

Gianpiero Buscarino

List of Publications by Year in descending order

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104
papers

2,069
citations

230014

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all docs

105
docs citations

105
times ranked

3358
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancing carbon dots fluorescence via plasmonic resonance energy transfer. <i>Materials Research Bulletin</i> , 2022, 149, 111746.	2.7	6
2	Decagram-Scale Synthesis of Multicolor Carbon Nanodots: Self-Tracking Nanoheaters with Inherent and Selective Anticancer Properties. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 2551-2563.	4.0	15
3	Photoinduced charge separation in functional carbon-silver nanohybrids. <i>Physical Chemistry Chemical Physics</i> , 2022, , .	1.3	0
4	Disclosing the emissive surface traps in green-emitting carbon nanodots. <i>Carbon</i> , 2021, 173, 454-461.	5.4	16
5	A Comparative Study of Top-Down and Bottom-Up Carbon Nanodots and Their Interaction with Mercury Ions. <i>Nanomaterials</i> , 2021, 11, 1265.	1.9	25
6	Fluorescent Carbon Nanodots as Sensors of Toxic Metal Ions and Pesticides. <i>Engineering Proceedings</i> , 2021, 6, .	0.4	1
7	Structure Effects Induced by High Mechanical Compaction of STAM ¹⁷ MOF Powders. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 2334-2342.	1.0	5
8	Ultrafast Interface Charge Separation in Carbon Nanodot ¹⁷ -Nanotube Hybrids. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 49232-49241.	4.0	5
9	Sensing of Transition Metals by Top-Down Carbon Dots. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10360.	1.3	3
10	Synthesis of multi-color luminescent ZnO nanoparticles by ultra-short pulsed laser ablation. <i>Applied Surface Science</i> , 2020, 506, 144954.	3.1	21
11	Structural and CO ₂ Capture Properties of Ethylenediamine-Modified HKUST-1 Metal ¹⁷ -Organic Framework. <i>Crystal Growth and Design</i> , 2020, 20, 5455-5465.	1.4	35
12	Bending Sensors Based on Thin Films of Semitransparent Bithiophene ¹⁷ -Fulleropyrrolidine Bisadducts. <i>ChemPlusChem</i> , 2020, 85, 2455-2464.	1.3	3
13	Carbon Nanodots as Functional Excipient to Develop Highly Stable and Smart PLGA Nanoparticles Useful in Cancer Theranostics. <i>Pharmaceutics</i> , 2020, 12, 1012.	2.0	18
14	Pressure-Dependent Tuning of Photoluminescence and Size Distribution of Carbon Nanodots for Theranostic Anticancer Applications. <i>Materials</i> , 2020, 13, 4899.	1.3	8
15	Dynamic Modification of Fermi Energy in Single-Layer Graphene by Photoinduced Electron Transfer from Carbon Dots. <i>Nanomaterials</i> , 2020, 10, 528.	1.9	9
16	Multitechnique Analysis of the Hydration in Three Different Copper Paddle-Wheel Metal ¹⁷ -Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28219-28232.	1.5	10
17	Metal ¹⁷ -Organic Framework ¹⁷ -Activated Carbon Composite Materials for the Removal of Ammonia from Contaminated Airstreams. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11747-11751.	7.2	40
18	Metal ¹⁷ -Organic Framework ¹⁷ -Activated Carbon Composite Materials for the Removal of Ammonia from Contaminated Airstreams. <i>Angewandte Chemie</i> , 2019, 131, 11873-11877.	1.6	8

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19	Highly Homogeneous Biotinylated Carbon Nanodots: Red-Emitting Nanoheaters as Theranostic Agents toward Precision Cancer Medicine. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 19854-19866.	4.0	61
20	Influence of oxide substrates on monolayer graphene doping process by thermal treatments in oxygen. <i>Carbon</i> , 2019, 149, 546-555.	5.4	12
21	The Relevance of Point Defects in Studying Silica-Based Materials from Bulk to Nanosystems. <i>Electronics (Switzerland)</i> , 2019, 8, 1378.	1.8	3
22	Unveiled the Source of the Structural Instability of HKUST-1 Powders upon Mechanical Compaction: Definition of a Fully Preserving Tableting Method. <i>Journal of Physical Chemistry C</i> , 2019, 123, 1730-1741.	1.5	15
23	Graphene-SiO ₂ Interaction from Composites to Doping. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1800540.	0.8	5
24	Photoinduced charge transfer from Carbon Dots to Graphene in solid composite. <i>Thin Solid Films</i> , 2019, 669, 620-624.	0.8	6
25	Î ² -C ₃ N ₄ Nanocrystals: Carbon Dots with Extraordinary Morphological, Structural, and Optical Homogeneity. <i>Chemistry of Materials</i> , 2018, 30, 1695-1700.	3.2	76
26	Ethanol Controls the Self-Assembly and Mesoscopic Properties of Human Insulin Amyloid Spherulites. <i>Journal of Physical Chemistry B</i> , 2018, 122, 3101-3112.	1.2	28
27	Monolayer graphene doping and strain dynamics induced by thermal treatments in controlled atmosphere. <i>Carbon</i> , 2018, 127, 270-279.	5.4	29
28	Inkjet printing Ag nanoparticles for SERS hot spots. <i>Analytical Methods</i> , 2018, 10, 3215-3223.	1.3	33
29	Light-Induced Formation of Pb ³⁺ Paramagnetic Species in Lead Halide Perovskites. <i>ACS Energy Letters</i> , 2018, 3, 1840-1847.	8.8	28
30	Disentangling size effects and spectral inhomogeneity in carbon nanodots by ultrafast dynamical hole-burning. <i>Nanoscale</i> , 2018, 10, 15317-15323.	2.8	33
31	Confined crystallization of a HKUST-1 metal-organic framework within mesostructured silica with enhanced structural resistance towards water. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22305-22315.	5.2	47
32	Determination of Geometry Arrangement of Copper Ions in HKUST-1 by XAFS During a Prolonged Exposure to Air. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24853-24860.	1.5	26
33	Nitrogen-doped carbon dots embedded in a SiO ₂ monolith for solid-state fluorescent detection of Cu ²⁺ ions. <i>Journal of Nanoparticle Research</i> , 2017, 19, 1.	0.8	17
34	Structural and thermal stability of graphene oxide-silica nanoparticles nanocomposites. <i>Journal of Alloys and Compounds</i> , 2017, 695, 2054-2064.	2.8	32
35	In-situ monitoring by Raman spectroscopy of the thermal doping of graphene and MoS ₂ in O ₂ -controlled atmosphere. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 418-424.	1.5	13
36	Investigation by Raman Spectroscopy of the Decomposition Process of HKUST-1 upon Exposure to Air. <i>Journal of Spectroscopy</i> , 2016, 2016, 1-7.	0.6	56

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37	Ge-doped silica nanoparticles: production and characterisation. <i>Optical Materials Express</i> , 2016, 6, 2213.	1.6	4
38	Controlling the oxidation processes of Zn nanoparticles produced by pulsed laser ablation in aqueous solution. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	7
39	Decomposition Process of Carboxylate MOF HKUST-1 Unveiled at the Atomic Scale Level. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12879-12889.	1.5	99
40	Luminescence mechanisms of defective ZnO nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 16237-16244.	1.3	89
41	Fluorescent nitrogen-rich carbon nanodots with an unexpected $\text{I}^2\text{-C}_{3\text{N}_4}$ nanocrystalline structure. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2598-2605.	2.7	53
42	Substrate and atmosphere influence on oxygen p-doped graphene. <i>Carbon</i> , 2016, 107, 696-704.	5.4	15
43	The thin and medium filters of the EPIC camera on-board XMM-Newton: measured performance after more than 15 years of operation. <i>Experimental Astronomy</i> , 2016, 42, 179-197.	1.6	5
44	Effect of thermal annealing on the luminescence of defective ZnO nanoparticles synthesized by pulsed laser ablation in water. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2016, 13, 890-894.	0.8	4
45	Methyl Radical in Clathrate Silica Voids. The Peculiar Physisorption Features of the Guest-Host Molecular Dynamics Interaction. <i>Journal of Physical Chemistry A</i> , 2016, 120, 6155-6169.	1.1	8
46	Trifluoroethanol modulates I^{\pm} -synuclein amyloid-like aggregate formation, stability and dissolution. <i>Biophysical Chemistry</i> , 2016, 216, 23-30.	1.5	9
47	Effect of air on oxygen p-doped graphene on SiO_2 . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 2341-2344.	0.8	26
48	Photoluminescence properties of S ₂ molecule trapped in Melanophlogite. <i>Physics and Chemistry of Minerals</i> , 2016, 43, 171-179.	0.3	2
49	Photoluminescence of Carbon Dots Embedded in a SiO ₂ Matrix. <i>Materials Today: Proceedings</i> , 2016, 3, S258-S265.	0.9	12
50	A rapid and eco-friendly route to synthesize graphene-doped silica nanohybrids. <i>Journal of Alloys and Compounds</i> , 2016, 664, 428-438.	2.8	39
51	I^2 -ray irradiation effects on silica nanoparticles. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015, 80, 012011.	0.3	1
52	Silica nanoparticle core structure examined by the $\text{E}^{\pm}\text{Si}^3$ center ²⁹ Si strong hyperfine interaction. <i>Journal of Non-Crystalline Solids</i> , 2015, 423-424, 41-44.	1.5	3
53	Effects of Pressure, Thermal Treatment, and O ₂ Loading in MCM41, MSU-H, and MSU-F Mesoporous Silica Systems Probed by Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2015, 119, 27434-27441.	1.5	5
54	Structure of the FeBTC Metal-Organic Framework: A Model Based on the Local Environment Study. <i>Journal of Physical Chemistry C</i> , 2015, 119, 7826-7830.	1.5	59

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55	Graphene p-Type Doping and Stability by Thermal Treatments in Molecular Oxygen Controlled Atmosphere. Journal of Physical Chemistry C, 2015, 119, 22718-22723.	1.5	41
56	Aging of MCM41, MSU-H and MSU-F mesoporous systems investigated through the Raman spectroscopy. , 2014, , .		0
57	Properties of HO ₂ radicals induced by ¹³⁷ I-ray irradiation in silica nanoparticles. Journal of Non-Crystalline Solids, 2014, 405, 116-123.	1.5	0
58	Visible-ultraviolet vibronic emission of silica nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 22028-22034.	1.3	60
59	Isolation of the CH ₃ ™ 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.	1.3	8
60	Thermally induced structural modifications and O ₂ trapping in highly porous silica nanoparticles. Materials Chemistry and Physics, 2014, 148, 956-963.	2.0	3
61	Alpha and deuteron irradiation effects on silica nanoparticles. Journal of Materials Science, 2014, 49, 6475-6484.	1.7	4
62	Luminescent silicon nanocrystals produced by near-infrared nanosecond pulsed laser ablation in water. Applied Surface Science, 2014, 302, 62-65.	3.1	37
63	EPR on Radiation-Induced Defects in SiO ₂ . , 2014, , 255-295.		13
64	Structural properties of core and surface of silica nanoparticles investigated by Raman spectroscopy. Journal of Raman Spectroscopy, 2013, 44, 810-816.	1.2	51
65	Entrapping of O ₂ Molecules in Nanostructured Silica Probed by Photoluminescence. Journal of Physical Chemistry C, 2013, 117, 2616-2622.	1.5	19
66	Raman and IR investigation of silica nanoparticles structure. Journal of Non-Crystalline Solids, 2013, 362, 20-24.	1.5	64
67	Optical and morphological properties of infrared emitting functionalized silica nanoparticles. Materials Chemistry and Physics, 2013, 142, 763-769.	2.0	6
68	Defect-related visible luminescence of silica nanoparticles. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 658-661.	0.8	11
69	Investigation on the generation process of HO ₂ radicals by ¹³⁷ I-ray irradiation in O ₂ -loaded fumed silica. Journal of Non-Crystalline Solids, 2013, 362, 152-155.	1.5	4
70	Properties of methyl radical trapped in amorphous SiO ₂ and in natural SiO ₂ -clathrate Melanophlogite. Journal of Non-Crystalline Solids, 2013, 361, 9-12.	1.5	9
71	Status of the EPIC thin and medium filters on-board XMM-Newton after more than 10 years of operation I: laboratory measurements on back-up filters. Proceedings of SPIE, 2013, , .	0.8	8
72	Oxidation Processes in Sicilian Olive Oils Investigated by a Combination of Optical and EPR Spectroscopy. Journal of Food Science, 2012, 77, C1084-9.	1.5	15

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73	Structure of Amorphous SiO ₂ Nanoparticles Probed through the EPR Centers. Journal of Physical Chemistry C, 2012, 116, 144-149.	1.5	22
74	A two-component model for the 2260cm ⁻¹ infrared absorption band in electron irradiated amorphous SiO ₂ . Journal of Non-Crystalline Solids, 2011, 357, 1926-1930.	1.5	1
75	Sintering process of amorphous SiO ₂ nanoparticles investigated by AFM, IR and Raman techniques. Journal of Non-Crystalline Solids, 2011, 357, 1866-1870.	1.5	15
76	Structural and luminescence properties of amorphous SiO ₂ nanoparticles. Journal of Non-Crystalline Solids, 2011, 357, 1941-1944.	1.5	25
77	Structural organization of silanol and silicon hydride groups in the amorphous silicon dioxide network. European Physical Journal B, 2011, 83, 47-52.	0.6	11
78	Effects of thermal treatments in controlled atmosphere on the Ce oxidation state in Ce-Ti-Eu doped SiO ₂ sol-gel glasses. Journal of Sol-Gel Science and Technology, 2011, 58, 56-61.	1.1	3
79	Preparation and photoactivity of samarium loaded anatase, brookite and rutile catalysts. Applied Catalysis B: Environmental, 2011, 104, 291-299.	10.8	48
80	Structural properties of the range-II- and range-III order in amorphous-SiO ₂ probed by electron paramagnetic resonance and Raman spectroscopy. European Physical Journal B, 2010, 76, 197-201.	0.6	7
81	Wide range excitation of visible luminescence in nanosilica. Solid State Communications, 2010, 150, 2278-2280.	0.9	16
82	The role of impurities in the irradiation induced densification of amorphous SiO ₂ . Journal of Physics Condensed Matter, 2010, 22, 255403.	0.7	7
83	Thermally Induced Structural Modification of Silica Nanoparticles Investigated by Raman and Infrared Absorption Spectroscopies. Journal of Physical Chemistry C, 2010, 114, 13991-13997.	1.5	33
84	Atomic force microscopy and Raman investigation on the sintering process of amorphous SiO ₂ nanoparticles. Journal of Applied Physics, 2010, 108, 074314.	1.1	24
85	Structural modifications induced by electron irradiation in SiO ₂ glass: Local densification measurements. Europhysics Letters, 2009, 87, 26007.	0.7	11
86	Polyamorphic transformation induced by electron irradiation in a-SiO ₂ glass. Physical Review B, 2009, 80, .	1.1	27
87	Photosensitivity of SiO ₂ -Al and SiO ₂ -Na glasses under ArF (193nm) laser. Journal of Non-Crystalline Solids, 2009, 355, 1066-1074.	1.5	26
88	Variability of the Si-O-Si angle in amorphous-SiO ₂ probed by electron paramagnetic resonance and Raman spectroscopy. Journal of Non-Crystalline Solids, 2009, 355, 1092-1094.	1.5	19
89	S ²⁹ i attribution of the 1.3 mT hyperfine structure of the EPR centers in amorphous SiO ₂ . Journal of Applied Physics, 2009, 105, 093514.	1.1	5
90	Optical absorption and electron paramagnetic resonance of the EPR center in amorphous silicon dioxide. Physical Review B, 2008, 77, .	1.1	12

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91	Optical absorption band at 5.8 eV associated with the E^{\prime} centers in amorphous silicon dioxide: Optical absorption and EPR measurements. <i>Physical Review B</i> , 2008, 77, .	1.1	17
92	Electron paramagnetic resonance investigation on the hyperfine structure of the center in amorphous silicon dioxide. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 518-521.	1.5	3
93	Experimental evidence of centers generation from oxygen vacancies in a-SiO ₂ . <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 577-580.	1.5	15
94	Electron paramagnetic resonance line shape investigation of the ²⁹ Si hyperfine doublet of the E^{\prime} center in a-SiO ₂ . <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 1301-1304.	0.8	4
95	Structural inhomogeneity of Ge-doped amorphous SiO ₂ probed by photoluminescence lifetime measurements under synchrotron radiation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 934-937.	0.8	2
96	²⁹ Si Hyperfine Structure of the E^{\prime} Center in Amorphous Silicon Dioxide. <i>Physical Review Letters</i> , 2006, 97, 135502.	2.9	31
97	Characterization of E^{\prime} and triplet point defects in oxygen-deficient amorphous silicon dioxide. <i>Physical Review B</i> , 2006, 73, .	1.1	32
98	Hyperfine structure of the E^{\prime} centre in amorphous silicon dioxide. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 5213-5219.	0.7	3
99	INVESTIGATION ON THE MICROSCOPIC STRUCTURE OF E^{\prime} CENTER IN AMORPHOUS SILICON DIOXIDE BY ELECTRON PARAMAGNETIC RESONANCE SPECTROSCOPY. <i>Modern Physics Letters B</i> , 2006, 20, 451-474.	1.0	7
100	Delocalized Nature of the E^{\prime} Center in Amorphous Silicon Dioxide. <i>Physical Review Letters</i> , 2005, 94, 125501.	2.9	35
101	Growth of paramagnetic defects by gamma rays irradiation in oxygen-deficient silica. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 1787-1790.	1.5	4
102	Modifications of optical absorption band of center in silica. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 1801-1804.	1.5	9
103	Experimental evidence for two different precursors of E^{\prime} centers in amorphous silica. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 1805-1810.	1.5	11
104	Structural relaxation of E^{\prime} centers in amorphous silica. <i>Physical Review B</i> , 2002, 66, .	1.1	43