Aziz Boukenter

List of Publications by Year
in descending order

87 papers	2,377 citations	257357 24 h-index	214721 47 g-index
87 all docs	87 docs citations	87 times ranked	986 citing authors

#	Article	IF	Citations
1	Radiation Effects on Silica-Based Optical Fibers: Recent Advances and Future Challenges. IEEE Transactions on Nuclear Science, 2013, 60, 2015-2036.	1.2	366
2	Overview of radiation induced point defects in silica-based optical fibers. Reviews in Physics, 2019, 4, 100032.	4.4	208
3	Recent advances in radiation-hardened fiber-based technologies for space applications. Journal of Optics (United Kingdom), 2018, 20, 093001.	1.0	153
4	Sol-gel derived ionic copper-doped microstructured optical fiber: a potential selective ultraviolet radiation dosimeter. Optics Express, 2012, 20, 29751.	1.7	129
5	Radiation hardening techniques for Er/Yb doped optical fibers and amplifiers for space application. Optics Express, 2012, 20, 8457.	1.7	99
6	Radiation Effects on Silica-Based Preforms and Optical Fibersâ€"I: Experimental Study With Canonical Samples. IEEE Transactions on Nuclear Science, 2008, 55, 3473-3482.	1.2	85
7	Combined High Dose and Temperature Radiation Effects on Multimode Silica-Based Optical Fibers. IEEE Transactions on Nuclear Science, 2013, 60, 4305-4313.	1.2	71
8	Proton- and Gamma-Induced Effects on Erbium-Doped Optical Fibers. IEEE Transactions on Nuclear Science, 2007, 54, 2426-2434.	1.2	68
9	Feasibility of radiation dosimetry with phosphorus-doped optical fibers in the ultraviolet and visible domain. Journal of Non-Crystalline Solids, 2011, 357, 1871-1874.	1.5	66
10	Radiation Effects on Ytterbium- and Ytterbium/Erbium-Doped Double-Clad Optical Fibers. IEEE Transactions on Nuclear Science, 2009, 56, 3293-3299.	1.2	60
11	Radiation-hard erbium optical fiber and fiber amplifier for both low- and high-dose space missions. Optics Letters, 2014, 39, 2541.	1.7	60
12	Radiation tolerant fiber Bragg gratings for high temperature monitoring at MGy dose levels. Optics Letters, 2014, 39, 5313.	1.7	54
13	High Î³-ray dose radiation effects on the performances of Brillouin scattering based optical fiber sensors. Optics Express, 2012, 20, 26978.	1.7	53
14	Influence of Drawing Conditions on the Properties and Radiation Sensitivities of Pure-Silica-Core Optical Fibers. Journal of Lightwave Technology, 2012, 30, 1726-1732.	2.7	46
15	Development of a Temperature Distributed Monitoring System Based On Raman Scattering in Harsh Environment. IEEE Transactions on Nuclear Science, 2014, 61, 3315-3322.	1.2	38
16	Transient Radiation Responses of Optical Fibers: Influence of MCVD Process Parameters. IEEE Transactions on Nuclear Science, 2012, 59, 2894-2901.	1.2	36
17	Vulnerability analysis of optical fibers for laser megajoule facility: preliminary studies. IEEE Transactions on Nuclear Science, 2005, 52, 1497-1503.	1.2	33
18	Vulnerability of OFDR-based distributed sensors to high Î³-ray doses. Optics Express, 2015, 23, 18997.	1.7	33

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19	Franceâ€™s State of the Art Distributed Optical Fibre Sensors Qualified for the Monitoring of the French Underground Repository for High Level and Intermediate Level Long Lived Radioactive Wastes. Sensors, 2017, 17, 1377.	2.1	33
20	Radiation Effects on Silica-Based Preforms and Optical Fibers-II: Coupling <i>Ab initio</i> Simulations and Experiments. IEEE Transactions on Nuclear Science, 2008, 55, 3508-3514.	1.2	32
21	Ge(2), Ge(1) and Ge-Eâ€² centers in irradiated Ge-doped silica: a first-principles EPR study. Optical Materials Express, 2015, 5, 1054.	1.6	29
22	Radiation-Hardened Fiber Bragg Grating Based Sensors for Harsh Environments. IEEE Transactions on Nuclear Science, 2017, 64, 68-73.	1.2	27
23	Spatial distribution of the red luminescence in pristine, Î³ rays and ultraviolet-irradiated multimode optical fibers. Applied Physics Letters, 2004, 84, 4215-4217.	1.5	26
24	Cerium-activated solâ€“gel silica glasses for radiation dosimetry in harsh environment. Materials Research Express, 2016, 3, 046201.	0.8	26
25	Coupled Theoretical and Experimental Studies for the Radiation Hardening of Silica-Based Optical Fibers. IEEE Transactions on Nuclear Science, 2014, 61, 1819-1825.	1.2	23
26	Solâ€“gel derived copper-doped silica glass as a sensitive material for X-ray beam dosimetry. Optical Materials, 2016, 51, 104-109.	1.7	22
27	Integration of Optical Fibers in Megajoule Class Laser Environments: Advantages and Limitations. IEEE Transactions on Nuclear Science, 2012, 59, 1317-1322.	1.2	21
28	Potential of Copper- and Cerium-Doped Optical Fiber Materials for Proton Beam Monitoring. IEEE Transactions on Nuclear Science, 2017, 64, 567-573.	1.2	20
29	Radioluminescence and Optically Stimulated Luminescence Responses of a Cerium-Doped Sol-Gel Silica Glass Under X-Ray Beam Irradiation. IEEE Transactions on Nuclear Science, 2018, 65, 1591-1597.	1.2	20
30	Growth and Decay Kinetics of Radiation-Induced Attenuation in Bulk Optical Materials. IEEE Transactions on Nuclear Science, 2018, 65, 1612-1618.	1.2	20
31	Radiation-induced defects in fluorine-doped silica-based optical fibers: Influence of a pre-loading with H2. Journal of Non-Crystalline Solids, 2009, 355, 1089-1091.	1.5	19
32	Origin of the visible absorption in radiation-resistant optical fibers. Optical Materials Express, 2013, 3, 1769.	1.6	19
33	Influence of photo-inscription conditions on the radiation-response of fiber Bragg gratings. Optics Express, 2015, 23, 8659.	1.7	18
34	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, .	1.1	17
35	Extreme Radiation Sensitivity of Ultra-Low Loss Pure-Silica-Core Optical Fibers at Low Dose Levels and Infrared Wavelengths. Sensors, 2020, 20, 7254.	2.1	17
36	Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. IEEE Transactions on Nuclear Science, 2020, 67, 1643-1649.	1.2	16

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37	Radiation Characterization of Optical Frequency Domain Reflectometry Fiber-Based Distributed Sensors. IEEE Transactions on Nuclear Science, 2016, 63, 1688-1693.	1.2	15
38	Effects of densification atmosphere on optical properties of ionic copper-activated solâ€“gel silica glass: towards an efficient radiation dosimeter. Materials Research Express, 2014, 1, 026203.	0.8	14
39	Steady-State Radiation-Induced Effects on the Performances of BOTDA and BOTDR Optical Fiber Sensors. IEEE Transactions on Nuclear Science, 2018, 65, 111-118.	1.2	14
40	Combined Temperature Radiation Effects and Influence of Drawing Conditions on Phosphorousâ€Doped Optical Fibers. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800553.	0.8	13
41	X-Ray, Proton, and Electron Radiation Effects on Type I Fiber Bragg Gratings. IEEE Transactions on Nuclear Science, 2018, 65, 1632-1638.	1.2	12
42	Temperature-Dependent Modeling of Cladding-Pumped <inline-formula> <tex-math notation="LaTeX">$ext{Er}^{3+}$</tex-math> </inline-formula>/<inline-formula> <tex-math notation="LaTeX">$ext{Yb}^{3+}$</tex-math> </inline-formula>-Codoped Fiber Amplifiers for Space Applications. Journal of Lightwave Technology, 2018, 36, 3594-3602.	2.7	12
43	Operating Temperature Range of Phosphorous-Doped Optical Fiber Dosimeters Exploiting Infrared Radiation-Induced Attenuation. IEEE Transactions on Nuclear Science, 2021, 68, 906-912.	1.2	12
44	Radiation Effects on Aluminosilicate Optical Fibers: Spectral Investigations From the Ultraviolet to Nearâ€Infrared Domains. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800485.	0.8	11
45	Spectroscopic Study of $gamma$-Ray and Pulsed X-Ray Radiation-Induced Point Defects in Pure-Silica-Core Optical Fibers. IEEE Transactions on Nuclear Science, 2007, 54, 1136-1142.	1.2	10
46	Radiation Effects on Pure-Silica Multimode Optical Fibers in the Visible and Near-Infrared Domains: Influence of OH Groups. Applied Sciences (Switzerland), 2021, 11, 2991.	1.3	10
47	Investigation of the Incorporation of Cerium Ions in MCVD-Silica Glass Preforms for Remote Optical Fiber Radiation Dosimetry. Sensors, 2021, 21, 3362.	2.1	10
48	Atmospheric Neutron Monitoring through Optical Fiber-Based Sensing. Sensors, 2020, 20, 4510.	2.1	9
49	Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. IEEE Transactions on Nuclear Science, 2020, 67, 1650-1657.	1.2	9
50	Photobleaching Effect on Infrared Radiation-Induced Attenuation of Germanosilicate Optical Fibers at MGy Dose Levels. IEEE Transactions on Nuclear Science, 2021, 68, 1688-1693.	1.2	9
51	Temperature Dependence of Low-Dose Radiation-Induced Attenuation of Germanium-Doped Optical Fiber at Infrared Wavelengths. IEEE Transactions on Nuclear Science, 2022, 69, 512-517.	1.2	9
52	6-MeV Electron Exposure Effects on OFDR-Based Distributed Fiber-Based Sensors. IEEE Transactions on Nuclear Science, 2018, 65, 1598-1603.	1.2	8
53	Radiation and High Temperature Effects on Regenerated Fiber Bragg Grating. Journal of Lightwave Technology, 2019, 37, 4763-4769.	2.7	8
54	Cu/Ce-co-Doped Silica Glass as Radioluminescent Material for Ionizing Radiation Dosimetry. Materials, 2020, 13, 2611.	1.3	8

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55	Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. IEEE Transactions on Nuclear Science, 2020, 67, 1658-1662.	1.2	8
56	Solâ€“Gel Waveguide-Based Sensor for Structural Health Monitoring on Large Surfaces in Aerospace Domain. Aerospace, 2021, 8, 109.	1.1	8
57	Temperature Influence on the Radiation Responses of Erbiumâ€Doped Fiber Amplifiers. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100002.	0.8	8
58	Combined Temperature and Radiation Effects on the Gain of Er- and Erâ€“Yb-Doped Fiber Amplifiers. IEEE Transactions on Nuclear Science, 2021, 68, 793-800.	1.2	8
59	Pulsed Xâ€Ray Radiation Responses of Solarizationâ€Resistant Optical Fibers. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800487.	0.8	7
60	Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. IEEE Transactions on Nuclear Science, 2020, 67, 289-295.	1.2	7
61	Optical responses of a copper-activated sol-gel silica glass under low-dose and low-dose rate X-ray exposures. OSA Continuum, 2019, 2, 563.	1.8	7
62	Photobleaching Effect on the Radiationâ€Induced Attenuation of an Ultralow Loss Optical Fiber at Telecommunication Wavelengths. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100518.	0.8	6
63	Optical Fiber-Based Monitoring of X-ray Pulse Series from a Linear Accelerator. Radiation, 2022, 2, 17-32.	0.6	6
64	Theoretical Investigation of Thermal Effects in High Power Er 3+ /Yb 3+ â€•Codoped Doubleâ€Clad Fiber Amplifiers for Space Applications. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800582.	0.8	5
65	Radiation-Response of Fiber Bragg Gratings at Low Temperatures. IEEE Transactions on Nuclear Science, 2020, 67, 1637-1642.	1.2	5
66	Temperature Effect on the Radioluminescence of Cu-, Ce-, and CuCe-Doped Silica-Based Fiber Materials. IEEE Transactions on Nuclear Science, 2021, 68, 1782-1787.	1.2	5
67	Combined Experimental and Simulation Study of the Fiber Composition Effects on Its Brillouin Scattering Signature. Journal of Lightwave Technology, 2019, 37, 4619-4624.	2.7	4
68	Regeneration of Fiber Bragg Gratings and Their Responses Under X-Rays. IEEE Transactions on Nuclear Science, 2021, 68, 1681-1687.	1.2	4
69	Temperature Dependence of Radiation Induced Attenuation of Aluminosilicate Optical Fiber. IEEE Transactions on Nuclear Science, 2022, 69, 1515-1520.	1.2	4
70	Comparison between the UV and X-ray Photosensitivities of Hybrid TiO2-SiO2 Thin Layers. Materials, 2020, 13, 3730.	1.3	3
71	Impact of Î³-rays Irradiation on Hybrid TiO2-SiO2 Sol-Gel Films Doped with RHODAMINE 6G. Materials, 2021, 14, 5754.	1.3	3
72	Optical fibers under irradiation: quantitative assessment of the energy distribution of radiation-induced trapped states. , 2020, , .		3

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73	Pulsed Xâ€Ray Radiation Response of Ultralow Loss Pureâ€Silicaâ€Core Optical Fibers. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100519.	0.8	3
74	X-Ray Radioluminescence in Diversely Doped Multimode Silica-Based Optical Fibers. IEEE Transactions on Nuclear Science, 2022, 69, 1625-1632.	1.2	3
75	Toward Confocal Chromatic Sensing in Nuclear Reactors: <i>In Situ</i> Optical Refractive Index Measurements of Bulk Glass. IEEE Transactions on Nuclear Science, 2022, 69, 722-730.	1.2	3
76	Brillouin scattering based sensor in high gamma dose environment: design and optimization of optical fiber for long-term distributed measurement. Proceedings of SPIE, 2012, , .	0.8	2
77	Distributed Temperature and Strain Fiber-Based Sensing in Radiation Environment. IEEE Transactions on Nuclear Science, 2021, 68, 1675-1680.	1.2	2
78	Combined Radiations and Temperature Effects on FBGs Photo-inscribed by Femtosecond Laser in Radiation-Hardened Optical Fibers. , 2018, , .		2
79	Integration of optical fibers in radiative environments: Advantages and limitations. , 2011, , .		1
80	Investigation by Thermoluminescence of the Ionization and Annealing Processes in Irradiated Ge-Doped Silica Fiber Preform. IEEE Transactions on Nuclear Science, 2021, 68, 1556-1564.	1.2	1
81	Coupled radiation and temperature effects on Erbium-doped fiber amplifiers. , 2020, , .		1
82	Multi-Mode Interferometry: Application to TiO2â€“SiO2 Sol-Gel Waveguide-Based Sensing in the Aerospace Domain. Aerospace, 2021, 8, 401.	1.1	1
83	Photocycle of point defects in highly- and weakly-germanium doped silica revealed by transient absorption measurements with femtosecond tunable pump. Scientific Reports, 2022, 12, .	1.6	1
84	Recent Advances in Radiation-Hardened Fiber-Optic Amplifiers for Space-based Laser Communications. , 2021, , .		0
85	Optimization of the Radiation Response of Backup Optical Fiber Amplifiers for Space Missions. IEEE Transactions on Nuclear Science, 2022, 69, 1500-1505.	1.2	0
86	<i>In Situ</i> Optical Characterization of Bulk Optical Glasses Under Protons and X-Rays. IEEE Transactions on Nuclear Science, 2022, 69, 1492-1499.	1.2	0
87	O2 Loaded Germanosilicate Optical Fibers: Experimental In Situ Investigation and Ab Initio Simulation Study of GLPC Evolution under Irradiation. Applied Sciences (Switzerland), 2022, 12, 3916.	1.3	0