Philippe Paillet

List of Publications by Year
in descending order

83	2,874	279798 23	175258 52
papers	citations	h-index	g-index

83	83	83	1673
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Radiation-Induced Junction-Leakage Random-Telegraph-Signal. IEEE Transactions on Nuclear Science, 2022, 69, 290-298.	2.0	3
2	Pulsed Xâ€Ray Radiation Response of Ultralow Loss Pureâ€Silicaâ€Core Optical Fibers. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100519.	1.8	3
3	Hours-Long Transient Leakage Current in MOS Structures Induced by High Total-Ionizing-Dose. IEEE Transactions on Nuclear Science, 2022, 69, 1428-1436.	2.0	0
4	In Situ Optical Characterization of Bulk Optical Glasses Under Protons and X-Rays. IEEE Transactions on Nuclear Science, 2022, 69, 1492-1499.	2.0	0
5	Radiation vulnerability of standard and radiation-hardened optical glasses at MGy dose: Towards the design of tolerant optical systems. Journal of Non-Crystalline Solids, 2022, 585, 121531.	3.1	3
6	Optical Fiber-Based Monitoring of X-ray Pulse Series from a Linear Accelerator. Radiation, 2022, 2, 17-32.	1.4	6
7	Monitoring of Ultra-High Dose Rate Pulsed X-ray Facilities with Radioluminescent Nitrogen-Doped Optical Fiber. Sensors, 2022, 22, 3192.	3.8	6
8	Junction Leakage Random Telegraph Signals in Arrays of MOSFETs. IEEE Electron Device Letters, 2021, , 1-1.	3.9	0
9	TID Effects Induced by ARACOR, ⁶⁰Co, and ORIATRON Photon Sources in MOS Devices: Impact of Geometry and Materials. IEEE Transactions on Nuclear Science, 2021, 68, 991-1001.	2.0	7
10	Investigations on Spectral Photon Radiation Sources to Perform TID Experiments in Micro- and Nano-Electronic Devices. IEEE Transactions on Nuclear Science, 2021, 68, 928-936.	2.0	4
11	Ultra-High Total Ionizing Dose Effects on MOSFETs for Analog Applications. IEEE Transactions on Nuclear Science, 2021, 68, 697-706.	2.0	12
12	Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. IEEE Transactions on Nuclear Science, 2020, 67, 289-295.	2.0	7
13	Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. IEEE Transactions on Nuclear Science, 2020, 67, 268-277.	2.0	6
14	Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. IEEE Transactions on Nuclear Science, 2020, 67, 234-244.	2.0	17
15	Origins of radiation-induced attenuation in pure-silica-core and Ge-doped optical fibers under pulsed x-ray irradiation. Journal of Applied Physics, 2020, 128, .	2.5	17
16	TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias. IEEE Transactions on Nuclear Science, 2020, 67, 2172-2178.	2.0	5
17	Extreme Radiation Sensitivity of Ultra-Low Loss Pure-Silica-Core Optical Fibers at Low Dose Levels and Infrared Wavelengths. Sensors, 2020, 20, 7254.	3.8	17
18	Annealing Effects on Radiation-Hardened CMOS Image Sensors Exposed to Ultrahigh Total Ionizing Doses. IEEE Transactions on Nuclear Science, 2020, 67, 1284-1292.	2.0	1

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19	Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. IEEE Transactions on Nuclear Science, 2020, 67, 1241-1250.	2.0	4
20	Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. IEEE Transactions on Nuclear Science, 2020, 67, 1650-1657.	2.0	9
21	High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. IEEE Transactions on Nuclear Science, 2020, 67, 1256-1262.	2.0	3
22	Analysis of Nanowire Field-Effect Transistors SET Response: Geometrical Considerations. IEEE Transactions on Nuclear Science, 2019, 66, 1410-1417.	2.0	2
23	Overview of radiation induced point defects in silica-based optical fibers. Reviews in Physics, 2019, 4, 100032.	8.9	208
24	Leakage Current Non-Uniformity and Random Telegraph Signals in CMOS Image Sensor Floating Diffusions Used for In-Pixel Charge Storage. Sensors, 2019, 19, 5550.	3.8	7
25	Random Telegraph Noises from the Source Follower, the Photodiode Dark Current, and the Gate-Induced Sense Node Leakage in CMOS Image Sensors. Sensors, 2019, 19, 5447.	3.8	9
26	SET Sensitivity of Trigate Silicon Nanowire Field-Effect Transistors. IEEE Transactions on Nuclear Science, 2019, 66, 352-358.	2.0	2
27	X-Rays, <inline-formula> <tex-math notation="LaTeX">$gamma$ </tex-math> </inline-formula>-Rays, and Proton Beam Monitoring With Multimode Nitrogen-Doped Optical Fiber. IEEE Transactions on Nuclear Science, 2019, 66, 306-311.	2.0	11
28	Random Telegraph Noises in CMOS Image Sensors Caused by Variable Gate-Induced Sense Node Leakage Due to X-Ray Irradiation. IEEE Journal of the Electron Devices Society, 2019, 7, 227-238.	2.1	8
29	Radiation-Induced Leakage Current and Electric Field Enhancement in CMOS Image Sensor Sense Node Floating Diffusions. IEEE Transactions on Nuclear Science, 2019, 66, 616-624.	2.0	16
30	Radiation Hardness Comparison of CMOS Image Sensor Technologies at High Total Ionizing Dose Levels. IEEE Transactions on Nuclear Science, 2019, 66, 111-119.	2.0	15
31	Investigations of the MGy dose level radiation effects on the photometric budget of a radiation-hardened CMOS-based camera. Applied Optics, 2019, 58, 6165.	1.8	2
32	X-ray irradiation response of antireflection coatings. , 2019, , .		0
33	Total Ionizing Dose Effects on a Radiation-Hardened CMOS Image Sensor Demonstrator for ITER Remote Handling. IEEE Transactions on Nuclear Science, 2018, 65, 101-110.	2.0	26
34	Total Ionizing Dose Radiation-Induced Dark Current Random Telegraph Signal in Pinned Photodiode CMOS Image Sensors. IEEE Transactions on Nuclear Science, 2018, 65, 92-100.	2.0	9
35	Vulnerability and Hardening Studies of Optical and Illumination Systems at MGy Dose Levels. IEEE Transactions on Nuclear Science, 2018, 65, 132-140.	2.0	11
36	Simulation of Single-Particle Displacement Damage in Siliconâ€"Part III: First Principle Characterization of Defect Properties. IEEE Transactions on Nuclear Science, 2018, 65, 724-731.	2.0	16

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37	Investigations on the Geometry Effects and Bias Configuration on the TID Response of nMOS SOI Tri-Gate Nanowire Field-Effect Transistors. IEEE Transactions on Nuclear Science, 2018, 65, 39-45.	2.0	22
38	X-Ray, Proton, and Electron Radiation Effects on Type I Fiber Bragg Gratings. IEEE Transactions on Nuclear Science, 2018, 65, 1632-1638.	2.0	12
39	6-MeV Electron Exposure Effects on OFDR-Based Distributed Fiber-Based Sensors. IEEE Transactions on Nuclear Science, 2018, 65, 1598-1603.	2.0	8
40	Total-Ionizing Dose Effects on Charge Transfer Efficiency and Image Lag in Pinned Photodiode CMOS Image Sensors. IEEE Transactions on Nuclear Science, 2018, 65, 84-91.	2.0	13
41	Dependence of the Voids-Fiber Bragg Grating Radiation Response on Temperature, Dose, and Dose Rate. IEEE Transactions on Nuclear Science, 2018, 65, 1619-1623.	2.0	9
42	Ni-Ion and $gamma$ -Ray Irradiated Silica-Based Glasses Characterized by Luminescence and Raman Spectroscopies. IEEE Transactions on Nuclear Science, 2018, 65, 1604-1611.	2.0	0
43	Estimation of the Single-Event Upset Sensitivity of Advanced SOI SRAMs. IEEE Transactions on Nuclear Science, 2018, 65, 339-345.	2.0	19
44	TID Response of pMOS Nanowire Field-Effect Transistors: Geometry and Bias Dependence. IEEE Transactions on Nuclear Science, 2018, 65, 1525-1531.	2.0	10
45	Growth and Decay Kinetics of Radiation-Induced Attenuation in Bulk Optical Materials. IEEE Transactions on Nuclear Science, 2018, 65, 1612-1618.	2.0	20
46	Potential performance loss and compensation techniques of a lens under ionizing radiations. , 2018, , .		1
47	Total Ionizing Dose Response of Multiple-Gate Nanowire Field Effect Transistors. IEEE Transactions on Nuclear Science, 2017, , 1-1.	2.0	16
48	Radiation Hardening of Digital Color CMOS Camera-on-a-Chip Building Blocks for Multi-MGy Total Ionizing Dose Environments. IEEE Transactions on Nuclear Science, 2017, 64, 45-53.	2.0	26
49	Dark Current Spectroscopy in Neutron, Proton and Ion Irradiated CMOS Image Sensors: From Point Defects to Clusters. IEEE Transactions on Nuclear Science, 2017, 64, 27-37.	2.0	18
50	Simulation of Single Particle Displacement Damage in Silicon â€“ Part I: Global Approach and Primary Interaction Simulation. IEEE Transactions on Nuclear Science, 2017, 64, 133-140.	2.0	31
51	Potential of Copper- and Cerium-Doped Optical Fiber Materials for Proton Beam Monitoring. IEEE Transactions on Nuclear Science, 2017, 64, 567-573.	2.0	20
52	Dose Rate Effect Comparison on the Radiation Response of Type I Fiber Bragg Gratings Written With UV cw Laser. IEEE Transactions on Nuclear Science, 2016, 63, 2046-2050.	2.0	8
53	Dark Current Spectroscopy on Alpha Irradiated Pinned Photodiode CMOS Image Sensors. IEEE Transactions on Nuclear Science, 2016, 63, 2183-2192.	2.0	14
54	Pixel pitch and particle energy influence on the dark current distribution of neutron irradiated CMOS image sensors. Optics Express, 2016, 24, 4299.	3.4	14

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55	On-site Regeneration Technique for Hole-Assisted Optical Fibers Used In Nuclear Facilities. IEEE Transactions on Nuclear Science, 2015, 62, 2941-2947.	2.0	12
56	Multi-MGy Radiation Hard CMOS Image Sensor: Design, Characterization and X/Gamma Rays Total Ionizing Dose Tests. IEEE Transactions on Nuclear Science, 2015, 62, 2956-2964.	2.0	17
57	Radiation effects on optical frequency domain reflectometry fiber-based sensor. Optics Letters, 2015, 40, 4571.	3.3	30
58	Influence of neutron and gamma-ray irradiations on rad-hard optical fiber. Optical Materials Express, 2015, 5, 898.	3.0	39
59	Influence of photo-inscription conditions on the radiation-response of fiber Bragg gratings. Optics Express, 2015, 23, 8659.	3.4	18
60	Dispersion of heavy ion deposited energy in nanometric electronic devices: Experimental measurements and simulation possibilities. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 636-640.	1.4	3
61	Development of a Temperature Distributed Monitoring System Based On Raman Scattering in Harsh Environment. IEEE Transactions on Nuclear Science, 2014, 61, 3315-3322.	2.0	38
62	Exploring the Kinetics of Formation and Annealing of Single Particle Displacement Damage in Microvolumes of Silicon. IEEE Transactions on Nuclear Science, 2014, 61, 2826-2833.	2.0	15
63	Radiation tolerant fiber Bragg gratings for high temperature monitoring at MGy dose levels. Optics Letters, 2014, 39, 5313.	3.3	54
64	Comparative Analysis of Mechanical Strain and Silicon Film Thickness on Charge Collection Mechanisms of Nanometer Scaled SOI Devices Under Heavy Ion and Pulsed Laser Irradiation. IEEE Transactions on Nuclear Science, 2014, 61, 1628-1634.	2.0	14
65	Coupled Theoretical and Experimental Studies for the Radiation Hardening of Silica-Based Optical Fibers. IEEE Transactions on Nuclear Science, 2014, 61, 1819-1825.	2.0	23
66	Radiation Effects in Advanced Multiple Gate and Silicon-on-Insulator Transistors. IEEE Transactions on Nuclear Science, 2013, 60, 1970-1991.	2.0	114
67	Impact of SOI Substrate on the Radiation Response of UltraThin Transistors Down to the 20 nm Node. IEEE Transactions on Nuclear Science, 2013, 60, 2583-2589.	2.0	117
68	Investigations on the Vulnerability of Advanced CMOS Technologies to MGy Dose Environments. IEEE Transactions on Nuclear Science, 2013, 60, 2590-2597.	2.0	19
69	Radiation Effects in CMOS Isolation Oxides: Differences and Similarities With Thermal Oxides. IEEE Transactions on Nuclear Science, 2013, 60, 2623-2629.	2.0	13
70	Transient Radiation Responses of Optical Fibers: Influence of MCVD Process Parameters. IEEE Transactions on Nuclear Science, 2012, 59, 2894-2901.	2.0	36
71	Identification of Radiation Induced Dark Current Sources in Pinned Photodiode CMOS Image Sensors. IEEE Transactions on Nuclear Science, 2012, 59, 918-926.	2.0	38
72	Improved Simulation of Ion Track Structures Using New Geant4 Modelsâ€"Impact on the Modeling of Advanced Technologies Response. IEEE Transactions on Nuclear Science, 2012, 59, 2697-2703.	2.0	37

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73	Radiation Effects in Pinned Photodiode CMOS Image Sensors: Pixel Performance Degradation Due to Total Ionizing Dose. IEEE Transactions on Nuclear Science, 2012, 59, 2878-2887.	2.0	78
74	Enhanced Radiation-Induced Narrow Channel Effects in Commercial <formula formulatype="inline"><tex Notation="TeX">${hbox {0.18}}~mu$</tex> </formula>m Bulk Technology. IEEE Transactions on Nuclear Science, 2011, 58, 2807-2815.	2.0	70
75	Radiation Effects in MOS Oxides. IEEE Transactions on Nuclear Science, 2008, 55, 1833-1853.	2.0	676
76	Total Ionizing Dose Effects on Triple-Gate FETs. IEEE Transactions on Nuclear Science, 2006, 53, 3158-3165.	2.0	82
77	High tolerance to total ionizing dose of Î©-shaped gate field-effect transistors. Applied Physics Letters, 2006, 88, 223511.	3.3	48
78	Total dose hardness assurance testing using laboratory radiation sources. IEEE Transactions on Nuclear Science, 2003, 50, 2310-2315.	2.0	18
79	Radiation effects in SOI technologies. IEEE Transactions on Nuclear Science, 2003, 50, 522-538.	2.0	353
80	Comparison of charge yield in MOS devices for different radiation sources. IEEE Transactions on Nuclear Science, 2002, 49, 2656-2661.	2.0	82
81	Isothermal and isochronal annealing methodology to study post-irradiation temperature activated phenomena. IEEE Transactions on Nuclear Science, 1997, 44, 2007-2012.	2.0	16
82	Trapping-detrapping properties of irradiated ultra-thin SIMOX buried oxides. IEEE Transactions on Nuclear Science, 1995, 42, 2108-2113.	2.0	35
83	Evidence of negative charge trapping in high temperature annealed thermal oxide. IEEE Transactions on Nuclear Science, 1994, 41, 473-478.	2.0	46