Roberto Lorenzi

List of Publications by Year
in descending order

68	979	471509 17	477307 29
papers	citations	h-index	g-index

68	68	68	1477
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Defect-assisted photocatalytic activity of glass-embedded gallium oxide nanocrystals. Journal of Colloid and Interface Science, 2022, 608, 2830-2838.	9.4	6
2	Physicochemical properties of Pyr13TFSI-NaTFSI electrolyte for sodium batteries. Electrochimica Acta, 2022, 412, 140123.	5.2	11
3	A Multi-Methodological Investigation of Natural and Synthetic Red Beryl Gemstones. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Ove	2.0	1
4	Waste Face Surgical Mask Transformation into Crude Oil and Nanostructured Electrocatalysts for Fuel Cells and Electrolyzers. ChemSusChem, 2022, 15, .	6.8	26
5	Promising Electrocatalytic Water and Methanol Oxidation Reaction Activity by Nickel Doped Hematite/Surface Oxidized Carbon Nanotubes Composite Structures. ChemPlusChem, 2022, 87, e202200036.	2.8	5
6	Valorization of the inedible pistachio shells into nanoscale transition metal and nitrogen codoped carbon-based electrocatalysts for hydrogen evolution reaction and oxygen reduction reaction. Materials for Renewable and Sustainable Energy, 2022, 11, 131-141.	3.6	20
7	Photoluminescence of Gallate Glass-Ceramics: Al2O3 Influence. Glass and Ceramics (English) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.6	1
8	Influence of the fiber drawing process on mechanical and vibrational properties of sol-gel silica glass. Journal of Non-Crystalline Solids, 2021, 555, 120534.	3.1	4
9	Lenticular Ga-oxide nanostructures in thin amorphous germanosilicate layers - Size control and dimensional constraints. Materials and Design, 2021, 204, 109667.	7.0	3
10	Historical glass mosaic tesserae: a multi-analytical approach for their characterization. European Physical Journal Plus, 2021, 136, 1.	2.6	1
11	A physico-chemical investigation of highly concentrated potassium acetate solutions towards applications in electrochemistry. Physical Chemistry Chemical Physics, 2021, 23, 1139-1145.	2.8	19
12	A new double layer super-capacitor made by free-standing activated carbon membranes and highly concentrated potassium acetate solutions. Electrochimica Acta, 2020, 364, 137323.	5.2	11
13	FeTiO 3 as Anode Material for Sodiumâ€ion Batteries: from Morphology Control to Decomposition. ChemElectroChem, 2020, 7, 1713-1722.	3.4	9
14	Responsive charge transport in wide-band-gap oxide films of nanostructured amorphous alkali-gallium-germanosilicate. Journal of Materials Chemistry C, 2019, 7, 7768-7778.	5.5	2
15	Pre-crystallization heat treatment and infrared luminescence enhancement in Ni2+-doped transparent glass-ceramics. Journal of Non-Crystalline Solids, 2019, 515, 42-49.	3.1	15
16	Infrared spectroscopic properties of low-phonon lanthanide-doped KLuS2 crystals. Journal of Luminescence, 2019, 211, 100-107.	3.1	10
17	A multidisciplinary non-destructive study of historical pipe organ fragments. Materials Characterization, 2019, 148, 317-322.	4.4	3
18	Radio- and photoluminescence properties of Ce/Tb co-doped glasses with huntite-like composition. Optical Materials, 2018, 78, 247-252.	3.6	7

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19	Visible-light excited red-emitting vacancies at carbon interstitials as indicators of irradiated and annealed Type Ia diamonds. Diamond and Related Materials, 2018, 90, 188-193.	3.9	1
20	Competition between green self-trapped-exciton and red non-bridging-oxygen emissions in SiO2 under interband excitation. Communications Physics, 2018, 1, .	5.3	13
21	Surface Characterization of TiO₂ Polymorphic Nanocrystals through ¹H-TD-NMR. Langmuir, 2018, 34, 9460-9469.	3.5	19
22	Donorâ€“Acceptor Control in Grownâ€inâ€Glass Gallium Oxide Nanocrystals by Crystallizationâ€driven Heterovalent Doping. ChemPhysChem, 2017, 18, 662-669.	2.1	7
23	Disclosing mineralogical phases in medioeval iron nails by non-destructive neutron techniques. Archaeological and Anthropological Sciences, 2017, 9, 515-522.	1.8	5
24	â€œQuantizedâ€•Doping of Individual Colloidal Nanocrystals Using Size-Focused Metal Quantum Clusters. ACS Nano, 2017, 11, 6233-6242.	14.6	21
25	Spectro-electrochemical Probing of Intrinsic and Extrinsic Processes in Exciton Recombination in Iâ€“IIIâ€“VI₂ Nanocrystals. Nano Letters, 2017, 17, 4508-4517.	9.1	60
26	Augmented excitation cross section of gadolinium ions in nanostructured glasses. Optics Letters, 2017, 42, 2419.	3.3	5
27	Red emission doublets in diamond from vacancies interacting with interstitial carbon aggregates in tunneling configurations. Carbon, 2017, 120, 294-303.	10.3	2
28	Luminescence mechanisms of defective ZnO nanoparticles. Physical Chemistry Chemical Physics, 2016, 18, 16237-16244.	2.8	89
29	Size-Dependent Luminescence in HfO₂ Nanocrystals: Toward White Emission from Intrinsic Surface Defects. Chemistry of Materials, 2016, 28, 3245-3253.	6.7	54
30	Permanent excimer superstructures by supramolecular networking of metal quantum clusters. Science, 2016, 353, 571-575.	12.6	54
31	Thermochromic Latentâ€Pigmentâ€Based Timeâ€“Temperature Indicators for Perishable Goods. Advanced Optical Materials, 2015, 3, 1164-1168.	7.3	33
32	Nucleation-controlled vacancy formation in light-emitting wide-band-gap oxide nanocrystals in glass. Journal of Materials Chemistry C, 2015, 3, 4380-4387.	5.5	5
33	Food Safety: Thermochromic Latent-Pigment-Based Time-Temperature Indicators for Perishable Goods (Advanced Optical Materials 9/2015). Advanced Optical Materials, 2015, 3, 1163-1163.	7.3	0
34	Diffusion-driven and size-dependent phase changes of gallium oxide nanocrystals in a glassy host. Physical Chemistry Chemical Physics, 2015, 17, 5141-5150.	2.8	11
35	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.	5.5	27
36	Light-emitting Ga-oxide nanocrystals in glass: a new paradigm for low-cost and robust UV-to-visible solar-blind converters and UV emitters. Nanoscale, 2014, 6, 1763-1774.	5.6	33

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37	Crystallization of nanoheterogeneities in Ga-containing germanosilicate glass: Dielectric and refractive response changes. Acta Materialia, 2014, 70, 19-29.	7.9	9
38	Native amorphous nanoheterogeneity in gallium germanosilicates as a tool for driving Ga₂O₃nanocrystal formation in glass for optical devices. Nanoscale, 2013, 5, 299-306.	5.6	41
39	Broadband luminescence in nanostructured glasses. Glass and Ceramics (English Translation of) Tj ETQq1 1 0.784314 rgBT /Overlock	0.6	2
40	Local crystallization of glasses aided by copper vapor laser. Glass and Ceramics (English Translation) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.6	4
41	Broadband infrared light-emitting patterns in optical glass by laser-induced nanostructuring of NiO-doped alkali-gallium germanosilicates. Optics Letters, 2013, 38, 492.	3.3	16
42	Spatially selective Au nanoparticle growth in laser-quality glass controlled by UV-induced phosphate-chain cross-linkage. Nanotechnology, 2013, 24, 225302.	2.6	16
43	Mn sites in cordierite - electron paramagnetic resonance, luminescence, and optical absorption analysis. European Journal of Mineralogy, 2012, 24, 447-456.	1.3	10
44	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.	6.7	14
45	Nickel-assisted growth and selective doping of spinel-like gallium oxide nanocrystals in germano-silicate glasses for infrared broadband light emission. Nanotechnology, 2012, 23, 015708.	2.6	39
46	Microfluorescence Analysis of Nanostructuring Inhomogeneity in Optical Fibers with Embedded Gallium Oxide Nanocrystals. Microscopy and Microanalysis, 2012, 18, 259-265.	0.4	13
47	Fully inorganic oxide-in-oxide ultraviolet nanocrystal light emitting devices. Nature Communications, 2012, 3, 690.	12.8	56
48	Structural rearrangement at the yttrium-depleted surface of HCl-processed yttrium aluminosilicate glass for 90Y-microsphere brachytherapy. Materials Chemistry and Physics, 2012, 133, 24-28.	4.0	10
49	Study of the absorption edge of SnO2 nanoparticles embedded in silica films. Journal of Non-Crystalline Solids, 2011, 357, 1888-1891.	3.1	5
50	Role of sol-gel networking and fluorine doping in the silica Urbach energy. Journal of Non-Crystalline Solids, 2011, 357, 1838-1841.	3.1	8
51	The role of networking in the optical anisotropy of hot-extruded calcium phosphate glass. Materials Chemistry and Physics, 2011, 128, 12-15.	4.0	3
52	Optical microfiber passive devices and sensors. Proceedings of SPIE, 2011, , .	0.8	0
53	In-line absorption sensor based on coiled optical microfiber. Applied Physics Letters, 2011, 98, .	3.3	38
54	Optical microfiber devices and sensors. , 2011, , .		0

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55	Updating of the interpretation of the optical absorption and emission of Verneuil synthetic and natural metamorphic blue sapphire: the role of V2+, V3+and Cr2+. IOP Conference Series: Materials Science and Engineering, 2010, 15, 012087.	0.6	4
56	Tunable Dielectric Function in Electricâ€Responsive Glass with Treeâ€Like Percolating Pathways of Chargeable Conductive Nanoparticles. Advanced Functional Materials, 2010, 20, 3511-3518.	14.9	6
57	Tunable Dielectric Function in Electric-Responsive Glass with Tree-Like Percolating Pathways of Chargeable Conductive Nanoparticles. Advanced Functional Materials, 2010, 20, 3510-3510.	14.9	3
58	Luminescence study of transition metal ions in natural magmatic and metamorphic yellow sapphires. IOP Conference Series: Materials Science and Engineering, 2010, 15, 012086.	0.6	4
59	Optical activity of Sn-variants of oxygen deficient centers in fluorine-modified silica. Journal of Non-Crystalline Solids, 2009, 355, 1024-1027.	3.1	1
60	Raman study of fluorine effects on silica with embedded SnO2 nanoparticles. Journal of Non-Crystalline Solids, 2009, 355, 1149-1151.	3.1	2
61	Electric field induced structural modification and second order optical nonlinearity in potassium niobium silicate glass. Journal of Non-Crystalline Solids, 2009, 355, 2578-2582.	3.1	16
62	Confined diffusion of erbium excitations inSnO2nanoparticles embedded in silica: A time-resolved infrared luminescence study. Physical Review B, 2009, 79, .	3.2	17
63	Ge nanoparticles growth in Ge-doped sol-gel silica by e-beam exposure. , 2008, , .		0
64	Second harmonic generation from bulk glassceramics containing laser-poled dielectric nanocrystals. , 2007, , .		0
65	Nanostructured SnO 2 -SiO 2 glassceramic thin films as electroluminescent material: an impedance spectroscopy analysis. Proceedings of SPIE, 2007, , .	0.8	1
66	Efficient 1.53Î¼m erbium light emission in heavily Er-doped titania-modified aluminium tellurite glasses. Journal of Non-Crystalline Solids, 2007, 353, 2150-2156.	3.1	26
67	High-energy shift of the Urbach ultraviolet absorption from attenuated dynamical disorder in fluorine modified sol-gel silica. Applied Physics Letters, 2007, 91, .	3.3	17
68	Solâ€“gel synthesis of Ge nanophases in silica. Solid State Communications, 2007, 144, 429-432.	1.9	5