

# Alessandro Paccagnella

## List of Publications by Year in descending order

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442  
papers

10,979  
citations

76322

40  
h-index

45310

90  
g-index

444  
all docs

444  
docs citations

444  
times ranked

7588  
citing authors

#	ARTICLE	IF	CITATIONS
1	THE LARGE AREA TELESCOPE ON THE FERMILARGE AREA TELESCOPE MISSION. <i>Astrophysical Journal</i> , 2009, 697, 1071-1102.	4.5	3,048
2	FERMI LARGE AREA TELESCOPE FIRST SOURCE CATALOG. <i>Astrophysical Journal, Supplement Series</i> , 2010, 188, 405-436.	7.7	851
3	Radiation-Induced Short Channel (RISCE) and Narrow Channel (RINCE) Effects in 65 and 130nm MOSFETs. <i>IEEE Transactions on Nuclear Science</i> , 2015, 62, 2933-2940.	2.0	158
4	Radiation induced leakage current and stress induced leakage current in ultra-thin gate oxides. <i>IEEE Transactions on Nuclear Science</i> , 1998, 45, 2375-2382.	2.0	157
5	Ionizing radiation induced leakage current on ultra-thin gate oxides. <i>IEEE Transactions on Nuclear Science</i> , 1997, 44, 1818-1825.	2.0	140
6	Layout techniques to enhance the radiation tolerance of standard CMOS technologies demonstrated on a pixel detector readout chip. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000, 439, 349-360.	1.6	131
7	The on-orbit calibration of the Fermi Large Area Telescope. <i>Astroparticle Physics</i> , 2009, 32, 193-219.	4.3	123
8	FERMI LARGE AREA TELESCOPE OBSERVATIONS OF THE VELA PULSAR. <i>Astrophysical Journal</i> , 2009, 696, 1084-1093.	4.5	120
9	Present and Future Non-Volatile Memories for Space. <i>IEEE Transactions on Nuclear Science</i> , 2010, , .	2.0	118
10	Radiation Effects in Flash Memories. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 1953-1969.	2.0	116
11	Hydrated-layer formation during dissolution of complex silicate glasses and minerals. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 1941-1955.	3.9	108
12	Identification and classification of single-event upsets in the configuration memory of SRAM-based FPGAs. <i>IEEE Transactions on Nuclear Science</i> , 2003, 50, 2088-2094.	2.0	108
13	Aspect ratio calculation in n-channel MOSFETs with a gate-enclosed layout. <i>Solid-State Electronics</i> , 2000, 44, 981-989.	1.4	79
14	Radiation effects on floating-gate memory cells. <i>IEEE Transactions on Nuclear Science</i> , 2001, 48, 2222-2228.	2.0	79
15	SVX', the new CDF silicon vertex detector. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1995, 360, 137-140.	1.6	78
16	A New Hardware/Software Platform and a New 1/E Neutron Source for Soft Error Studies: Testing FPGAs at the ISIS Facility. <i>IEEE Transactions on Nuclear Science</i> , 2007, 54, 1184-1189.	2.0	77
17	Impact ionization and light emission in AlGaAs/GaAs HEMT's. <i>IEEE Transactions on Electron Devices</i> , 1992, 39, 1849-1857.	3.0	76
18	Influence of LDD Spacers and H <sup>+</sup> Transport on the Total-Ionizing-Dose Response of 65-nm MOSFETs Irradiated to Ultrahigh Doses. <i>IEEE Transactions on Nuclear Science</i> , 2018, 65, 164-174.	2.0	73

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19	Silver nanoparticles inkjet-printed flexible biosensor for rapid label-free antibiotic detection in milk. <i>Sensors and Actuators B: Chemical</i> , 2019, 280, 280-289.	7.8	73
20	Low field leakage current and soft breakdown in ultra-thin gate oxides after heavy ions, electron or X-ray irradiation. <i>IEEE Transactions on Nuclear Science</i> , 2000, 47, 566-573.	2.0	67
21	A model of radiation induced leakage current (RILC) in ultra-thin gate oxides. <i>IEEE Transactions on Nuclear Science</i> , 1999, 46, 1553-1561.	2.0	64
22	Transient conductive path induced by a Single ion in 10 nm SiO <sub>2</sub> /sub 2/ Layers. <i>IEEE Transactions on Nuclear Science</i> , 2004, 51, 3304-3311.	2.0	63
23	Facility for fast neutron irradiation tests of electronics at the ISIS spallation neutron source. <i>Applied Physics Letters</i> , 2008, 92, 114101.	3.3	63
24	Evaluating the effects of SEUs affecting the configuration memory of an SRAM-based FPGA. , 0, , .		56
25	Properties of SiO <sub>2</sub> /Si/GaAs structures formed by solid phase epitaxy of amorphous Si on GaAs. <i>Applied Physics Letters</i> , 1991, 58, 2540-2542.	3.3	54
26	Deep submicron CMOS technologies for the LHC experiments. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1999, 78, 625-634.	0.4	52
27	Heavy ion irradiation of thin gate oxides. <i>IEEE Transactions on Nuclear Science</i> , 2000, 47, 2648-2655.	2.0	52
28	Anomalous charge loss from floating-gate memory cells due to heavy ions irradiation. <i>IEEE Transactions on Nuclear Science</i> , 2002, 49, 3051-3058.	2.0	52
29	A model for TID effects on floating Gate Memory cells. <i>IEEE Transactions on Nuclear Science</i> , 2004, 51, 3753-3758.	2.0	52
30	TID Sensitivity of NAND Flash Memory Building Blocks. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 1909-1913.	2.0	49
31	Radiation induced leakage current in floating gate memory cells. <i>IEEE Transactions on Nuclear Science</i> , 2005, 52, 2144-2152.	2.0	48
32	Key Contributions to the Cross Section of NAND Flash Memories Irradiated With Heavy Ions. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 3302-3308.	2.0	47
33	Structural dependence of crystalline silicate hydration during aqueous dissolution. <i>Earth and Planetary Science Letters</i> , 1989, 93, 292-298.	4.4	46
34	A model of the stress induced leakage current in gate oxides. <i>IEEE Transactions on Electron Devices</i> , 2001, 48, 285-288.	3.0	46
35	A Review of Ionizing Radiation Effects in Floating Gate Memories. <i>IEEE Transactions on Device and Materials Reliability</i> , 2004, 4, 359-370.	2.0	46
36	Hydrogen bonding in amorphous silicon with use of the low-pressure chemical-vapor-deposition technique. <i>Physical Review B</i> , 1991, 43, 6627-6632.	3.2	44

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37	Error Instability in Floating Gate Flash Memories Exposed to TID. IEEE Transactions on Nuclear Science, 2009, 56, 3267-3273.	2.0	44
38	Data retention after heavy ion exposure of floating gate memories: analysis and simulation. IEEE Transactions on Nuclear Science, 2003, 50, 2176-2183.	2.0	43
39	Charge loss after <sup>60</sup> Co irradiation of flash arrays. IEEE Transactions on Nuclear Science, 2004, 51, 2912-2916.	2.0	43
40	Evidence of interface trap creation by hot electrons in AlGaAs/GaAs high electron mobility transistors. Applied Physics Letters, 1996, 69, 1411-1413.	3.3	42
41	Study of breakdown effects in silicon multiguard structures. IEEE Transactions on Nuclear Science, 1999, 46, 1215-1223.	2.0	42
42	Accelerated wear-out of ultra-thin gate oxides after irradiation. IEEE Transactions on Nuclear Science, 2003, 50, 729-734.	2.0	42
43	Schottky diodes on hydrogen plasma treated GaAs surfaces. Applied Physics Letters, 1989, 55, 259-261.	3.3	40
44	Angular Dependence of Heavy Ion Effects in Floating Gate Memory Arrays. IEEE Transactions on Nuclear Science, 2007, 54, 2371-2378.	2.0	40
45	Gate Bias Dependence of Defect-Mediated Hot-Carrier Degradation in GaN HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 1316-1320.	3.0	40
46	Light emission in AlGaAs/GaAs HEMTs and GaAs MESFETs induced by hot carriers. IEEE Electron Device Letters, 1990, 11, 487-489.	3.9	39
47	Radiation tolerance of single-sided silicon microstrips. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 339, 511-523.	1.6	39
48	Simulation-based analysis of SEU effects in SRAM-based FPGAs. IEEE Transactions on Nuclear Science, 2004, 51, 3354-3359.	2.0	39
49	Effect of different total ionizing dose sources on charge loss from programmed floating gate cells. IEEE Transactions on Nuclear Science, 2005, 52, 2372-2377.	2.0	38
50	Effects of Heavy-ion Irradiation on Vertical 3-D NAND Flash Memories. IEEE Transactions on Nuclear Science, 2018, 65, 318-325.	2.0	38
51	Ion beam testing of ALTERA APEX FPGAs. , 0, , .		37
52	Micro breakdown in small-area ultrathin gate oxides. IEEE Transactions on Electron Devices, 2002, 49, 1367-1374.	3.0	37
53	Heavy-ion Induced Threshold Voltage Tails in Floating Gate Arrays. IEEE Transactions on Nuclear Science, 2010, , .	2.0	37
54	Catastrophic Failure in Highly Scaled Commercial NAND Flash Memories. IEEE Transactions on Nuclear Science, 2010, 57, 266-271.	2.0	37

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55	Impact of Technology Scaling on the Heavy-Ion Upset Cross Section of Multi-Level Floating Gate Cells. IEEE Transactions on Nuclear Science, 2011, 58, 969-974.	2.0	37
56	Potentials and pitfalls of FPGA application in inverter drives - a case study. , 0, , .		36
57	Drain current decrease in MOSFETs after heavy ion irradiation. IEEE Transactions on Nuclear Science, 2004, 51, 3150-3157.	2.0	36
58	Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses. IEEE Transactions on Nuclear Science, 2020, 67, 1302-1311.	2.0	35
59	Impact of Aging Phenomena on Soft Error Susceptibility. , 2011, , .		34
60	Annealing of Heavy-Ion Induced Floating Gate Errors: LET and Feature Size Dependence. IEEE Transactions on Nuclear Science, 2010, 57, 1835-1841.	2.0	33
61	Total Ionizing Dose Effects in NOR and NAND Flash Memories. IEEE Transactions on Nuclear Science, 2007, 54, 1066-1070.	2.0	31
62	Enhancement of Transistor-to-Transistor Variability Due to Total Dose Effects in 65-nm MOSFETs. IEEE Transactions on Nuclear Science, 2015, 62, 2398-2403.	2.0	31
63	Noise characteristics of radiation-induced soft breakdown current in ultrathin gate oxides. IEEE Transactions on Nuclear Science, 2001, 48, 2093-2100.	2.0	30
64	Subpicosecond conduction through thin SiO <sub>2</sub> layers triggered by heavy ions. Journal of Applied Physics, 2006, 99, 074101.	2.5	30
65	Fermi Large Area Telescope Performance after 10 Years of Operation. Astrophysical Journal, Supplement Series, 2021, 256, 12.	7.7	30
66	Impact ionization phenomena in AlGaAs/GaAs HEMTs. IEEE Transactions on Electron Devices, 1991, 38, 2571-2573.	3.0	29
67	Total Ionizing Dose Effects in 3-D NAND Flash Memories. IEEE Transactions on Nuclear Science, 2019, 66, 48-53.	2.0	29
68	Influence of Halo Implantations on the Total Ionizing Dose Response of 28-nm pMOSFETs Irradiated to Ultrahigh Doses. IEEE Transactions on Nuclear Science, 2019, 66, 82-90.	2.0	29
69	Silicon avalanche detectors with negative feedback as detectors for high energy physics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 367, 212-214.	1.6	28
70	Ionizing radiation effects on floating gates. Applied Physics Letters, 2004, 85, 485-487.	3.3	28
71	Increase in the Heavy-Ion Upset Cross Section of Floating Gate Cells Previously Exposed to TID. IEEE Transactions on Nuclear Science, 2010, , .	2.0	28
72	Dose-Rate Sensitivity of 65-nm MOSFETs Exposed to Ultrahigh Doses. IEEE Transactions on Nuclear Science, 2018, 65, 1482-1487.	2.0	28

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73	A plug, print & play inkjet printing and impedance-based biosensing technology operating through a smartphone for clinical diagnostics. <i>Biosensors and Bioelectronics</i> , 2022, 196, 113737.	10.1	28
74	Channel Hot Carrier Stress on Irradiated 130-nm NMOSFETs. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 1960-1967.	2.0	27
75	Impact of Bias Temperature Instability on Soft Error Susceptibility. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2015, 23, 743-751.	3.1	27
76	Metal-GaAs interaction and contact degradation in microwave MESFETs. <i>Quality and Reliability Engineering International</i> , 1990, 6, 29-46.	2.3	26
77	Charge Buildup and Spatial Distribution of Interface Traps in 65-nm pMOSFETs Irradiated to Ultrahigh Doses. <i>IEEE Transactions on Nuclear Science</i> , 2019, 66, 1574-1583.	2.0	26
78	Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With $\text{HfO}_2/\text{Al}_2\text{O}_3$ Dielectrics. <i>IEEE Transactions on Nuclear Science</i> , 2020, 67, 210-220.	2.0	26
79	Silicon diffusion in aluminium. <i>Thin Solid Films</i> , 1985, 128, 217-223.	1.8	25
80	Pd/Ge ohmic contacts for GaAs metal-semiconductor field effect transistors: Technology and performance. <i>Thin Solid Films</i> , 1990, 187, 9-18.	1.8	25
81	Negative base current and impact ionization phenomena in AlGaAs/GaAs HBTs. <i>IEEE Electron Device Letters</i> , 1992, 13, 253-255.	3.9	25
82	The SVX II silicon vertex detector upgrade at CDF. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1995, 360, 118-124.	1.6	25
83	New results on silicon microstrip detectors of CMS tracker. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000, 447, 142-150.	1.6	25
84	Gate current in ultrathin MOS capacitors: a new model of tunnel current. <i>IEEE Transactions on Electron Devices</i> , 2001, 48, 271-278.	3.0	25
85	Space and time-resolved gene expression experiments on cultured mammalian cells by a single-cell electroporation microarray. <i>New Biotechnology</i> , 2008, 25, 55-67.	4.4	25
86	Potential High Resolution Dosimeters For MRT. <i>AIP Conference Proceedings</i> , 2010, , .	0.4	25
87	Collapse of MOSFET Drain Current After Soft Breakdown. <i>IEEE Transactions on Device and Materials Reliability</i> , 2004, 4, 63-72.	2.0	24
88	Impact of 24-GeV Proton Irradiation on 0.13- $\mu\text{m}$ CMOS Devices. <i>IEEE Transactions on Nuclear Science</i> , 2006, 53, 1917-1922.	2.0	24
89	Temperature dependence of neutron-induced soft errors in SRAMs. <i>Microelectronics Reliability</i> , 2012, 52, 289-293.	1.7	24
90	Single and Multiple Cell Upsets in 25-nm NAND Flash Memories. <i>IEEE Transactions on Nuclear Science</i> , 2013, 60, 2675-2681.	2.0	24

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91	Radiation effects on breakdown characteristics of multiguarded devices. IEEE Transactions on Nuclear Science, 1997, 44, 721-727.	2.0	23
92	Single Event Effects in NAND Flash Memory Arrays. IEEE Transactions on Nuclear Science, 2006, 53, 1813-1818.	2.0	23
93	Angular Dependence of Heavy-Ion Induced Errors in Floating Gate Memories. IEEE Transactions on Nuclear Science, 2011, 58, 2621-2627.	2.0	23
94	Possible effects on avionics induced by terrestrial gamma-ray flashes. Natural Hazards and Earth System Sciences, 2013, 13, 1127-1133.	3.6	23
95	Sample-to-Sample Variability and Bit Errors Induced by Total Dose in Advanced NAND Flash Memories. IEEE Transactions on Nuclear Science, 2014, 61, 2889-2895.	2.0	23
96	Correlation between surface-state density and impact ionization phenomena in GaAs MESFET's. IEEE Transactions on Electron Devices, 1991, 38, 2682-2684.	3.0	22
97	High-resistance buried layers by MeV Fe implantation in n-type InP. Applied Physics Letters, 1999, 75, 668-670.	3.3	22
98	Total dose dependence of radiation-induced leakage current in ultra-thin gate oxides. Microelectronics Reliability, 1999, 39, 221-226.	1.7	22
99	Collapse of MOSFET drain current after soft breakdown and its dependence on the transistor aspect ratio $W/L$ , , , .		22
100	Impact of NBTI Aging on the Single-Event Upset of SRAM Cells. IEEE Transactions on Nuclear Science, 2010, , .	2.0	22
101	Total Ionizing Dose effects on a 28 nm Hi-K metal-gate CMOS technology up to 1 Grad. Journal of Instrumentation, 2017, 12, C02003-C02003.	1.2	22
102	Sorption of Actinide Analogues on Granite Minerals Studied by MeV Ion Beam Techniques. Radiochimica Acta, 1988, 44-45, 299-304.	1.2	21
103	Impact ionization, recombination, and visible light emission in AlGaAs/GaAs high electron mobility	2.5	21
104	Channel-Hot-Carrier Degradation and Bias Temperature Instabilities in CMOS Inverters. IEEE Transactions on Electron Devices, 2009, 56, 2155-2159.	3.0	21
105	Degradation of Sub 40-nm NAND Flash Memories Under Total Dose Irradiation. IEEE Transactions on Nuclear Science, 2012, 59, 2952-2958.	2.0	21
106	Neutron-Induced Upsets in NAND Floating Gate Memories. IEEE Transactions on Device and Materials Reliability, 2012, 12, 437-444.	2.0	21
107	Effects of high energy x ray and proton irradiation on lead zirconate titanate thin films' dielectric and piezoelectric response. Applied Physics Letters, 2013, 102, .	3.3	21
108	Drain Current Collapse in 65Ånm pMOS Transistors After Exposure to Grad Dose. IEEE Transactions on Nuclear Science, 2015, 62, 2899-2905.	2.0	21

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109	TID Degradation Mechanisms in 16-nm Bulk FinFETs Irradiated to Ultrahigh Doses. IEEE Transactions on Nuclear Science, 2021, 68, 1571-1578.	2.0	21
110	Dissolution mechanisms of silicate minerals yielded by intercomparison with glasses and radiation damage studies. Chemical Geology, 1989, 78, 219-227.	3.3	20
111	Impact of Heavy-Ion Strikes on Minimum-Size MOSFETs With Ultra-Thin Gate Oxide. IEEE Transactions on Nuclear Science, 2006, 53, 3675-3680.	2.0	20
112	CHIPIX65: Developments on a new generation pixel readout ASIC in CMOS 65 nm for HEP experiments. , 2015, , .		20
113	Stress induced leakage current in ultra-thin gate oxides after constant current stress. Microelectronic Engineering, 1997, 36, 145-148.	2.4	19
114	Secondary Effects of Single Ions on Floating Gate Memory Cells. IEEE Transactions on Nuclear Science, 2006, 53, 3291-3297.	2.0	19
115	Effects of Total Ionizing Dose on the Retention of 41-nm NAND Flash Cells. IEEE Transactions on Nuclear Science, 2011, 58, 2824-2829.	2.0	19
116	The Effect of Proton Irradiation in Suppressing Current Collapse in AlGaIn/GaN High-Electron-Mobility Transistors. IEEE Transactions on Electron Devices, 2019, 66, 372-377.	3.0	19
117	Reliability extrapolation model for stress-induced-leakage current in thin silicon oxides. Electronics Letters, 1997, 33, 1342.	1.0	18
118	MRS detectors with high gain for registration of weak visible and UV light fluxes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 387, 225-230.	1.6	18
119	Using AFM Related Techniques for the Nanoscale Electrical Characterization of Irradiated Ultrathin Gate Oxides. IEEE Transactions on Nuclear Science, 2007, 54, 1891-1897.	2.0	18
120	Microdose and Breakdown Effects Induced by Heavy Ions on Sub 32-nm Triple-Gate SOI FETs. IEEE Transactions on Nuclear Science, 2008, 55, 3182-3188.	2.0	18
121	On the Evaluation of Radiation-Induced Transient Faults in Flash-Based FPGAs. , 2008, , .		18
122	Degradation Induced by X-Ray Irradiation and Channel Hot Carrier Stresses in 130-nm NMOSFETs With Enclosed Layout. IEEE Transactions on Nuclear Science, 2008, 55, 3216-3223.	2.0	18
123	Space Environment Effects on Flexible, Low-Voltage Organic Thin-Film Transistors. ACS Applied Materials & Interfaces, 2017, 9, 35150-35158.	8.0	18
124	Comments, with reply, on 'Impact ionization in GaAs MESFETs' by K. Hui, et al. IEEE Electron Device Letters, 1991, 12, 80-81.	3.9	17
125	A novel approach to quantum point contact for post soft breakdown conduction. , 0, , .		17
126	Thin oxide degradation after high-energy ion irradiation. IEEE Transactions on Nuclear Science, 2001, 48, 1735-1743.	2.0	17



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127	Post-radiation-induced soft breakdown conduction properties as a function of temperature. Applied Physics Letters, 2001, 79, 1336-1338.	3.3	17
128	Soft breakdown current noise in ultra-thin gate oxides. Solid-State Electronics, 2002, 46, 1019-1025.	1.4	17
129	Recent progress of RD53 Collaboration towards next generation Pixel Read-Out Chip for HL-LHC. Journal of Instrumentation, 2016, 11, C12058-C12058.	1.2	17
130	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.	2.0	17
131	Inkjet Printed Interdigitated Biosensor for Easy and Rapid Detection of Bacteriophage Contamination: a Preliminary Study for Milk Processing Control Applications. Chemosensors, 2019, 7, 8.	3.6	17
132	A Heavy-Ion Detector Based on 3-D NAND Flash Memories. IEEE Transactions on Nuclear Science, 2020, 67, 154-160.	2.0	17
133	Degradation mechanism of Ti/Au and Ti/Pd/Au gate metallizations in GaAs MESFET's. IEEE Transactions on Electron Devices, 1987, 34, 957-960.	3.0	16
134	Statistical model for radiation-induced wear-out of ultra-thin gate oxides after exposure to heavy ion irradiation. IEEE Transactions on Nuclear Science, 2003, 50, 2167-2175.	2.0	16
135	Systematic characterization of soft- and hard-breakdown spots using techniques with nanometer resolution. Microelectronic Engineering, 2007, 84, 1956-1959.	2.4	16
136	Effectiveness of TMR-Based Techniques to Mitigate Alpha-Induced SEU Accumulation in Commercial SRAM-Based FPGAs. IEEE Transactions on Nuclear Science, 2008, 55, 1968-1973.	2.0	16
137	Power converters for future LHC experiments. Journal of Instrumentation, 2012, 7, C03012-C03012.	1.2	16
138	Single Event Upsets Induced by Direct Ionization from Low-Energy Protons in Floating Gate Cells. IEEE Transactions on Nuclear Science, 2017, 64, 464-470.	2.0	16
139	Space and terrestrial radiation effects in flash memories. Semiconductor Science and Technology, 2017, 32, 033003.	2.0	16
140	GaAs MESFETs with nonalloyed ohmic contacts: technology and performance. Electronics Letters, 1988, 24, 708-709.	1.0	15
141	Change of $g_{\text{sub m}}/f$ and breakdown voltage induced by thermal annealing of surface states in power MESFETs. IEEE Transactions on Electron Devices, 1990, 37, 1163-1165.	3.0	15
142	Variability in FG Memories Performance After Irradiation. IEEE Transactions on Nuclear Science, 2006, 53, 3349-3355.	2.0	15
143	Neutron-induced soft errors in advanced flash memories. , 2008, , .		15
144	Radiation Sensitivity of Ohmic RF-MEMS Switches for Spatial Applications. , 2009, , .		15

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145	Single Event Effects in 90-nm Phase Change Memories. IEEE Transactions on Nuclear Science, 2011, 58, 2755-2760.	2.0	15
146	Total Ionizing Dose Effects in Si-Based Tunnel FETs. IEEE Transactions on Nuclear Science, 2014, 61, 2874-2880.	2.0	15
147	Analysis of TID Failure Modes in SRAM-Based FPGA Under Gamma-Ray and Focused Synchrotron X-Ray Irradiation. IEEE Transactions on Nuclear Science, 2014, 61, 1777-1784.	2.0	15
148	Developments on DC/DC converters for the LHC experiment upgrades. Journal of Instrumentation, 2014, 9, C02017-C02017.	1.2	15
149	Palladium on Plastic Substrates for Plasmonic Devices. Sensors, 2015, 15, 1138-1147.	3.8	15
150	Single Event Transients and Pulse Quenching Effects in Bandgap Reference Topologies for Space Applications. IEEE Transactions on Nuclear Science, 2016, 63, 2950-2961.	2.0	15
151	Inkjet sensors produced by consumer printers with smartphone impedance readout. Sensing and Bio-Sensing Research, 2019, 26, 100308.	4.2	15
152	Mechanical properties of ion implanted glasses. Nuclear Instruments & Methods in Physics Research B, 1984, 1, 253-257.	1.4	14
153	Frequency dispersion of transconductance: a tool to characterise deep levels in III-V FETs. Electronics Letters, 1992, 28, 2107.	1.0	14
154	Electron irradiation effects on thin MOS capacitors. Journal of Non-Crystalline Solids, 1999, 245, 238-244.	3.1	14
155	Electrical stresses on ultra-thin gate oxide SOI MOSFETs after irradiation. IEEE Transactions on Nuclear Science, 2005, 52, 2252-2258.	2.0	14
156	SEU sensitivity of virtex configuration logic. IEEE Transactions on Nuclear Science, 2005, 52, 2462-2467.	2.0	14
157	Effect of Ion Energy on Charge Loss From Floating Gate Memories. IEEE Transactions on Nuclear Science, 2008, 55, 2042-2047.	2.0	14
158	Methodologies to Study Frequency-Dependent Single Event Effects Sensitivity in Flash-Based FPGAs. IEEE Transactions on Nuclear Science, 2009, 56, 3534-3541.	2.0	14
159	Investigation of Hot Carrier Stress and Constant Voltage Stress in High- $\kappa$ Si-Based TFETs. IEEE Transactions on Device and Materials Reliability, 2015, 15, 236-241.	2.0	14
160	Total suppression of dynamic-ron in AlGaIn/GaN-HEMTs through proton irradiation. , 2017, , .		14
161	Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. IEEE Transactions on Nuclear Science, 2020, 67, 1412-1420.	2.0	14
162	Correlation between impact ionisation, recombination and visible light emission in GaAs MESFETs. Electronics Letters, 1991, 27, 770.	1.0	13

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163	Electrically and radiation induced leakage currents in thin oxides. <i>Microelectronics Reliability</i> , 2000, 40, 57-67.	1.7	13
164	Comparison of the electrical and thermal stability of stress- or radiation-induced leakage current in thin oxides. <i>Applied Physics Letters</i> , 2000, 76, 1158-1160.	3.3	13
165	Time decay of stress induced leakage current in thin gate oxides by low-field electron injection. <i>Solid-State Electronics</i> , 2001, 45, 1345-1353.	1.4	13
166	Effects of Heavy-Ion Strikes on Fully Depleted SOI MOSFETs With Ultra-Thin Gate Oxide and Different Strain-Inducing Techniques. <i>IEEE Transactions on Nuclear Science</i> , 2007, 54, 2257-2263.	2.0	13
167	A Statistical Approach to Microdose Induced Degradation in FinFET Devices. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 3285-3292.	2.0	13
168	Gate Rupture in Ultra-Thin Gate Oxides Irradiated With Heavy Ions. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 1964-1970.	2.0	13
169	Neutron and Alpha Single Event Upsets in Advanced NAND Flash Memories. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 1799-1805.	2.0	13
170	Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. <i>IEEE Transactions on Nuclear Science</i> , 2020, 67, 253-259.	2.0	13
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