Alessandro Lauria

List of Publications by Year
in descending order

66	1,461	394286	330025
papers	citations	19 h-index	37 g-index

68	68	68	2233
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ce3+-doped fibers for remote radiation dosimetry. Applied Physics Letters, 2004, 85, 6356-6358.	1.5	123
2	Probing Solventâ€“Ligand Interactions in Colloidal Nanocrystals by the NMR Line Broadening. Chemistry of Materials, 2018, 30, 5485-5492.	3.2	117
3	25th Anniversary Article: Metal Oxide Particles in Materials Science: Addressing All Length Scales. Advanced Materials, 2014, 26, 235-257.	11.1	112
4	Transparent and tough bulk composites inspired by nacre. Nature Communications, 2019, 10, 2794.	5.8	109
5	Multifunctional Role of Rare Earth Doping in Optical Materials: Nonaqueous Solâ€“Gel Synthesis of Stabilized Cubic HfO₂ Luminescent Nanoparticles. ACS Nano, 2013, 7, 7041-7052.	7.3	84
6	Influence of carbon enrichment on electrical conductivity and processing of polycarbosilane derived ceramic for MEMS applications. Journal of the European Ceramic Society, 2014, 34, 3559-3570.	2.8	61
7	Fully inorganic oxide-in-oxide ultraviolet nanocrystal light emitting devices. Nature Communications, 2012, 3, 690.	5.8	56
8	Size-Dependent Luminescence in HfO₂ Nanocrystals: Toward White Emission from Intrinsic Surface Defects. Chemistry of Materials, 2016, 28, 3245-3253.	3.2	54
9	Energy transfer to erbium ions from wide-band-gapSnO2nanocrystals in silica. Physical Review B, 2006, 73, .	1.1	46
10	Effect of reducing sintering atmosphere on Ce-doped solâ€“gel silica glasses. Journal of Non-Crystalline Solids, 2009, 355, 1140-1144.	1.5	46
11	Ultraviolet free-exciton light emission in Er-passivated SnO2 nanocrystals in silica. Applied Physics Letters, 2006, 89, 153126.	1.5	41
12	Optical absorption spectra of Fe²⁺ and Fe³⁺ in aqueous solutions and hydrated crystals. Physica Status Solidi (B): Basic Research, 2007, 244, 4669-4677.	0.7	39
13	Influence of Treatment Conditions on the Chemical Oxidative Activity of H₂SO₄/H₂O₂ Mixtures for Modulating the Topography of Titanium. Advanced Engineering Materials, 2009, 11, B227.	1.6	35
14	Luminescent carbon dots obtained from polymeric waste. Journal of Cleaner Production, 2020, 262, 121288.	4.6	29
15	Incorporation of Ce3+ in crystalline Gd-silicate nanoclusters formed in silica. Journal of Luminescence, 2012, 132, 461-466.	1.5	28
16	Non-aqueous solâ€“gel synthesis of hybrid rare-earth-doped Î³-Ga₂O₃nanoparticles with multiple organicâ€“inorganic-ionic light-emission features. Journal of Materials Chemistry C, 2015, 3, 41-45.	2.7	27
17	Growth of SnO2nanocrystals controlled by erbium doping in silica. Nanotechnology, 2006, 17, 4031-4036.	1.3	26
18	Demonstration of cellular imaging by using luminescent and anti-cytotoxic europium-doped hafnia nanocrystals. Nanoscale, 2018, 10, 7933-7940.	2.8	24

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19	Transparent Nacreâ€like Composites Toughened through Mineral Bridges. Advanced Functional Materials, 2020, 30, 2002149.	7.8	24
20	Optical and Structural Properties of Pb and Ce Doped ${hbox {SrHfO}}_{3}$ Powders. IEEE Transactions on Nuclear Science, 2010, 57, 1245-1250.	1.2	19
21	High-energy shift of the Urbach ultraviolet absorption from attenuated dynamical disorder in fluorine modified sol-gel silica. Applied Physics Letters, 2007, 91, .	1.5	17
22	Confined diffusion of erbium excitations inSnO2nanoparticles embedded in silica: A time-resolved infrared luminescence study. Physical Review B, 2009, 79, .	1.1	17
23	Multifunctional microparticles with uniform magnetic coatings and tunable surface chemistry. RSC Advances, 2014, 4, 62483-62491.	1.7	17
24	Structure and morphology of scintillating Ce- and Pb-doped strontium hafnate powders. Optical Materials, 2010, 32, 1356-1359.	1.7	16
25	Intrinsic and impurity-induced emission bands in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SrHfO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow> Physical Review B, 2010, 82, .	1.1	16
26	Tracking of Short Distance Transport Pathways in Biological Tissues by Ultra-Small Nanoparticles. Frontiers in Chemistry, 2018, 6, 28.	1.8	16
27	Kinetics of luminescence of interface defects and resonant Er3+ ions in nanostructured SnO2:SiO2. Solid State Communications, 2006, 138, 574-576.	0.9	15
28	Effect of deep traps on the optical properties of Tb3+ doped sol-gel silica. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1056-1059.	0.8	15
29	Thermally-induced ionization of the Ce3+ excited state in SrHfO3 microcrystalline phosphor. Optical Materials, 2010, 33, 149-152.	1.7	15
30	SnO2 nanoparticles in silica: Nanosized tools for femtosecond-laser machining of refractive index patterns. Applied Physics Letters, 2006, 88, 131912.	1.5	14
31	Evidences of Rare-Earth Nanophases Embedded in Silica Using Vibrational Spectroscopy. IEEE Transactions on Nuclear Science, 2010, 57, 1361-1369.	1.2	14
32	Solâ€“Gel Strategy for Self-Induced Fluorination and Dehydration of Silica with Extended Vacuum Ultraviolet Transmittance and Radiation Hardness. Chemistry of Materials, 2012, 24, 677-681.	3.2	14
33	Nonaqueous Solâ€“Gel Synthesis of Anatase Nanoparticles and Their Electrophoretic Deposition in Porous Alumina. Langmuir, 2017, 33, 12404-12418.	1.6	14
34	The Bright Xâ€Ray Stimulated Luminescence of HfO₂ Nanocrystals Activated by Ti Ions. Advanced Optical Materials, 2020, 8, 1901348.	3.6	13
35	Eu Incorporation into Solâ€“Gel Silica for Photonic Applications: Spectroscopic and TEM Evidences of Î±-Quartz and Eu Pyrosilicate Nanocrystal Growth. Journal of Physical Chemistry C, 2013, 117, 26831-26848.	1.5	12
36	Diffusion-driven and size-dependent phase changes of gallium oxide nanocrystals in a glassy host. Physical Chemistry Chemical Physics, 2015, 17, 5141-5150.	1.3	11

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37	A crystal-field study of erbium oxide and fluoride. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1209-1212.	0.8	10
38	Radio-luminescence spectral features and fast emission in hafnium dioxide nanocrystals. Physical Chemistry Chemical Physics, 2018, 20, 15907-15915.	1.3	10
39	Ce-doped SiO 2 optical fibers for remote radiation sensing and measurement. , 2009, , .		9
40	Prompt and delayed recombination mechanisms in Lu4Hf3O12 nanophosphors. Optical Materials, 2011, 34, 228-233.	1.7	9
41	Radio-luminescence efficiency and rare-earth dispersion in Tb-doped silica glasses. Radiation Measurements, 2007, 42, 784-787.	0.7	8
42	Role of sol-gel networking and fluorine doping in the silica Urbach energy. Journal of Non-Crystalline Solids, 2011, 357, 1838-1841.	1.5	8
43	Trapping states and excited state ionization of the Ce3+ activator in the SrHfO3 host. Chemical Physics Letters, 2013, 556, 89-93.	1.2	7
44	Tunable Dielectric Function in Electricâ€Responsive Glass with Treeâ€Like Percolating Pathways of Chargeable Conductive Nanoparticles. Advanced Functional Materials, 2010, 20, 3511-3518.	7.8	6
45	Acetateâ€“citrate gel combustion: a strategy for the synthesis of nanosized lutetium hafnate phosphor powders. Journal of Materials Chemistry, 2011, 21, 8975.	6.7	6
46	Synthesis and luminescence of Cs₂HfCl₆ micro- and Cs₂HfF₆ nanoparticles. Journal of Materials Chemistry C, 2022, 10, 4383-4392.	2.7	6
47	Oxygen-deficiency effect on thermal poling of silica-based glasses. Solid State Communications, 2005, 136, 300-303.	0.9	5
48	Solâ€“gel synthesis of Ge nanophases in silica. Solid State Communications, 2007, 144, 429-432.	0.9	5
49	Erbium-induced blurring of the fractal surface of SnO2 nanocrystals grown in silica. Journal of Nanoparticle Research, 2008, 10, 737-743.	0.8	5
50	Study of the absorption edge of SnO2 nanoparticles embedded in silica films. Journal of Non-Crystalline Solids, 2011, 357, 1888-1891.	1.5	5
51	FTIR spectroscopy to investigate the role of fluorine on the optical properties of pure and rare earth-doped solâ€“gel silica. Journal of Non-Crystalline Solids, 2007, 353, 564-567.	1.5	4
52	Luminescence and defects of Yb3+-doped solâ€“gel silica glasses. Journal of Non-Crystalline Solids, 2007, 353, 486-489.	1.5	4
53	SiO 2 -based scintillating fibers for x-ray detectors. , 2004, 5198, 298.		3
54	Tunable Dielectric Function in Electric-Responsive Glass with Tree-Like Percolating Pathways of Chargeable Conductive Nanoparticles. Advanced Functional Materials, 2010, 20, 3510-3510.	7.8	3

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55	Raman study of fluorine effects on silica with embedded SnO2 nanoparticles. Journal of Non-Crystalline Solids, 2009, 355, 1149-1151.	1.5	2
56	Charge Compensation in Europium-Doped Hafnia Nanoparticles: Solvothermal Synthesis and Colloidal Dispersion. Crystals, 2021, 11, 1042.	1.0	2
57	Low-temperature radio- and thermo-stimulated luminescence of SnO2-doped silica. Journal of Non-Crystalline Solids, 2004, 345-346, 306-310.	1.5	1
58	Nanostructured SnO 2 -SiO 2 glassceramic thin films as electroluminescent material: an impedance spectroscopy analysis. Proceedings of SPIE, 2007, , .	0.8	1
59	Native and radiation-induced two-fold coordinated sites in nanostructured SnO2:SiO2. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 822-825.	0.8	1
60	Optical activity of Sn-variants of oxygen deficient centers in fluorine-modified silica. Journal of Non-Crystalline Solids, 2009, 355, 1024-1027.	1.5	1
61	Vibrational spectroscopy of silica glasses doped with Eu3+ions. IOP Conference Series: Materials Science and Engineering, 2010, 15, 012033.	0.3	1
62	Ce-doped SiO 2 glass as scintillating material: variation on the synthesis procedure for the improvement of material properties. , 2006, , .		0
63	Light emission and structural properties of undoped and erbium-doped nanostructured silica with SnO 2 nanoparticles. Proceedings of SPIE, 2007, , .	0.8	0
64	Ge nanoparticles growth in Ge-doped sol-gel silica by e-beam exposure. , 2008, , .		0
65	Correction to â€œEvidences of Rare-Earth Nanophases Embedded in Silica Using Vibrational Spectroscopyâ€•[Jun 10 1361-1369. IEEE Transactions on Nuclear Science, 2010, 57, 2405-2405.	1.2	0
66	Heat-Induced Transformation of Luminescent, Size Tuneable, Anisotropic Eu:Lu(OH)2Cl Microparticles to Micro-Structurally Controlled Eu:Lu2O3 Microplatelets. Crystals, 2021, 11, 992.	1.0	0