Antonino Alessi

List of Publications by Year
in descending order

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91 papers	1,479 citations	361413 20 h-index	361022 35 g-index
92 all docs	92 docs citations	92 times ranked	1407 citing authors

#	Article	IF	Citations
1	Overview of radiation induced point defects in silica-based optical fibers. Reviews in Physics, 2019, 4, 100032.	8.9	208
2	Decomposition Process of Carboxylate MOF HKUST-1 Unveiled at the Atomic Scale Level. Journal of Physical Chemistry C, 2016, 120, 12879-12889.	3.1	99
3	Raman and IR investigation of silica nanoparticles structure. Journal of Non-Crystalline Solids, 2013, 362, 20-24.	3.1	64
4	Qualification and Calibration of Single-Mode Phosphosilicate Optical Fiber for Dosimetry at CERN. Journal of Lightwave Technology, 2019, 37, 4643-4649.	4.6	62
5	Structure of the FeBTC Metalâ€“Organic Framework: A Model Based on the Local Environment Study. Journal of Physical Chemistry C, 2015, 119, 7826-7830.	3.1	59
6	Investigation by Raman Spectroscopy of the Decomposition Process of HKUST-1 upon Exposure to Air. Journal of Spectroscopy, 2016, 2016, 1-7.	1.3	56
7	Structural properties of core and surface of silica nanoparticles investigated by Raman spectroscopy. Journal of Raman Spectroscopy, 2013, 44, 810-816.	2.5	51
8	Influence of Drawing Conditions on the Properties and Radiation Sensitivities of Pure-Silica-Core Optical Fibers. Journal of Lightwave Technology, 2012, 30, 1726-1732.	4.6	46
9	Evolution of Photo-induced defects in Ge-doped fiber/preform: influence of the drawing. Optics Express, 2011, 19, 11680.	3.4	42
10	A rapid and eco-friendly route to synthesize graphene-doped silica nanohybrids. Journal of Alloys and Compounds, 2016, 664, 428-438.	5.5	39
11	Distributed Optical Fiber Radiation Sensing in the Proton Synchrotron Booster at CERN. IEEE Transactions on Nuclear Science, 2018, 65, 1639-1644.	2.0	38
12	Transient Radiation Responses of Optical Fibers: Influence of MCVD Process Parameters. IEEE Transactions on Nuclear Science, 2012, 59, 2894-2901.	2.0	36
13	Structural and thermal stability of graphene oxide-silica nanoparticles nanocomposites. Journal of Alloys and Compounds, 2017, 695, 2054-2064.	5.5	32
14	X-ray irradiation effects on fluorine-doped germanosilicate optical fibers. Optical Materials Express, 2014, 4, 1683.	3.0	28
15	Refractive index change dependence on Ge(1) defects in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math>-irradiated Ge-doped silica. Physical Review B, 2009, 80, .	3.2	27
16	Radiation Response of Ce-Codoped Germanosilicate and Phosphosilicate Optical Fibers. IEEE Transactions on Nuclear Science, 2016, 63, 2058-2064.	2.0	27
17	Interstitial O2 distribution in amorphous SiO2 nanoparticles determined by Raman and photoluminescence spectroscopy. Journal of Applied Physics, 2013, 114, .	2.5	25
18	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

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19	Influence of Ge doping level on the EPR signal of Ge(1), Ge(2) and E'Ge defects in Ge-doped silica. Journal of Non-Crystalline Solids, 2011, 357, 1900-1903.	3.1	22
20	X-ray irradiation effects on a multistep Ge-doped silica fiber produced using different drawing conditions. Journal of Non-Crystalline Solids, 2011, 357, 1966-1970.	3.1	21
21	Effect of oxygen deficiency on the radiation sensitivity of sol-gel Ge-doped amorphous SiO2. European Physical Journal B, 2008, 61, 25-31.	1.5	20
22	Entrapping of O₂ Molecules in Nanostructured Silica Probed by Photoluminescence. Journal of Physical Chemistry C, 2013, 117, 2616-2622.	3.1	19
23	Dosimetry Mapping of Mixed-Field Radiation Environment Through Combined Distributed Optical Fiber Sensing and FLUKA Simulation. IEEE Transactions on Nuclear Science, 2019, 66, 299-305.	2.0	18
24	Twofold co-ordinated Ge defects induced by gamma-ray irradiation in Ge-doped SiO_2. Optics Express, 2008, 16, 4895.	3.4	17
25	Influence of the Manufacturing Process on the Radiation Sensitivity of Fluorine-Doped Silica-Based Optical Fibers. IEEE Transactions on Nuclear Science, 2012, 59, 760-766.	2.0	17
26	Gamma and x-ray irradiation effects on different Ge and Ge/F doped optical fibers. Journal of Applied Physics, 2015, 118, .	2.5	17
27	Formation of optically active oxygen deficient centers in Ge-doped SiO2 by Î³- and Î²-ray irradiation. Journal of Non-Crystalline Solids, 2010, 356, 275-280.	3.1	16
28	O₂-Loading Treatment of Ge-Doped Silica Fibers: A Radiation Hardening Process. Journal of Lightwave Technology, 2016, 34, 2311-2316.	4.6	16
29	Radiation-Induced Attenuation in Single-Mode Phosphosilicate Optical Fibers for Radiation Detection. IEEE Transactions on Nuclear Science, 2018, 65, 126-131.	2.0	16
30	Photoactivated processes in optical fibers: generation and conversion mechanisms of twofold coordinated Si and Ge atoms. Nanotechnology, 2017, 28, 195202.	2.6	15
31	Near-IR- and UV-femtosecond laser waveguide inscription in silica glasses. Optical Materials Express, 2019, 9, 4624.	3.0	15
32	Dependence of the emission properties of the germanium lone pair center on Ge doping of silica. Journal of Physics Condensed Matter, 2011, 23, 015903.	1.8	13
33	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.	1.8	13
34	EPR on Radiation-Induced Defects in SiO2. , 2014, , 255-295.		13
35	Influence of fluorine on the fiber resistance studied through the nonbridging oxygen hole center related luminescence. Journal of Applied Physics, 2013, 113, 193107.	2.5	12
36	Radiation Hardened Architecture of a Single-Ended Raman-Based Distributed Temperature Sensor. IEEE Transactions on Nuclear Science, 2017, 64, 54-60.	2.0	12

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37	Infrared radiation Induced attenuation of radiation sensitive optical fibers: influence of temperature and modal propagation. Optical Fiber Technology, 2020, 55, 102166.	2.7	12
38	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.	1.8	11
39	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
40	Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers. IEEE Transactions on Nuclear Science, 2020, 67, 305-311.	2.0	10
41	Raman investigation of the drawing effects on Ge-doped fibers. Journal of Non-Crystalline Solids, 2011, 357, 24-27.	3.1	9
42	Micro-Raman investigation of X or Î³ irradiated Ge doped fibers. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1346-1349.	1.4	9
43	Correlations between Structural and Optical Properties of Peroxy Bridges from First Principles. Journal of Physical Chemistry C, 2017, 121, 4002-4010.	3.1	9
44	Optical absorption spectra of P defects in vitreous silica. Optical Materials Express, 2018, 8, 385.	3.0	9
45	Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. IEEE Transactions on Nuclear Science, 2020, 67, 1650-1657.	2.0	9
46	Isolation of the CH₃Ë™ rotor in a thermally stable inert matrix: first characterization of the gradual transition from classical to quantum behaviour at low temperatures. Physical Chemistry Chemical Physics, 2014, 16, 13360-13366.	2.8	8
47	Nearâ€IR Radiationâ€Induced Attenuation of Aluminosilicate Optical Fibers. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000807.	1.8	8
48	Phosphorous doping and drawing effects on the Raman spectroscopic properties of O = P bond in silica-based fiber and preform. Optical Materials Express, 2012, 2, 1391.	3.0	7
49	Cathodoluminescence investigation of Ge-point defects in silica-based optical fibers. Journal of Luminescence, 2016, 179, 1-7.	3.1	7
50	Resonance Raman of oxygen dangling bonds in amorphous silicon dioxide. Journal of Raman Spectroscopy, 2017, 48, 230-234.	2.5	7
51	v-P2O5 micro-clustering in P-doped silica studied by a first-principles Raman investigation. Scientific Reports, 2019, 9, 7126.	3.3	7
52	Pulsed Xâ€Ray Radiation Responses of Solarizationâ€Resistant Optical Fibers. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800487.	1.8	7
53	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
54	Optical and morphological properties of infrared emitting functionalized silica nanoparticles. Materials Chemistry and Physics, 2013, 142, 763-769.	4.0	6

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55	Cathodoluminescence Characterization of Point Defects in Optical Fibers. IEEE Transactions on Nuclear Science, 2016, , 1-1.	2.0	6
56	Concentration growth and thermal stability of Î³-ray induced germanium lone pair center in Ge-doped solâ€“gel a-SiO2. Journal of Non-Crystalline Solids, 2009, 355, 1050-1053.	3.1	5
57	Effects of Pressure, Thermal Treatment, and O₂ Loading in MCM41, MSU-H, and MSU-F Mesoporous Silica Systems Probed by Raman Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 27434-27441.	3.1	5
58	Evidence of different red emissions in irradiated germanosilicate materials. Journal of Luminescence, 2016, 177, 127-132.	3.1	5
59	Alpha and deuteron irradiation effects on silica nanoparticles. Journal of Materials Science, 2014, 49, 6475-6484.	3.7	4
60	Ge-doped silica nanoparticles: production and characterisation. Optical Materials Express, 2016, 6, 2213.	3.0	4
61	In-situ regeneration of P-doped optical fiber dosimeter. Optics Letters, 2020, 45, 5201.	3.3	4
62	Geâ€doping dependence of gammaâ€ray induced germanium lone pair centers in Geâ€doped silica. Physica Status Solidi (B): Basic Research, 2008, 245, 2128-2131.	1.5	3
63	Thermally induced structural modifications and O 2 trapping in highly porous silica nanoparticles. Materials Chemistry and Physics, 2014, 148, 956-963.	4.0	3
64	Silica nanoparticle core structure examined by the Eâ€²SiÎ³ center 29Si strong hyperfine interaction. Journal of Non-Crystalline Solids, 2015, 423-424, 41-44.	3.1	3
65	Irradiation temperature influence on the in-situ measured radiation induced attenuation of Ge-doped fibers. IEEE Transactions on Nuclear Science, 2016, , 1-1.	2.0	3
66	Coupled irradiation-temperature effects on induced point defects in germanosilicate optical fibers. Journal of Materials Science, 2017, 52, 10697-10708.	3.7	3
67	The Relevance of Point Defects in Studying Silica-Based Materials from Bulk to Nanosystems. Electronics (Switzerland), 2019, 8, 1378.	3.1	3
68	Ultraviolet-visible light-induced solarisation in silica-based optical fibres for indoor solar applications. Journal of Non-Crystalline Solids, 2021, 552, 120458.	3.1	3
69	Irradiation induced germanium lone pair centers in Ge-doped solâ€“gel SiO2: Luminescence lifetime and temperature dependence. Journal of Luminescence, 2010, 130, 1866-1871.	3.1	2
70	Confocal-micro-luminescence characterization of femtosecond laser irradiated silica and borosilicate glasses. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 251-257.	1.4	2
71	Influence of Selfâ€Trapped Holes on the Responses of Fluorineâ€Doped Multimode Optical Fibers Exposed to Low Fluences of Protons. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800547.	1.8	2
72	Characterization of Radiation-Resistant Multimode Optical Fibers for Large-Scale Procurement. IEEE Transactions on Nuclear Science, 2021, 68, 1407-1413.	2.0	2

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73	Implementation of Optical Fiber based Dosimetry at CERN. , 2018, , .		2
74	Coupled theoretical and experimental studies for the radiation hardening of silica-based optical fibers. , 2013, , .		1
75	Î²-ray irradiation effects on silica nanoparticles. IOP Conference Series: Materials Science and Engineering, 2015, 80, 012011.	0.6	1
76	Cerium Codoping Effect on the Radiation Response of Germanosilicate and Phosphosilicate Multimode Optical Fibers. , 2015, , .		1
77	Effect of irradiation temperature on the radiation induced attenuation of Ge-doped fibers. , 2016, , .		1
78	Study of point defects in as-drawn and irradiated Ge-doped optical fibers using cathodoluminescence. IOP Conference Series: Materials Science and Engineering, 2017, 169, 012006.	0.6	1
79	Spectral properties and lifetime of green emission in Î³-ray irradiated bismuth-doped silica photonic crystal fibers. Journal of Non-Crystalline Solids, 2018, 482, 100-104.	3.1	1
80	Study of silica-based intrinsically emitting nanoparticles produced by an excimer laser. Beilstein Journal of Nanotechnology, 2019, 10, 211-221.	2.8	1
81	Comparison of γ and β-ray irradiation effects in sol-gel Ge-doped SiO<inf>2</inf>. , 2009, , .		0
82	Influence of the manufacturing process on the radiation sensitivity of fluorine-doped silica-based optical fibers. , 2011, , .		0
83	Diffusion and outgassing of O<inf>2</inf> in amorphous SiO<inf>2</inf> silica nanoparticles with specific surface properties. , 2014, , .		0
84	Aging of MCM41, MSU-H and MSU-F mesoporous systems investigated through the Raman spectroscopy. , 2014, , .		0
85	Properties of HO 2 â€¢ radicals induced by Î³-ray irradiation in silica nanoparticles. Journal of Non-Crystalline Solids, 2014, 405, 116-123.	3.1	0
86	Radiation Induced Attenuation Kinetics in Pure-Silica-Core Optical Fibers during Successive Irradiations. , 2015, , .		0
87	Investigation of point defects in silica-based optical fibers by cathodoluminescence. , 2016, , .		0
88	Irradiation temperature effects on the induced point defects in Ge-doped optical fibers.. IOP Conference Series: Materials Science and Engineering, 2017, 169, 012008.	0.6	0
89	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
90	Structured blue emission in Bismuth doped fibers. Optical Materials, 2018, 84, 663-667.	3.6	0

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91	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.	2.5	0