transactions on Nuclear Science, 2009, 56, 3361-3366.	1.2	12
347	Use of a Contacted Buried $\{m n\}^{\{+\}}$ Layer for Single Event Mitigation in 90 nm CMOS. IEEE Transactions on Nuclear Science, 2009, 56, 2008-2013.	1.2	5
348	Effects of Surrounding Materials on Proton-Induced Energy Deposition in Large Silicon Diode Arrays. IEEE Transactions on Nuclear Science, 2009, 56, 2167-2170.	1.2	2
349	Characterization of Neutron- and Alpha-Particle-Induced Transients Leading to Soft Errors in 90-nm CMOS Technology. IEEE Transactions on Device and Materials Reliability, 2009, 9, 325-333.	1.5	9
350	Modeling of ionizing radiation-induced degradation in multiple gate field effect transistors. , 2009, , .		3
351	Evidence for Lateral Angle Effect on Single-Event Latchup in 65 nm SRAMs. IEEE Transactions on Nuclear Science, 2009, 56, 208-213.	1.2	13
352	Effects of halo doping and Si capping layer thickness on total-dose effects in Ge p-MOSFETs. , 2009, , .		0
353	The effect of elevated temperature on digital single event transient pulse widths in a bulk CMOS technology. Reliability Physics Symposium, 2009 IEEE International, 2009, , .	0.0	13
354	Bias effects on total dose-induced degradation of bipolar linear microcircuits for switched dose-rate irradiation. , 2009, , .		0
355	Performance, reliability, radiation effects, and aging issues in microelectronics — from atomic-scale physics to engineering-level modeling. , 2009, , .		2
356	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
357	Test Circuit for Measuring Pulse Widths of Single-Event Transients Causing Soft Errors. IEEE Transactions on Semiconductor Manufacturing, 2009, 22, 119-125.	1.4	15
358	Design Considerations for CdTe Nanotetrapods as Electronic Devices. Nano Letters, 2009, 9, 3683-3688.	4.5	16
359	Total ionizing dose effects in shallow trench isolation oxides. Microelectronics Reliability, 2008, 48, 1000-1007.	0.9	110
360	Atomic Displacement Effects in Single-Event Gate Rupture. IEEE Transactions on Nuclear Science, 2008, 55, 3025-3031.	1.2	23

#	ARTICLE	IF	CITATIONS
361	Integrating Circuit Level Simulation and Monte-Carlo Radiation Transport Code for Single Event Upset Analysis in SEU Hardened Circuitry. IEEE Transactions on Nuclear Science, 2008, 55, 2886-2894.	1.2	46
362	Quantifying the Reduction in Collected Charge and Soft Errors in the Presence of Guard Rings. IEEE Transactions on Device and Materials Reliability, 2008, 8, 203-209.	1.5	16
363	Effects of Hydrogen on the Radiation Response of Bipolar Transistors: Experiment and Modeling. IEEE Transactions on Nuclear Science, 2008, 55, 3039-3045.	1.2	18
364	Post-Irradiation Annealing Mechanisms of Defects Generated in Hydrogenated Bipolar Oxides. IEEE Transactions on Nuclear Science, 2008, 55, 3032-3038.	1.2	19
365	Electron Capture, Hydrogen Release, and Enhanced Gain Degradation in Linear Bipolar Devices. IEEE Transactions on Nuclear Science, 2008, 55, 2986-2991.	1.2	59
366	Multi-Scale Simulation of Radiation Effects in Electronic Devices. IEEE Transactions on Nuclear Science, 2008, 55, 1891-1902.	1.2	17
367	Characterizing SRAM Single Event Upset in Terms of Single and Multiple Node Charge Collection. IEEE Transactions on Nuclear Science, 2008, 55, 2943-2947.	1.2	67
368	The E ⁺ center and oxygen vacancies in SiO ₂ . Journal of Non-Crystalline Solids, 2008, 354, 217-223.	1.5	52
369	Extended SET Pulses in Sequential Circuits Leading to Increased SE Vulnerability. IEEE Transactions on Nuclear Science, 2008, 55, 3077-3081.	1.2	20
370	Effects of Moisture and Hydrogen Exposure on Radiation-Induced MOS Device Degradation and Its Implications for Long-Term Aging. IEEE Transactions on Nuclear Science, 2008, 55, 3206-3215.	1.2	6
371	Single Event Mechanisms in 90 nm Triple-Well CMOS Devices. IEEE Transactions on Nuclear Science, 2008, 55, 2948-2956.	1.2	49
372	Test circuit for measuring pulse widths of single-event transients causing soft errors. , 2008, , .		8
373	Gate-Length and Drain-Bias Dependence of Band-to-Band Tunneling-Induced Drain Leakage in Irradiated Fully Depleted SOI Devices. IEEE Transactions on Nuclear Science, 2008, 55, 3259-3264.	1.2	39
374	Assessing Alpha Particle-Induced Single Event Transient Vulnerability in a 90-nm CMOS Technology. IEEE Electron Device Letters, 2008, 29, 638-640.	2.2	17
375	Single Event Upset Mechanisms for Low-Energy-Deposition Events in SiGe HBTs. IEEE Transactions on Nuclear Science, 2008, 55, 1581-1586.	1.2	25
376	Total Ionizing Dose Effects on Strained HfO_2 -Based nMOSFETs. IEEE Transactions on Nuclear Science, 2008, 55, 2981-2985.	1.2	11
377	Device-Orientation Effects on Multiple-Bit Upset in 65 nm SRAMs. IEEE Transactions on Nuclear Science, 2008, 55, 2880-2885.	1.2	48
378	Neutron and alpha particle-induced transients in 90 nm technology. , 2008, , .		17

#	ARTICLE	IF	CITATIONS
379	Increased Rate of Multiple-Bit Upset From Neutrons at Large Angles of Incidence. IEEE Transactions on Device and Materials Reliability, 2008, 8, 565-570.	1.5	25
380	Reliability and radiation effects in IC technologies. , 2008, , .		37
381	Laser-Induced Current Transients in Silicon-Germanium HBTs. IEEE Transactions on Nuclear Science, 2008, 55, 2936-2942.	1.2	34
382	Scaling and soft errors: Moore of the same for SOI ?. , 2008, , .		9
383	Electrostatic Mechanisms Responsible for Device Degradation in Proton Irradiated AlGaIn/AlN/GaN HEMTs. IEEE Transactions on Nuclear Science, 2008, 55, 2106-2112.	1.2	57
384	ELDRS in bipolar linear circuits: A review. , 2008, , .		23
385	Reactions of Water Molecules in Silica-Based Network Glasses. Physical Review Letters, 2008, 100, 105503.	2.9	38
386	Effects of Guard Bands and Well Contacts in Mitigating Long SETs in Advanced CMOS Processes. IEEE Transactions on Nuclear Science, 2008, 55, 1708-1713.	1.2	58
387	SINGLE EVENT EFFECTS IN THE NANO ERA. International Journal of High Speed Electronics and Systems, 2008, 18, 815-824.	0.3	1
388	Disorder-Recrystallization Effects in Low-Energy Beam-Solid Interactions. Physical Review Letters, 2008, 100, 185502.	2.9	20
389	Radiation Effects on the $1/f$ Noise of Field-Oxide Field Effect Transistors. IEEE Transactions on Nuclear Science, 2008, 55, 2975-2980.	1.2	13
390	Temperature-dependent second- and third-order optical nonlinear susceptibilities at the Si/SiO ₂ interface. Physical Review B, 2008, 78, .	1.1	2
391	The Role of Water in the Radiation Response of Wet and Dry Oxides. IEEE Transactions on Nuclear Science, 2008, 55, 2085-2089.	1.2	7
392	Impact of Radiation-Induced Defects on Bipolar Device Operation. , 2008, , .		0
393	Defect Formation and Annihilation in Electronic Devices and the Role of Hydrogen. , 2008, , .		0
394	Oxide Traps, Border Traps, and Interface Traps in SiO ₂ . , 2008, , .		3
395	Impact of Total Ionizing Dose on the Analog Single Event Transient Sensitivity of a Linear Bipolar Integrated Circuit. IEEE Transactions on Nuclear Science, 2007, 54, 2534-2540.	1.2	34
396	Quantum Mechanical Description of Displacement Damage Formation. IEEE Transactions on Nuclear Science, 2007, 54, 1906-1912.	1.2	18

#	ARTICLE	IF	CITATIONS
397	Doping-Type Dependence of Damage in Silicon Diodes Exposed to X-Ray, Proton, and He ⁺ Irradiations. IEEE Transactions on Nuclear Science, 2007, 54, 1925-1930.	1.2	17
398	Radiation Induced Charge Trapping in Ultrathin HfO ₂ -Based MOSFETs. IEEE Transactions on Nuclear Science, 2007, 54, 1883-1890.	1.2	74
399	Hydrogen shuttling near Hf-defect complexes in Si ⁺ •SiO ₂ •HfO ₂ structures. Applied Physics Letters, 2007, 91, .	1.5	30
400	Application of RADSAFE to Model the Single Event Upset Response of a 0.25 μ m CMOS SRAM. IEEE Transactions on Nuclear Science, 2007, 54, 898-903.	1.2	66
401	Impact of Heavy Ion Energy and Nuclear Interactions on Single-Event Upset and Latchup in Integrated Circuits. IEEE Transactions on Nuclear Science, 2007, 54, 2303-2311.	1.2	104
402	Characterization of Digital Single Event Transient Pulse-Widths in 130-nm and 90-nm CMOS Technologies. IEEE Transactions on Nuclear Science, 2007, 54, 2506-2511.	1.2	141
403	Quantifying the Effectiveness of Guard Bands in Reducing the Collected Charge Leading to Soft Errors. , 2007, , .		10
404	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
405	Monte-Carlo Based On-Orbit Single Event Upset Rate Prediction for a Radiation Hardened by Design Latch. IEEE Transactions on Nuclear Science, 2007, 54, 2419-2425.	1.2	63
406	The Effects of Angle of Incidence and Temperature on Latchup in 65 nm Technology. IEEE Transactions on Nuclear Science, 2007, 54, 2541-2546.	1.2	16
407	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
408	Distribution of Proton-Induced Transients in Silicon Focal Plane Arrays. IEEE Transactions on Nuclear Science, 2007, 54, 2444-2449.	1.2	3
409	Band-to-Band Tunneling (BBT) Induced Leakage Current Enhancement in Irradiated Fully Depleted SOI Devices. IEEE Transactions on Nuclear Science, 2007, 54, 2174-2180.	1.2	50
410	Electrostatic mechanisms responsible for device degradation in AlGaN/AlN/GaN HEMTs. , 2007, , .		0
411	Effect of Voltage Fluctuations on the Single Event Transient Response of Deep Submicron Digital Circuits. IEEE Transactions on Nuclear Science, 2007, 54, 2495-2499.	1.2	29
412	Total Dose and Bias Temperature Stress Effects for HfSiON on Si MOS Capacitors. IEEE Transactions on Nuclear Science, 2007, 54, 1931-1937.	1.2	18
413	Second Harmonic Generation for Noninvasive Metrology of Silicon-on-Insulator Wafers. IEEE Transactions on Semiconductor Manufacturing, 2007, 20, 107-113.	1.4	14
414	High Energy Neutron Multiple-Bit Upset. , 2007, , .		4

#	ARTICLE	IF	CITATIONS
415	The Effects of X-Ray and Proton Irradiation on a 200 GHz/90 GHz Complementary (nnp + npn) SiGe:C HBT Technology. IEEE Transactions on Nuclear Science, 2007, 54, 2190-2195.	1.2	18
416	Predicting Thermal Neutron-Induced Soft Errors in Static Memories Using TCAD and Physics-Based Monte Carlo Simulation Tools. IEEE Electron Device Letters, 2007, 28, 180-182.	2.2	30
417	Enhanced TID Susceptibility in Sub-100 nm Bulk CMOS I/O Transistors and Circuits. IEEE Transactions on Nuclear Science, 2007, 54, 2210-2217.	1.2	73
418	Total Dose Response of Ge MOS Capacitors With HfO ₂ /Dy ₂ O ₃ Gate Stacks. IEEE Transactions on Nuclear Science, 2007, 54, 971-974.	1.2	22
419	The Radiation Tolerance of Strained Si/SiGe n-MODFETs. IEEE Transactions on Nuclear Science, 2007, 54, 2251-2256.	1.2	3
420	Soft Error Considerations for Multicore Microprocessor Design. , 2007, , .		7
421	Total Dose and Single Event Transients in Linear Voltage Regulators. IEEE Transactions on Nuclear Science, 2007, 54, 1327-1334.	1.2	22
422	The Effects of Proton and X-Ray Irradiation on the DC and AC Performance of Complementary (nnp + npn) SiGe:C HBT / Overlock 10 T	1.2	17
423	Effect of Well and Substrate Potential Modulation on Single Event Pulse Shape in Deep Submicron CMOS. IEEE Transactions on Nuclear Science, 2007, 54, 2407-2412.	1.2	71
424	Hydrogen-Related Instabilities in MOS Devices Under Bias Temperature Stress. IEEE Transactions on Device and Materials Reliability, 2007, 7, 502-508.	1.5	40
425	Effects of guard bands and well contacts in mitigating long SETs in advanced CMOS processes. , 2007, , .		2
426	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
427	Impact of Ion Energy and Species on Single Event Effects Analysis. IEEE Transactions on Nuclear Science, 2007, 54, 2312-2321.	1.2	98
428	Hydrogen effects in MOS devices. Microelectronic Engineering, 2007, 84, 2344-2349.	1.1	34
429	Oxide interface studies using second harmonic generation. Microelectronic Engineering, 2007, 84, 2089-2092.	1.1	7
430	Depletion-All-Around Operation of the SOI Four-Gate Transistor. IEEE Transactions on Electron Devices, 2007, 54, 323-331.	1.6	40
431	Radiation Effects in Microelectronics. , 2007, , 11-29.		23
432	Evidence of Radiation-Induced Dopant Neutralization in Partially-Depleted SOI NMOSFETs. IEEE Transactions on Nuclear Science, 2007, 54, 1920-1924.	1.2	5

#	ARTICLE	IF	CITATIONS
433	First-principles calculations of mobilities in ultrathin double-gate MOSFETs. Journal of Computational Electronics, 2007, 6, 85-88.	1.3	2
434	Engineering model of a biased metal-molecule-metal junction. Journal of Computational Electronics, 2007, 6, 425-430.	1.3	1
435	Effects of device aging on microelectronics radiation response and reliability. Microelectronics Reliability, 2007, 47, 1075-1085.	0.9	38
436	Hydrogen in MOSFETs - A primary agent of reliability issues. Microelectronics Reliability, 2007, 47, 903-911.	0.9	54
437	Physical mechanisms of single-event effects in advanced microelectronics. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 1133-1136.	0.6	23
438	Applications of heavy ion microprobe for single event effects analysis. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 443-446.	0.6	12
439	Physical Model for the Low-Dose-Rate Effect in Bipolar Devices. IEEE Transactions on Nuclear Science, 2006, 53, 3655-3660.	1.2	63
440	DEFECT-RELATED ISSUES IN HIGH-K DIELECTRICS. , 2006, , 189-202.		1
441	Analysis of Bias Effects on the Total-Dose Response of a Bipolar Voltage Comparator. IEEE Transactions on Nuclear Science, 2006, 53, 3232-3236.	1.2	16
442	Substrate Engineering Concepts to Mitigate Charge Collection in Deep Trench Isolation Technologies. IEEE Transactions on Nuclear Science, 2006, 53, 3298-3305.	1.2	39
443	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
444	The Effect of Negative Feedback on Single Event Transient Propagation in Digital Circuits. IEEE Transactions on Nuclear Science, 2006, 53, 3285-3290.	1.2	14
445	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
446	Effects of Water on the Aging and Radiation Response of MOS Devices. IEEE Transactions on Nuclear Science, 2006, 53, 3629-3635.	1.2	25
447	Charge Collection and Charge Sharing in a 130 nm CMOS Technology. IEEE Transactions on Nuclear Science, 2006, 53, 3253-3258.	1.2	336
448	Dose rate effects in bipolar oxides: Competition between trap filling and recombination. Applied Physics Letters, 2006, 88, 232113.	1.5	51
449	Implications of Nuclear Reactions for Single Event Effects Test Methods and Analysis. IEEE Transactions on Nuclear Science, 2006, 53, 3356-3362.	1.2	57
450	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

#	ARTICLE	IF	CITATIONS
451	Modeling Total-Dose Effects for a Low-Dropout Voltage Regulator. IEEE Transactions on Nuclear Science, 2006, 53, 3223-3231.	1.2	17
452	On-Chip Characterization of Single-Event Transient Pulsewidths. IEEE Transactions on Device and Materials Reliability, 2006, 6, 542-549.	1.5	127
453	Multiple-Bit Upset in 130 nm CMOS Technology. IEEE Transactions on Nuclear Science, 2006, 53, 3259-3264.	1.2	83
454	Single event burnout in power diodes: Mechanisms and models. Microelectronics Reliability, 2006, 46, 317-325.	0.9	30
455	Nature of Interface Defect Buildup in Gated Bipolar Devices Under Low Dose Rate Irradiation. IEEE Transactions on Nuclear Science, 2006, 53, 3649-3654.	1.2	32
456	Studies of charge carrier trapping and recombination processes in Si ⁺ SiO ₂ ⁻ MgO structures using second-harmonic generation. Applied Physics Letters, 2006, 88, 062102.	1.5	8
457	Simulating Nuclear Events in a TCAD Model of a High-Density SEU Hardened SRAM Technology. IEEE Transactions on Nuclear Science, 2006, 53, 1794-1798.	1.2	9
458	Temperature effect on geminate recombination. Applied Physics Letters, 2006, 89, 042108.	1.5	25
459	Single Event-Induced Error Propagation Through Nominally-off Transmission Gates. IEEE Transactions on Nuclear Science, 2006, 53, 3558-3562.	1.2	18
460	Total Dose Radiation Response of Nitrided and Non-nitrided SiO ₂ /4H-SiC MOS Capacitors. IEEE Transactions on Nuclear Science, 2006, 53, 3687-3692.	1.2	36
461	Single Event-Induced Instability in Linear Voltage Regulators. IEEE Transactions on Nuclear Science, 2006, 53, 3506-3511.	1.2	18
462	Effects of Switched-bias Annealing on Charge Trapping in HfO ₂ Gate Dielectrics. IEEE Transactions on Nuclear Science, 2006, 53, 3636-3643.	1.2	39
463	Atomic-Scale Mechanisms for Low-NIEL Dopant-Type Dependent Damage in Si. IEEE Transactions on Nuclear Science, 2006, 53, 3621-3628.	1.2	14
464	Analysis of Total-Dose Response of a Bipolar Voltage Comparator Combining Radiation Experiments and Design Data. IEEE Transactions on Nuclear Science, 2006, 53, 1910-1916.	1.2	13
465	Differences Between Charge Trapping States in Irradiated Nano-Crystalline HfO ₂ and Non-Crystalline Hf Silicates. IEEE Transactions on Nuclear Science, 2006, 53, 3644-3648.	1.2	26
466	Single event transient effects in a voltage reference. Microelectronics Reliability, 2005, 45, 355-359.	0.9	12
467	Single event transient propagation through digital optocouplers. IEEE Transactions on Nuclear Science, 2005, 52, 1136-1139.	1.2	2
468	Physical mechanisms of negative-bias temperature instability. Applied Physics Letters, 2005, 86, 142103.	1.5	113

#	ARTICLE	IF	CITATIONS
469	Mechanisms leading to erratic snapback behavior in bipolar junction transistors with base emitter shorted. Journal of Applied Physics, 2005, 97, 084504.	1.1	10
470	The effect of metallization Layers on single event susceptibility. IEEE Transactions on Nuclear Science, 2005, 52, 2189-2193.	1.2	36
471	Estimation of low-dose-rate degradation on bipolar linear integrated circuits using switching experiments. IEEE Transactions on Nuclear Science, 2005, 52, 2616-2621.	1.2	41
472	Transient radiation effects in ultra-low noise HgCdTe IR detector arrays for space-based astronomy. IEEE Transactions on Nuclear Science, 2005, 52, 2657-2663.	1.2	13
473	Estimation and verification of radiation induced N/sub ot/ and N/sub it/ energy distribution using combined bipolar and MOS characterization methods in gated bipolar devices. IEEE Transactions on Nuclear Science, 2005, 52, 2245-2251.	1.2	28
474	Role of heavy-ion nuclear reactions in determining on-orbit single event error rates. IEEE Transactions on Nuclear Science, 2005, 52, 2182-2188.	1.2	65
475	The impact of mechanical stress on the total-dose response of linear bipolar transistors with various passivation layers. IEEE Transactions on Nuclear Science, 2005, 52, 1513-1517.	1.2	0
476	Proton-induced damage in gallium nitride-based Schottky diodes. IEEE Transactions on Nuclear Science, 2005, 52, 2239-2244.	1.2	28
477	Coupled electro-thermal Simulations of single event burnout in power diodes. IEEE Transactions on Nuclear Science, 2005, 52, 2194-2199.	1.2	28
478	The contribution of nuclear reactions to heavy ion single event upset cross-section measurements in a high-density SEU hardened SRAM. IEEE Transactions on Nuclear Science, 2005, 52, 2125-2131.	1.2	142
479	The Effects of Scaling and Well and Substrate Contact Placement on Single Event Latchup in Bulk CMOS Technology. European Conference on Radiation and Its Effects on Components and Systems, Proceedings of the, 2005, , .	0.0	21
480	The effects of aging on MOS irradiation and annealing response. IEEE Transactions on Nuclear Science, 2005, 52, 2642-2648.	1.2	28
481	Common origin for enhanced low-dose-rate sensitivity and bias temperature instability under negative bias. IEEE Transactions on Nuclear Science, 2005, 52, 2265-2271.	1.2	65
482	Charge trapping in irradiated SOI wafers measured by second harmonic generation. IEEE Transactions on Nuclear Science, 2004, 51, 3231-3237.	1.2	19
483	Electrical and radiation assisted passivation of Ta2O5/Si interface. Journal of Applied Physics, 2004, 95, 8463-8465.	1.1	3
484	Negative bias-temperature instabilities in metal-oxide-silicon devices with SiO2 and SiOxNy/HfO2 gate dielectrics. Applied Physics Letters, 2004, 84, 4394-4396.	1.5	46
485	Characterization of multiple Si-SiO2 interfaces in silicon-on-insulator materials via second-harmonic generation. Applied Physics Letters, 2004, 85, 3095-3097.	1.5	29
486	Design considerations for optical systems in ionizing and nonionizing radiation environments. IEEE Transactions on Nuclear Science, 2004, 51, 3595-3602.	1.2	7

#	ARTICLE	IF	CITATIONS
487	GAIN DEGRADATION AND ENHANCED LOW-DOSE-RATE SENSITIVITY IN BIPOLAR JUNCTION TRANSISTORS. International Journal of High Speed Electronics and Systems, 2004, 14, 503-517.	0.3	17
488	HYDROGEN AT THE Si/SiO ₂ INTERFACE: FROM ATOMIC-SCALE CALCULATIONS TO ENGINEERING MODELS. International Journal of High Speed Electronics and Systems, 2004, 14, 575-580.	0.3	1
489	The Energy Dependence of Proton-Induced Degradation in AlGa _N /Ga _N High Electron Mobility Transistors. IEEE Transactions on Nuclear Science, 2004, 51, 293-297.	1.2	114
490	Spatial and temporal characteristics of energy deposition by protons and alpha particles in silicon. IEEE Transactions on Nuclear Science, 2004, 51, 3312-3317.	1.2	36
491	Influence of total-dose radiation on the electrical characteristics of SOI MOSFETs. Microelectronic Engineering, 2004, 72, 332-341.	1.1	15
492	Interface trapping properties of nMOSFETs with Al ₂ O ₃ /SiO _x Ny/Si(100) gate dielectric stacks after exposure to ionizing radiation. Microelectronic Engineering, 2004, 72, 50-54.	1.1	12
493	Total dose effects on double gate fully depleted SOI MOSFETs. IEEE Transactions on Nuclear Science, 2004, 51, 3767-3772.	1.2	21
494	Radiation-induced base current broadening mechanisms in gated bipolar devices. IEEE Transactions on Nuclear Science, 2004, 51, 3178-3185.	1.2	21
495	Elevated temperature irradiation at high dose rate of commercial linear bipolar ICs. IEEE Transactions on Nuclear Science, 2004, 51, 2903-2907.	1.2	18
496	System-level design hardening based on worst-case ASET Simulations. IEEE Transactions on Nuclear Science, 2004, 51, 2787-2793.	1.2	26
497	Total dose effects in a linear Voltage regulator. IEEE Transactions on Nuclear Science, 2004, 51, 3816-3821.	1.2	36
498	Total dose effects on bipolar integrated circuits: characterization of the saturation region. IEEE Transactions on Nuclear Science, 2004, 51, 3225-3230.	1.2	18
499	Dual role of fluorine at the Si-SiO ₂ interface. Applied Physics Letters, 2004, 85, 4950-4952.	1.5	22
500	Effects of hydrogen motion on interface trap formation and annealing. IEEE Transactions on Nuclear Science, 2004, 51, 3158-3165.	1.2	96
501	Effect of thermal annealing on radiation-induced degradation of bipolar technologies when the dose rate is switched from high to low. IEEE Transactions on Nuclear Science, 2004, 51, 3219-3224.	1.2	8
502	Nonuniform total-dose-induced charge distribution in shallow-trench isolation oxides. IEEE Transactions on Nuclear Science, 2004, 51, 3166-3171.	1.2	121
503	Characterization of enhanced low dose rate sensitivity (ELDRS) effects using Gated Lateral PNP transistor structures. IEEE Transactions on Nuclear Science, 2004, 51, 3773-3780.	1.2	77
504	Proton irradiation effects on Ga _N -based high electron-mobility transistors with Si-doped Al _x Ga _{1-x} N and thick Ga _N cap Layers. IEEE Transactions on Nuclear Science, 2004, 51, 3801-3806.	1.2	101

#	ARTICLE	IF	CITATIONS
505	Charge trapping and low frequency noise in SOI buried oxides. IEEE Transactions on Nuclear Science, 2004, 51, 3238-3242.	1.2	12
506	Effect of switching from high to low dose rate on linear bipolar technology radiation response. IEEE Transactions on Nuclear Science, 2004, 51, 2896-2902.	1.2	38
507	Using surface charge analysis to characterize the radiation response of Si/SiO ₂ structures. IEEE Transactions on Nuclear Science, 2004, 51, 3686-3691.	1.2	5
508	CVD diamond photoconductive devices. Diamond and Related Materials, 2004, 13, 785-790.	1.8	4
509	Single event transient pulse widths in digital microcircuits. IEEE Transactions on Nuclear Science, 2004, 51, 3285-3290.	1.2	116
510	High-Speed Light Modulation in Avalanche Breakdown Mode for Si Diodes. IEEE Electron Device Letters, 2004, 25, 628-630.	2.2	62
511	GAIN DEGRADATION AND ENHANCED LOW-DOSE-RATE SENSITIVITY IN BIPOLAR JUNCTION TRANSISTORS. Selected Topics in Electronics and Systems, 2004, , 219-233.	0.2	1
512	Laser detection of radiation enhanced electron transport in ultra-thin oxides. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 514, 150-155.	0.7	4
513	A model of radiation effects in nitride oxide films for power MOSFET applications. Solid-State Electronics, 2003, 47, 775-783.	0.8	25
514	Spin/carrier dynamics at semiconductor interfaces using intense, tunable, ultra-fast lasers. Physica Status Solidi (B): Basic Research, 2003, 240, 490-499.	0.7	1
515	Proton-irradiation effects on AlGaN/AlN/GaN high electron mobility transistors. IEEE Transactions on Nuclear Science, 2003, 50, 1791-1796.	1.2	126
516	Effects of 2 MeV proton irradiation on operating wavelength and leakage current of vertical cavity surface emitting lasers. IEEE Transactions on Nuclear Science, 2003, 50, 1982-1990.	1.2	16
517	Radiation-induced charge trapping in thin Al ₂ O ₃ /SiO ₂ /N/Si(100) gate dielectric stacks. IEEE Transactions on Nuclear Science, 2003, 50, 1910-1918.	1.2	57
518	Electrical, spectral, and chemical properties of 1.8 MeV proton irradiated AlGaN/GaN HEMT structures as a function of proton fluence. IEEE Transactions on Nuclear Science, 2003, 50, 1934-1941.	1.2	79
519	Impact of mechanical stress on total-dose effects in bipolar ICs. IEEE Transactions on Nuclear Science, 2003, 50, 2335-2340.	1.2	6
520	Contactless ultra-fast laser probing of radiation-induced leakage current in ultra-thin oxides. IEEE Transactions on Nuclear Science, 2003, 50, 1929-1933.	1.2	4
521	Evaluating average and atypical response in radiation effects simulations. IEEE Transactions on Nuclear Science, 2003, 50, 2265-2271.	1.2	103
522	Statistical modeling of radiation-induced proton transport in silicon: deactivation of dopant acceptors in bipolar devices. IEEE Transactions on Nuclear Science, 2003, 50, 1896-1900.	1.2	57

#	ARTICLE	IF	CITATIONS
523	Charge separation techniques for irradiated pseudo-MOS SOI transistors. IEEE Transactions on Nuclear Science, 2003, 50, 1891-1895.	1.2	76
524	Two-color optical technique for characterization of x-ray radiation-enhanced electron transport in SiO ₂ . Journal of Applied Physics, 2003, 93, 1865-1870.	1.1	9
525	Radiation-induced acceptor deactivation in bipolar devices: Effects of electric field. Applied Physics Letters, 2003, 83, 4646-4648.	1.5	7
526	Total-dose and single-event effects in DC/DC converter control circuitry. IEEE Transactions on Nuclear Science, 2003, 50, 1867-1872.	1.2	29
527	Field-induced reactions of water molecules at Si-dielectric interfaces. Materials Research Society Symposia Proceedings, 2003, 786, 331.	0.1	3
528	Test structures for analyzing proton radiation effects in bipolar technologies. IEEE Transactions on Semiconductor Manufacturing, 2003, 16, 253-258.	1.4	11
529	Detection of trap activation by ionizing radiation in SiO ₂ by spatially localized cathodoluminescence spectroscopy. Journal of Applied Physics, 2002, 92, 5729-5734.	1.1	9
530	Dual behavior of H ⁺ at SiO ₂ interfaces: Mobility versus trapping. Applied Physics Letters, 2002, 81, 1839-1841.	1.5	35
531	Separation of ionization and displacement damage using gate-controlled lateral PNP bipolar transistors. IEEE Transactions on Nuclear Science, 2002, 49, 3185-3190.	1.2	57
532	Total-dose radiation response of hafnium-silicate capacitors. IEEE Transactions on Nuclear Science, 2002, 49, 3191-3196.	1.2	91
533	Reliability degradation of ultra-thin oxynitride and Al ₂ O ₃ gate dielectric films owing to heavy-ion irradiation. Electronics Letters, 2002, 38, 157.	0.5	11
534	The structure, properties, and dynamics of oxygen vacancies in amorphous SiO ₂ . IEEE Transactions on Nuclear Science, 2002, 49, 2667-2673.	1.2	163
535	Proton-induced degradation in AlGaAs/GaAs heterojunction bipolar transistors. IEEE Transactions on Nuclear Science, 2002, 49, 3213-3216.	1.2	4
536	Evaluation of a design methodology dedicated to dose-rate-hardened linear integrated circuits. IEEE Transactions on Nuclear Science, 2002, 49, 1468-1473.	1.2	6
537	Effect of amplifier parameters on single-event transients in an inverting operational amplifier. IEEE Transactions on Nuclear Science, 2002, 49, 1496-1501.	1.2	37
538	Structure, Properties, and Dynamics of Oxygen Vacancies in Amorphous SiO ₂ . Physical Review Letters, 2002, 89, 285505.	2.9	167
539	Long-term reliability degradation of ultrathin dielectric films due to heavy-ion irradiation. IEEE Transactions on Nuclear Science, 2002, 49, 3045-3050.	1.2	48
540	Physical model for enhanced interface-trap formation at low dose rates. IEEE Transactions on Nuclear Science, 2002, 49, 2650-2655.	1.2	169

#	ARTICLE	IF	CITATIONS
541	Total-dose and single-event effects in switching DC/DC power converters. IEEE Transactions on Nuclear Science, 2002, 49, 3217-3221.	1.2	40
542	Unified model of hole trapping, 1/f noise, and thermally stimulated current in MOS devices. IEEE Transactions on Nuclear Science, 2002, 49, 2674-2683.	1.2	182
543	Analytical model for proton radiation effects in bipolar devices. IEEE Transactions on Nuclear Science, 2002, 49, 2643-2649.	1.2	83
544	Dose and dose-rate effects on NPN bipolar junction transistors irradiated at high temperature. IEEE Transactions on Nuclear Science, 2002, 49, 1474-1479.	1.2	10
545	Characterization of 1.8-MeV proton-irradiated AlGaIn/GaN field-effect transistor structures by nanoscale depth-resolved luminescence spectroscopy. IEEE Transactions on Nuclear Science, 2002, 49, 2695-2701.	1.2	33
546	Proton-induced defect generation at the Si-SiO ₂ /sub 2/ interface. IEEE Transactions on Nuclear Science, 2001, 48, 2086-2092.	1.2	125
547	Defect Generation by Hydrogen at the Si-SiO ₂ Interface. Physical Review Letters, 2001, 87, 165506.	2.9	159
548	A hydrogen-transport-based interface-trap-generation model for hot-carrier reliability prediction. IEEE Electron Device Letters, 2001, 22, 290-292.	2.2	17
549	Aging and baking effects on the radiation hardness of MOS capacitors. IEEE Transactions on Nuclear Science, 2001, 48, 2158-2163.	1.2	20
550	Heavy-ion-induced breakdown in ultra-thin gate oxides and high-k dielectrics. IEEE Transactions on Nuclear Science, 2001, 48, 1904-1912.	1.2	67
551	A generalized model for the lifetime of microelectronic components, applied to storage conditions. Microelectronics Reliability, 2001, 41, 317-322.	0.9	8
552	Thermal modeling of single event burnout failure in semiconductor power devices. Microelectronics Reliability, 2001, 41, 571-578.	0.9	7
553	Evaluation of MOS devices' total dose response using the isochronal annealing method. IEEE Transactions on Nuclear Science, 2001, 48, 2170-2173.	1.2	7
554	Proton radiation response mechanisms in bipolar analog circuits. IEEE Transactions on Nuclear Science, 2001, 48, 2074-2080.	1.2	64
555	Application determination of single-event transient characteristics in the LM 111 comparator. IEEE Transactions on Nuclear Science, 2001, 48, 1855-1858.	1.2	16
556	Critical charge for single-event transients (SETs) in bipolar linear circuits. IEEE Transactions on Nuclear Science, 2001, 48, 1966-1972.	1.2	45
557	Annealing behavior of a proton irradiated Al/sub x/Ga/sub 1-x/N/GaN high electron mobility transistor grown by MBE. IEEE Transactions on Electron Devices, 2000, 47, 304-307.	1.6	86
558	Experimental procedure to predict the competition between the degradation induced by irradiation and thermal annealing of oxide trapped charge in MOSFETs. IEEE Transactions on Nuclear Science, 2000, 47, 2329-2333.	1.2	9

#	ARTICLE	IF	CITATIONS
559	Modeling BJT radiation response with non-uniform energy distributions of interface traps. IEEE Transactions on Nuclear Science, 2000, 47, 514-518.	1.2	16
560	Characterization of X-ray radiation damage in Si/SiO ₂ structures using second-harmonic generation. IEEE Transactions on Nuclear Science, 2000, 47, 2256-2261.	1.2	15
561	Total dose effects in composite nitride-oxide films. IEEE Transactions on Nuclear Science, 2000, 47, 2297-2304.	1.2	15
562	Analysis of single-event transients in analog circuits. IEEE Transactions on Nuclear Science, 2000, 47, 2616-2623.	1.2	125
563	Low energy electron-excited nanoscale luminescence: a tool to detect trap activation by ionizing radiation. IEEE Transactions on Nuclear Science, 2000, 47, 2276-2280.	1.2	3
564	Defects and nanocrystals generated by Si implantation into a-SiO ₂ . IEEE Transactions on Nuclear Science, 2000, 47, 2269-2275.	1.2	38
565	Origins of total-dose response variability in linear bipolar microcircuits. IEEE Transactions on Nuclear Science, 2000, 47, 2342-2349.	1.2	32
566	Prediction of the one-year thermal annealing of irradiated commercial devices based on experimental isochronal curves. IEEE Transactions on Nuclear Science, 2000, 47, 2244-2248.	1.2	9
567	Hydrogen-related defects in irradiated SiO ₂ . IEEE Transactions on Nuclear Science, 2000, 47, 2289-2296.	1.2	48
568	Reactions of hydrogen with Si-SiO ₂ interfaces. IEEE Transactions on Nuclear Science, 2000, 47, 2262-2268.	1.2	184
569	Light emission studies of total dose and hot carrier effects on silicon junctions. IEEE Transactions on Nuclear Science, 1999, 46, 1804-1808.	1.2	5
570	Hardness assurance implications of bimodal total dose response in a bipolar linear voltage comparator. IEEE Transactions on Nuclear Science, 1999, 46, 1627-1632.	1.2	17
571	Minimizing gain degradation in lateral PNP bipolar junction transistors using gate control. IEEE Transactions on Nuclear Science, 1999, 46, 1652-1659.	1.2	21
572	Comparison of lifetime and threshold current damage factors for multi-quantum-well (MQW) GaAs/GaAlAs laser diodes irradiated at different proton energies. IEEE Transactions on Nuclear Science, 1999, 46, 1797-1803.	1.2	22
573	Radiation-enhanced short channel effects due to multi-dimensional influence from charge at trench isolation oxides. IEEE Transactions on Nuclear Science, 1999, 46, 1830-1835.	1.2	42
574	Analysis of the influence of MOS device geometry on predicted SEU cross sections. IEEE Transactions on Nuclear Science, 1999, 46, 1363-1369.	1.2	22
575	Identification of degradation mechanisms in a bipolar linear voltage comparator through correlation of transistor and circuit response. IEEE Transactions on Nuclear Science, 1999, 46, 1666-1673.	1.2	51
576	Ab initio calculations of H ⁺ energetics in SiO ₂ : Implications for transport. IEEE Transactions on Nuclear Science, 1999, 46, 1568-1573.	1.2	47

#	ARTICLE	IF	CITATIONS
577	TCAD-assisted analysis of back-channel leakage in irradiated mesa SOI nMOSFETs. IEEE Transactions on Nuclear Science, 1998, 45, 2593-2599.	1.2	24
578	Total dose effects on power-MOSFET switching converters. Microelectronics Reliability, 1998, 38, 1935-1939.	0.9	17
579	Modeling low-dose-rate effects in irradiated bipolar-base oxides. IEEE Transactions on Nuclear Science, 1998, 45, 2352-2360.	1.2	48
580	Dose-rate and irradiation temperature dependence of BJT SPICE model rad-parameters. IEEE Transactions on Nuclear Science, 1998, 45, 1431-1437.	1.2	9
581	Annealing effects on multi-quantum well laser diodes after proton irradiation. IEEE Transactions on Nuclear Science, 1998, 45, 2826-2832.	1.2	27
582	Total dose effects on gate controlled lateral PNP bipolar junction transistors. IEEE Transactions on Nuclear Science, 1998, 45, 2577-2583.	1.2	23
583	Space charge limited degradation of bipolar oxides at low electric fields. IEEE Transactions on Nuclear Science, 1998, 45, 2339-2351.	1.2	151
584	Moderated degradation enhancement of lateral pnp transistors due to measurement bias. IEEE Transactions on Nuclear Science, 1998, 45, 2644-2648.	1.2	78
585	200 MeV proton damage effects on multi-quantum well laser diodes. IEEE Transactions on Nuclear Science, 1997, 44, 1898-1905.	1.2	43
586	Prediction of low dose-rate effects in power metal oxide semiconductor field effect transistors based on isochronal annealing measurements. Journal of Applied Physics, 1997, 81, 2437-2441.	1.1	32
587	Domain switching and spatial dependence of permittivity in ferroelectric thin films. Journal of Applied Physics, 1997, 82, 2505-2516.	1.1	42
588	Profiling of electrical doping concentration in ferroelectrics. Journal of Applied Physics, 1997, 82, 2517-2527.	1.1	17
589	Experimental determination of the frequency factor of thermal annealing processes in metal-oxide-semiconductor gate-oxide structures. Journal of Applied Physics, 1997, 82, 4102-4107.	1.1	23
590	Hardness assurance testing of bipolar junction transistors at elevated irradiation temperatures. IEEE Transactions on Nuclear Science, 1997, 44, 1989-2000.	1.2	114
591	Radiation-induced gain degradation in lateral PNP BJTs with lightly and heavily doped emitters. IEEE Transactions on Nuclear Science, 1997, 44, 1914-1921.	1.2	53
592	Implementation of total dose effects in the bipolar junction transistor Gummel-Poon model. IEEE Transactions on Nuclear Science, 1997, 44, 1922-1929.	1.2	17
593	Experimental validation of an accelerated method of oxide-trap-level characterization for predicting long term thermal effects in metal oxide semiconductor devices. IEEE Transactions on Nuclear Science, 1997, 44, 2001-2006.	1.2	29
594	A survey of device reliability concerns for LV/LP IC technologies. Microelectronic Engineering, 1997, 39, 225-234.	1.1	0

#	ARTICLE	IF	CITATIONS
595	SEGR and SEB in n-channel power MOSFETs. IEEE Transactions on Nuclear Science, 1996, 43, 2927-2931.	1.2	83
596	Radiation effects at low electric fields in thermal, SIMOX, and bipolar-base oxides. IEEE Transactions on Nuclear Science, 1996, 43, 2537-2546.	1.2	154
597	A physical interpretation for the single-event-gate-rupture cross-section of n-channel power MOSFETs. IEEE Transactions on Nuclear Science, 1996, 43, 2932-2937.	1.2	21
598	Gain degradation of lateral and substrate pnp bipolar junction transistors. IEEE Transactions on Nuclear Science, 1996, 43, 3151-3160.	1.2	64
599	Modeling ionizing radiation induced gain degradation of the lateral PNP bipolar junction transistor. IEEE Transactions on Nuclear Science, 1996, 43, 3032-3039.	1.2	98
600	Recent advances in understanding total-dose effects in bipolar transistors. IEEE Transactions on Nuclear Science, 1996, 43, 787-796.	1.2	72
601	Measurement of a cross-section for single-event gate rupture in power MOSFETs. IEEE Electron Device Letters, 1996, 17, 163-165.	2.2	20
602	RELIABILITY CHALLENGES FOR LOW VOLTAGE/LOW POWER INTEGRATED CIRCUITS. Quality and Reliability Engineering International, 1996, 12, 271-279.	1.4	3
603	A review of the techniques used for modeling single-event effects in power MOSFETs. IEEE Transactions on Nuclear Science, 1996, 43, 546-560.	1.2	89
604	Interpretation of experimentally observed C-t responses for copper contaminated devices. Solid-State Electronics, 1996, 39, 369-375.	0.8	6
605	SEGR: A unique failure mode for power MOSFETs in spacecraft. Microelectronics Reliability, 1996, 36, 1871-1874.	0.9	12
606	Experimental evidence of the temperature and angular dependence in SEGR [power MOSFET]. IEEE Transactions on Nuclear Science, 1996, 43, 936-943.	1.2	10
607	Influence of ion beam energy on SEGR failure thresholds of vertical power MOSFETs. IEEE Transactions on Nuclear Science, 1996, 43, 2938-2943.	1.2	35
608	The determination of Si-SiO ₂ interface trap density in irradiated four-terminal VDMOSFETs using charge pumping. IEEE Transactions on Nuclear Science, 1996, 43, 2558-2564.	1.2	68
609	TCAD-based simulation of hot-carrier degradation in p-channel mosfets using silicon energy-balance and oxide carrier-transport equations. Journal of Technology Computer Aided Design TCAD, 1996, , 1-13.	0.0	0
610	Physically based comparison of hot-carrier-induced and ionizing-radiation-induced degradation in BJTs. IEEE Transactions on Electron Devices, 1995, 42, 436-444.	1.6	99
611	Exploration of heavy ion irradiation effects on gate oxide reliability in power MOSFETs. Microelectronics Reliability, 1995, 35, 603-608.	0.9	19
612	A method for predicting breakdown voltage of power devices with cylindrical diffused junctions. Solid-State Electronics, 1995, 38, 1547-1549.	0.8	1

#	ARTICLE	IF	CITATIONS
613	Single-event gate-rupture in power MOSFETs: prediction of breakdown biases and evaluation of oxide thickness dependence. IEEE Transactions on Nuclear Science, 1995, 42, 1922-1927.	1.2	60
614	Passivation of ferroelectric PZT capacitors using spin-on-glass. Integrated Ferroelectrics, 1995, 6, 121-128.	0.3	3
615	Evidence for border traps in metal-oxide-semiconductor transistors through 1/f noise. Applied Physics Letters, 1995, 67, 691-693.	1.5	6
616	Investigation of surface roughness and hillock formation on platinized substrates used for Pt/PZT/Pt capacitor fabrication. Integrated Ferroelectrics, 1995, 7, 61-73.	0.3	11
617	Effect of RuOx bottom electrode annealing temperature on sol-gel derived PZT capacitors. Integrated Ferroelectrics, 1995, 10, 309-318.	0.3	0
618	Influence of Ti interfacial layers on the electrical and microstructural properties of SOL-gel prepared PZT films. Integrated Ferroelectrics, 1995, 6, 111-119.	0.3	1
619	Impact of oxide thickness on SEGR failure in vertical power MOSFETs; development of a semi-empirical expression. IEEE Transactions on Nuclear Science, 1995, 42, 1928-1934.	1.2	69
620	Comparison of ionizing-radiation-induced gain degradation in lateral, substrate, and vertical PNP BJTs. IEEE Transactions on Nuclear Science, 1995, 42, 1541-1549.	1.2	103
621	Hardness-assurance issues for lateral PNP bipolar junction transistors. IEEE Transactions on Nuclear Science, 1995, 42, 1641-1649.	1.2	60
622	Relaxation of Si-SiO ₂ /Si interfacial stress in bipolar screen oxides due to ionizing radiation. IEEE Transactions on Nuclear Science, 1995, 42, 1689-1697.	1.2	50
623	Excess collector current due to an oxide-trapped-charge-induced emitter in irradiated NPN BJT's. IEEE Transactions on Electron Devices, 1995, 42, 923-927.	1.6	37
624	Limitations of the uniform effective field approximation due to doping of ferroelectric thin film capacitors. Journal of Applied Physics, 1995, 78, 4766-4775.	1.1	19
625	Synergetic effects of radiation stress and hot-carrier stress on the current gain of npn bipolar junction transistors. IEEE Transactions on Nuclear Science, 1994, 41, 2412-2419.	1.2	12
626	Effect of neutron irradiation on the breakdown voltage of power MOSFET's. IEEE Transactions on Nuclear Science, 1994, 41, 2719-2726.	1.2	7
627	An I-V measurement method and its application for characterizing ferroelectric PZT thin films. Integrated Ferroelectrics, 1994, 4, 31-43.	0.3	6
628	Application of test method 1019.4 to nonhardened power MOSFETs. IEEE Transactions on Nuclear Science, 1994, 41, 555-560.	1.2	23
629	Dose-rate effects on radiation-induced bipolar junction transistor gain degradation. Applied Physics Letters, 1994, 65, 1918-1920.	1.5	46
630	Comparison of termination methods for low-voltage, vertical integrated power devices. Solid-State Electronics, 1994, 37, 1611-1617.	0.8	0

#	ARTICLE	IF	CITATIONS
631	Evaluation of SEGR threshold in power MOSFETs. IEEE Transactions on Nuclear Science, 1994, 41, 2160-2166.	1.2	58
632	Determining the drain doping in DMOS transistors using the hump in the leakage current. IEEE Transactions on Electron Devices, 1994, 41, 2326-2336.	1.6	7
633	Bounding the total-dose response of modern bipolar transistors. IEEE Transactions on Nuclear Science, 1994, 41, 1864-1870.	1.2	76
634	Saturation of the dose-rate response of bipolar transistors below 10 rad(SiO/sub 2)/s: implications for hardness assurance. IEEE Transactions on Nuclear Science, 1994, 41, 2637-2641.	1.2	42
635	The surface generation hump in irradiated power MOSFETs. IEEE Transactions on Nuclear Science, 1994, 41, 2443-2451.	1.2	21
636	Physical mechanisms contributing to enhanced bipolar gain degradation at low dose rates. IEEE Transactions on Nuclear Science, 1994, 41, 1871-1883.	1.2	251
637	The effects of ionizing radiation on commercial power MOSFETs operated at cryogenic temperatures. IEEE Transactions on Nuclear Science, 1994, 41, 2530-2535.	1.2	9
638	Evaluation of a method for estimating low-dose-rate irradiation response of MOSFETs. IEEE Transactions on Nuclear Science, 1994, 41, 2560-2566.	1.2	17
639	Temperature and angular dependence of substrate response in SEGR [power MOSFET]. IEEE Transactions on Nuclear Science, 1994, 41, 2216-2221.	1.2	33
640	Quantifying the impact of homogeneous metal contamination using test structure metrology and device modeling. IEEE Transactions on Semiconductor Manufacturing, 1994, 7, 249-258.	1.4	17
641	Comparison of hot-carrier and radiation induced increases in base current in bipolar transistors. IEEE Transactions on Nuclear Science, 1994, 41, 2567-2573.	1.2	6
642	Investigation of possible sources of 1/f noise in irradiated n-channel power MOSFETs. IEEE Transactions on Nuclear Science, 1994, 41, 1902-1906.	1.2	12
643	Annealing of ESD-induced damage in power MOSFETs. Journal of Electrostatics, 1993, 31, 131-144.	1.0	2
644	Simulating single-event burnout of n-channel power MOSFET's. IEEE Transactions on Electron Devices, 1993, 40, 1001-1008.	1.6	82
645	A conceptual model of a single-event gate-rupture in power MOSFETs. IEEE Transactions on Nuclear Science, 1993, 40, 1959-1966.	1.2	80
646	Hardness-assurance and testing issues for bipolar/BiCMOS devices. IEEE Transactions on Nuclear Science, 1993, 40, 1686-1693.	1.2	90
647	Charge separation for bipolar transistors. IEEE Transactions on Nuclear Science, 1993, 40, 1276-1285.	1.2	179
648	Separation of effects of oxide-trapped charge and interface-trapped charge on mobility in irradiated power MOSFETs. IEEE Transactions on Nuclear Science, 1993, 40, 1307-1315.	1.2	53

#	ARTICLE	IF	CITATIONS
649	Radiation-induced mobility degradation in p-channel double-diffused metal-oxide-semiconductor power transistors at 300 and 77 K. Journal of Applied Physics, 1993, 73, 2910-2915.	1.1	42
650	1/f noise and interface trap density in high field stressed pMOS transistors. Electronics Letters, 1993, 29, 696.	0.5	7
651	Effects of radiation-induced oxide-trapped charge on inversion-layer hole mobility at 300 and 77 K. Applied Physics Letters, 1992, 60, 3156-3158.	1.5	32
652	Comparison of 1/f noise in irradiated power MOSFETs measured in the linear and saturation regions. IEEE Transactions on Nuclear Science, 1992, 39, 2012-2017.	1.2	13
653	Trends in the total-dose response of modern bipolar transistors. IEEE Transactions on Nuclear Science, 1992, 39, 2026-2035.	1.2	152
654	Temperature dependence of single-event burnout in n-channel power MOSFETs (for space application). IEEE Transactions on Nuclear Science, 1992, 39, 1605-1612.	1.2	58
655	Total-dose radiation effects on sol-gel derived PZT thin films. IEEE Transactions on Nuclear Science, 1992, 39, 2036-2043.	1.2	47
656	Detection of ESD-induced noncatastrophic damage in p-channel power MOSFETs. Journal of Electrostatics, 1992, 28, 241-252.	1.0	2
657	Gate-charge measurements for irradiated n-channel DMOS power transistors. IEEE Transactions on Nuclear Science, 1991, 38, 1352-1358.	1.2	5
658	Predicting worst-case charge buildup in power-device field oxides. IEEE Transactions on Nuclear Science, 1991, 38, 1383-1390.	1.2	3
659	Effects of ionizing radiation on the noise properties of DMOS power transistors. IEEE Transactions on Nuclear Science, 1991, 38, 1304-1309.	1.2	60
660	Comparison between the effects of positive noncatastrophic HBM ESD stress in n-channel and p-channel power MOSFETs. IEEE Electron Device Letters, 1991, 12, 546-549.	2.2	3
661	Single-event burnout of power bipolar junction transistors. IEEE Transactions on Nuclear Science, 1991, 38, 1315-1322.	1.2	38
662	Response of advanced bipolar processes to ionizing radiation. IEEE Transactions on Nuclear Science, 1991, 38, 1342-1351.	1.2	287
663	Novel test structure for the measurement of electrostatic discharge pulses (MOS ICs). IEEE Transactions on Semiconductor Manufacturing, 1991, 4, 213-218.	1.4	2
664	The effects of ionizing radiation on the breakdown voltage of p-channel power MOSFETs. IEEE Transactions on Nuclear Science, 1990, 37, 2076-2082.	1.2	10
665	Simulated space radiation effects on power MOSFETs in switching power supplies. IEEE Transactions on Industry Applications, 1990, 26, 798-802.	3.3	19
666	Interface and oxide charge effects on DMOS channel mobility. Electronics Letters, 1989, 25, 1156.	0.5	18

#	ARTICLE	IF	CITATIONS
667	Analysis of current-mirror MOSFETs for use in total-dose radiation environments. IEEE Transactions on Nuclear Science, 1989, 36, 2099-2103.	1.2	3
668	The effects of ionizing radiation on power-MOSFET termination structures. IEEE Transactions on Nuclear Science, 1989, 36, 2104-2109.	1.2	23
669	An approximate-analytic solution for the forward-biased step junction. IEEE Transactions on Electron Devices, 1988, 35, 698-700.	1.6	1
670	Dose-rate effects on the total-dose threshold-voltage shift of power MOSFETs. IEEE Transactions on Nuclear Science, 1988, 35, 1536-1540.	1.2	40
671	Efficiency of photoconductive switches. Journal of Applied Physics, 1987, 62, 4798-4805.	1.1	1
672	Subthreshold transconductance in the long-channel MOSFET. Solid-State Electronics, 1987, 30, 1043-1048.	0.8	2
673	BJT—MOSFET transconductance comparisons. IEEE Transactions on Electron Devices, 1987, 34, 1061-1065.	1.6	3
674	A precise scaling length for depleted regions. Solid-State Electronics, 1985, 28, 779-782.	0.8	1
675	Explaining the saturation of potential drop on the high side of a grossly asymmetric junction. Journal of Applied Physics, 1985, 57, 1239-1241.	1.1	5
676	New Insight into Single-Event Radiation Failure Mechanisms in Silicon Carbide Power Schottky Diodes and MOSFETs. Materials Science Forum, 0, 1004, 1066-1073.	0.3	4