Giovanni Bertoni

List of Publications by Year
in descending order

131 papers	7,808 citations	47006 47 h-index	53230 85 g-index
133 all docs	133 docs citations	133 times ranked	12996 citing authors

#	Article	IF	Citations
1	Unveiling the Cation Exchange Reaction between the NASICON Li_{1.5}Al_{0.5}Ge_{1.5}(PO₄)₃ Solid Electrolyte and the pyr13TFSI Ionic Liquid. Journal of the American Chemical Society, 2022, 144, 3442-3448.	13.7	15
2	3d Metal Doping of Core@Shell WÃ¼stite@ferrite Nanoparticles as a Promising Route toward Room Temperature Exchange Bias Magnets. Small, 2022, 18, e2107426.	10.0	11
3	Influence of Rutile and Anatase TiO₂ Precursors on the Synthesis of a Li_{1.5}Al_{0.5}Ti_{1.5}(PO₄)₃ Electrolyte for Solid-State Lithium Batteries. Journal of the Electrochemical Society, 2022, 169, 040515.	2.9	3
4	Asymmetric supercapacitors based on nickel decorated graphene and porous graphene electrodes. Electrochimica Acta, 2022, 424, 140626.	5.2	19
5	Effect of pressure on the properties of a NASICON Li_{1.3}Al_{0.3}Ti_{1.7}(PO₄)₃ nanofiber solid electrolyte. Journal of Materials Chemistry A, 2021, 9, 13688-13696.	10.3	15
6	In situ decoration of laser-scribed graphene with TiO2 nanoparticles for scalable high-performance micro-supercapacitors. Carbon, 2021, 176, 296-306.	10.3	37
7	Enabling Highâ€Performance NASICONâ€Based Solidâ€State Lithium Metal Batteries Towards Practical Conditions. Advanced Functional Materials, 2021, 31, 2102765.	14.9	32
8	Ag/MgO Nanoparticles via Gas Aggregation Nanocluster Source for Perovskite Solar Cell Engineering. Materials, 2021, 14, 5507.	2.9	4
9	Synthesis of Electrospun NASICON Li_{1.5}Al_{0.5}Ge_{1.5}(PO₄)₃ Solid Electrolyte Nanofibers by Control of Germanium Hydrolysis. Journal of the Electrochemical Society, 2021, 168, 110512.	2.9	6
10	Platinum carbonyl clusters decomposition on defective graphene surface. Surface Science, 2020, 691, 121499.	1.9	8
11	Bandgap determination from individual orthorhombic thin cesium lead bromide nanosheets by electron energy-loss spectroscopy. Nanoscale Horizons, 2020, 5, 1610-1617.	8.0	8
12	Water-Mediated ElectroHydrogenation of CO₂ at Near-Equilibrium Potential by Carbon Nanotubes/Cerium Dioxide Nanohybrids. ACS Applied Energy Materials, 2020, 3, 8509-8518.	5.1	23
13	Toward an Allâ€Ceramic Cathodeâ€“Electrolyte Interface with Lowâ€Temperature Pressed NASICON Li_{1.5}Al_{0.5}Ge_{1.5}(PO₄)₃ Electrolyte. Advanced Materials Interfaces, 2020, 7, 2000164.	3.7	17
14	Unraveling the mechanism of the one-pot synthesis of exchange coupled Co-based nano-heterostructures with a high energy product. Nanoscale, 2020, 12, 14076-14086.	5.6	6
15	Modulation of the magnetic properties of gold-spinel ferrite heterostructured nanocrystals. Nano Research, 2020, 13, 785-794.	10.4	16
16	Optical and electronic properties of silver nanoparticles embedded in cerium oxide. Journal of Chemical Physics, 2020, 152, 114704.	3.0	12
17	Discovering the Influence of Lithium Loss on Garnet Li₇La₃Zr₂O₁₂ Electrolyte Phase Stability. ACS Applied Energy Materials, 2020, 3, 3415-3424.	5.1	49
18	Martensite-enabled magnetic flexibility: The effects of post-growth treatments in magnetic-shape-memory Heusler thin films. Acta Materialia, 2020, 187, 135-145.	7.9	18

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19	Nickel addition to optimize the hydrogen storage performance of lithium intercalated fullerides. Materials Research Bulletin, 2020, 126, 110848.	5.2	3
20	Direct Quantification of Cu Vacancies and Spatial Localization of Surface Plasmon Resonances in Copper Phosphide Nanocrystals. , 2019, 1, 665-670.		13
21	Super-activated biochar from poultry litter for high-performance supercapacitors. Microporous and Mesoporous Materials, 2019, 285, 161-169.	4.4	58
22	Highly efficient plasmon-mediated electron injection into cerium oxide from embedded silver nanoparticles. Nanoscale, 2019, 11, 10282-10291.	5.6	27
23	Electrospinning of Polystyrene/Polyhydroxybutyrate Nanofibers Doped with Porphyrin and Graphene for Chemiresistor Gas Sensors. Nanomaterials, 2019, 9, 280.	4.1	49
24	Role of Zn²⁺ Substitution on the Magnetic, Hyperthermic, and Relaxometric Properties of Cobalt Ferrite Nanoparticles. Journal of Physical Chemistry C, 2019, 123, 6148-6157.	3.1	65
25	The Role of Metal Disulfide Interlayer in Liâ€“S Batteries. Journal of Physical Chemistry C, 2018, 122, 1014-1023.	3.1	40
26	Colloidal CsX (X = Cl, Br, I) Nanocrystals and Their Transformation to CsPbX₃ Nanocrystals by Cation Exchange. Chemistry of Materials, 2018, 30, 79-83.	6.7	67
27	Magnetic Shape Memory Turns to Nano: Microstructure Controlled Actuation of Freeâ€Standing Nanodisks. Small, 2018, 14, e1803027.	10.0	19
28	Ab Initio Structure Determination of Cu_{2â€“x}Te Plasmonic Nanocrystals by Precession-Assisted Electron Diffraction Tomography and HAADF-STEM Imaging. Inorganic Chemistry, 2018, 57, 10241-10248.	4.0	25
29	Tuning and Locking the Localized Surface Plasmon Resonances of CuS (Covellite) Nanocrystals by an Amorphous CuPd_xS Shell. Chemistry of Materials, 2017, 29, 1716-1723.	6.7	50
30	Colloidal Monolayer Î²-In₂Se₃ Nanosheets with High Photoresponsivity. Journal of the American Chemical Society, 2017, 139, 3005-3011.	13.7	105
31	Topotaxial Phase Transformation in Cobalt Doped Iron Oxide Core/Shell Hard Magnetic Nanoparticles. Chemistry of Materials, 2017, 29, 1279-1289.	6.7	29
32	In Situ Transmission Electron Microscopy Study of Electron Beam-Induced Transformations in Colloidal Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 2124-2132.	14.6	246
33	Light-assisted delithiation of lithium iron phosphate nanocrystals towards photo-rechargeable lithium ion batteries. Nature Communications, 2017, 8, 14643.	12.8	179
34	Interplay of Internal Structure and Interfaces on the Emitting Properties of Hybrid ZnO Hierarchical Particles. ACS Applied Materials & Interfaces, 2017, 9, 15182-15191.	8.0	5
35	Selective Fe Promotion on Au Nanoparticles: An Efficient Way to Activate Au/SiO₂ Catalysts for the CO Oxidation Reaction. ChemCatChem, 2017, 9, 2952-2960.	3.7	7
36	Antiferromagnetic transition in graphene functionalized with nitroaniline. Journal of Nanophotonics, 2017, 11, 032512.	1.0	1

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37	MnO_x-decorated carbonized porous silicon nanowire electrodes for high performance supercapacitors. Energy and Environmental Science, 2017, 10, 1505-1516.	30.8	109
38	Role of the Crystal Structure in Cation Exchange Reactions Involving Colloidal Cu₂Se Nanocrystals. Journal of the American Chemical Society, 2017, 139, 9583-9590.	13.7	83
39	Strongly emissive perovskite nanocrystal inks for high-voltage solar cells. Nature Energy, 2017, 2, .	39.5	544
40	Contraction, cation oxidation state and size effects in cerium oxide nanoparticles. Nanotechnology, 2017, 28, 495702.	2.6	12
41	Low-Temperature Electron Beam-Induced Transformations of Cesium Lead Halide Perovskite Nanocrystals. ACS Omega, 2017, 2, 5660-5665.	3.5	60
42	A review on hexacyanoferrate-based materials for energy storage and smart windows: challenges and perspectives. Journal of Materials Chemistry A, 2017, 5, 18919-18932.	10.3	235
43	Effect of Ni-nanoparticles decoration on graphene to enable high capacity sodium-ion battery negative electrodes. Electrochimica Acta, 2017, 250, 212-218.	5.2	9
44	Investigation of Ni@CoO core-shell nanoparticle films synthesized by sequential layer deposition. Applied Surface Science, 2017, 396, 1860-1865.	6.1	4
45	Steering the magnetic properties of Ni/NiO/CoO core-shell nanoparticle films: The role of core-shell interface versus interparticle interactions. Physical Review Materials, 2017, 1, .	2.4	6
46	Energy Product Enhancement in Imperfectly Exchangeâ€Coupled Nanocomposite Magnets. Advanced Electronic Materials, 2016, 2, 1500365.	5.1	47
47	Co-axial heterostructures integrating palladium/titanium dioxide with carbon nanotubes for efficient electrocatalytic hydrogen evolution. Nature Communications, 2016, 7, 13549.	12.8	98
48	Strongly Exchange Coupled Core|Shell Nanoparticles with High Magnetic Anisotropy: A Strategy toward Rare-Earth-Free Permanent Magnets. Chemistry of Materials, 2016, 28, 4214-4222.	6.7	98
49	Influence of the Ion Coordination Number on Cation Exchange Reactions with Copper Telluride Nanocrystals. Journal of the American Chemical Society, 2016, 138, 7082-7090.	13.7	67
50	Facile transformation of FeO/Fe3O4 core-shell nanocubes to Fe3O4 via magnetic stimulation. Scientific Reports, 2016, 6, 33295.	3.3	37
51	Influence of defect distribution on the reducibility of CeO_{2â^'x}nanoparticles. Nanotechnology, 2016, 27, 425705.	2.6	16
52	Nanoscale mapping of plasmon and exciton in ZnO tetrapods coupled with Au nanoparticles. Scientific Reports, 2016, 6, 19168.	3.3	27
53	Colloidal CuFeS₂ Nanocrystals: Intermediate Fe d-Band Leads to High Photothermal Conversion Efficiency. Chemistry of Materials, 2016, 28, 4848-4858.	6.7	126
54	Relevance of LiPF₆ as Etching Agent of LiMnPO₄ Colloidal Nanocrystals for High Rate Performing Li-ion Battery Cathodes. ACS Applied Materials & Interfaces, 2016, 8, 4069-4075.	8.0	20

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55	Accelerated Removal of Fe-Antisite Defects while Nanosizing Hydrothermal LiFePO₄ with Ca²⁺. Nano Letters, 2016, 16, 2692-2697.	9.1	52
56	Solution Synthesis Approach to Colloidal Cesium Lead Halide Perovskite Nanoplatelets with Monolayer-Level Thickness Control. Journal of the American Chemical Society, 2016, 138, 1010-1016.	13.7	747
57	Disentangling the Role of Shape, Ligands, and Dielectric Constants in the Absorption Properties of Colloidal CdSe/CdS Nanocrystals. ACS Photonics, 2016, 3, 58-67.	6.6	34
58	Magnetism of aniline modified graphene-based materials. Journal of Magnetism and Magnetic Materials, 2016, 415, 45-50.	2.3	4
59	Morphology, structural properties and reducibility of size-selected CeO_{2â^'}_x nanoparticle films. Beilstein Journal of Nanotechnology, 2015, 6, 60-67.	2.8	13
60	Atomic Scale Structure and Reduction of Cerium Oxide at the Interface with Platinum. Advanced Materials Interfaces, 2015, 2, 1500375.	3.7	25
61	Cu_{3-x}P Nanocrystals as a Material Platform for Near-Infrared Plasmonics and Cation Exchange Reactions. Chemistry of Materials, 2015, 27, 1120-1128.	6.7	137
62	Cation exchange mediated elimination of the Fe-antisites in the hydrothermal synthesis of LiFePO4. Nano Energy, 2015, 16, 256-267.	16.0	54
63	Pyramid-Shaped Wurtzite CdSe Nanocrystals with Inverted Polarity. ACS Nano, 2015, 9, 8537-8546.	14.6	25
64	Synthesis of Highly Fluorescent Copper Clusters Using Living Polymer Chains as Combined Reducing Agents and Ligands. ACS Nano, 2015, 9, 11886-11897.	14.6	53
65	Nanoscale Transformations in Covellite (CuS) Nanocrystals in the Presence of Divalent Metal Cations in a Mild Reducing Environment. Chemistry of Materials, 2015, 27, 7531-7537.	6.7	89
66	Origin of the visible emission of black silicon microstructures. Applied Physics Letters, 2015, 107, .	3.3	7
67	Laser-induced disaggregation of TiO₂nanofillers for uniform nanocomposites. Nanotechnology, 2014, 25, 125702.	2.6	3
68	Solid solutions and phase transitions in (Ca,M2+)M2+Si2O6 pyroxenes (M2+ = Co, Fe, Mg). American Mineralogist, 2014, 99, 704-711.	1.9	23
69	Hollow and Concave Nanoparticles via Preferential Oxidation of the Core in Colloidal Core/Shell Nanocrystals. Journal of the American Chemical Society, 2014, 136, 9061-9069.	13.7	32
70	Addition of transition metals to lithium intercalated fullerides enhances hydrogen storage properties. International Journal of Hydrogen Energy, 2014, 39, 2124-2131.	7.1	25
71	Etched Colloidal LiFePO4 Nanoplatelets toward High-Rate Capable Li-Ion Battery Electrodes. Nano Letters, 2014, 14, 6828-6835.	9.1	53
72	Redox Centers Evolution in Phospho-Olivine Type (LiFe_{0.5}Mn_{0.5}) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td	9.1	56

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73	Decoration of graphene with nickel nanoparticles: study of the interaction with hydrogen. Journal of Materials Chemistry A, 2014, 2, 1039-1046.	10.3	67
74	New Approach for the Step by Step Control of Magnetic Nanostructure Functionalization. Inorganic Chemistry, 2014, 53, 9166-9173.	4.0	7
75	High Temperature Stability of Onion-Like Carbon vs Highly Oriented Pyrolytic Graphite. PLoS ONE, 2014, 9, e105788.	2.5	7
76	Synthesis of Uniform Disk-Shaped Copper Telluride Nanocrystals and Cation Exchange to Cadmium Telluride Quantum Disks with Stable Red Emission. Journal of the American Chemical Society, 2013, 135, 12270-12278.	13.7	138
77	CuIn_xGa_{1â€“x}S₂ Nanocrystals with Tunable Composition and Band Gap Synthesized via a Phosphine-Free and Scalable Procedure. Chemistry of Materials, 2013, 25, 3180-3187.	6.7	65
78	Electrical response from nanocomposite PDMSâ€“Ag NPs generated byin situlaser ablation in solution. Nanotechnology, 2013, 24, 035707.	2.6	16
79	Boron nitride nanotubes and primary human osteoblasts: in vitro compatibility and biological interactions under low frequency ultrasound stimulation. Nanotechnology, 2013, 24, 465102.	2.6	40
80	Formation and magnetic manipulation of periodically aligned microchains in thin plastic membranes. Journal of Applied Physics, 2012, 112, 083927.	2.5	22
81	Restructured endoplasmic reticulum generated by mutant amyotrophic lateral sclerosis-linked VAPB is cleared by the proteasome. Journal of Cell Science, 2012, 125, 3601-3611.	2.0	41
82	Direct Imaging of DNA Fibers: The Visage of Double Helix. Nano Letters, 2012, 12, 6453-6458.	9.1	73
83	Superparamagnetic cellulose fiber networks via nanocomposite functionalization. Journal of Materials Chemistry, 2012, 22, 1662-1666.	6.7	39
84	Blue-UV-Emitting ZnSe(Dot)/ZnS(Rod) Core/Shell Nanocrystals Prepared from CdSe/CdS Nanocrystals by Sequential Cation Exchange. ACS Nano, 2012, 6, 1637-1647.	14.6	138
85	Direct Determination of Polarity, Faceting, and Core Location in Colloidal Core/Shell Wurtzite Semiconductor Nanocrystals. ACS Nano, 2012, 6, 6453-6461.	14.6	61
86	Assembly of shape-controlled nanocrystals by depletion attraction. Chemical Communications, 2011, 47, 203-205.	4.1	64
87	Birth and Growth of Octapod-Shaped Colloidal Nanocrystals Studied by Electron Tomography. Journal of Physical Chemistry C, 2011, 115, 20128-20133.	3.1	18
88	A Cast-Mold Approach to Iron Oxide and Pt/Iron Oxide Nanocontainers and Nanoparticles with a Reactive Concave Surface. Journal of the American Chemical Society, 2011, 133, 2205-2217.	13.7	71
89	Water-Repellent Cellulose Fiber Networks with Multifunctional Properties. ACS Applied Materials & Interfaces, 2011, 3, 4024-4031.	8.0	103
90	Nanochains Formation of Superparamagnetic Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 7249-7254.	3.1	29

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91	Three-Dimensional Morphology of Iron Oxide Nanoparticles with Reactive Concave Surfaces. A Compressed Sensing-Electron Tomography (CS-ET) Approach. Nano Letters, 2011, 11, 4666-4673.	9.1	148
92	Hierarchical self-assembly of suspended branched colloidal nanocrystals into superlattice structures. Nature Materials, 2011, 10, 872-876.	27.5	415
93	In Vivo toxicity assessment of gold nanoparticles in Drosophila melanogaster. Nano Research, 2011, 4, 405-413.	10.4	83
94	Fitting the momentum dependent loss function in EELS. Microscopy Research and Technique, 2011, 74, 212-218.	2.2	6
95	A holographic biprism as a perfect energy filter?. Ultramicroscopy, 2011, 111, 887-893.	1.9	17
96	â€œMagnetic Force Microscopy and Energy Loss Imaging of Superparamagnetic Iron Oxide Nanoparticlesâ€• Scientific Reports, 2011, 1, 202.	3.3	31
97	Electron microscopy studies of electronâ€beam sensitive PbTeâ€based nanostructures. Microscopy Research and Technique, 2010, 73, 944-951.	2.2	2
98	Formation and microscopic investigation of iron oxide aligned nanowires into polymeric nanocomposite films. Microscopy Research and Technique, 2010, 73, 952-958.	2.2	11
99	Tuning of the characteristics of Au nanoparticles produced by solid target laser ablation into water by changing the irradiation parameters. Microscopy Research and Technique, 2010, 73, 937-943.	2.2	16
100	Enhancement of Neurite Outgrowth in Neuronal-Like Cells following Boron Nitride Nanotube-Mediated Stimulation. ACS Nano, 2010, 4, 6267-6277.	14.6	208
101	Octapod-Shaped Colloidal Nanocrystals of Cadmium Chalcogenides via â€œOne-Potâ€•Cation Exchange and Seeded Growth. Nano Letters, 2010, 10, 3770-3776.	9.1	171
102	Dynamical Formation of Spatially Localized Arrays of Aligned Nanowires in Plastic Films with Magnetic Anisotropy. ACS Nano, 2010, 4, 1873-1878.	14.6	87
103	Phosphine-Free Synthesis of p-Type Copper(I) Selenide Nanocrystals in Hot Coordinating Solvents. Journal of the American Chemical Society, 2010, 132, 8912-8914.	13.7	232
104	Colloidal PbTeâ€“Aunanocrystal heterostructures. Journal of Materials Chemistry, 2010, 20, 1357-1366.	6.7	46
105	Magnetoresistive phenomena in an Fe-filled carbon nanotube/elastomer composite. Nanotechnology, 2010, 21, 125505.	2.6	20
106	Endâ€toâ€End Assembly of Shapeâ€Controlled Nanocrystals via a Nanowelding Approach Mediated by Gold Domains. Advanced Materials, 2009, 21, 550-554.	21.0	114
107	Deconvolution of core electron energy loss spectra. Ultramicroscopy, 2009, 109, 1343-1352.	1.9	14
108	Fluorescent Asymmetrically Cobalt-Tipped CdSe@CdS Core@Shell Nanorod Heterostructures Exhibiting Room-Temperature Ferromagnetic Behavior. Journal of the American Chemical Society, 2009, 131, 12817-12828.	13.7	119

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109	Model-based quantification of EELS: is standardless quantification possible?. Mikrochimica Acta, 2008, 161, 439-443.	5.0	3
110	Structural characterization of Er-doped Li2Oâ€“Al2O3â€“SiO2 glass ceramics. Optical Materials, 2008, 30, 1183-1188.	3.6	13
111	Model-based quantification of EELS spectra: Treating the effect of correlated noise. Ultramicroscopy, 2008, 108, 74-83.	1.9	22
112	The Fresnel effect of a defocused biprism on the fringes in inelastic holography. Ultramicroscopy, 2008, 108, 263-269.	1.9	21
113	Accuracy and precision in model based EELS quantification. Ultramicroscopy, 2008, 108, 782-790.	1.9	49
114	Electrical switching in Feâˆ•Crâˆ•MgOâˆ•Fe magnetic tunnel junctions. Applied Physics Letters, 2008, 92, 212115.	3.3	33
115	Nanoscale analysis of interfaces in a metal/oxide/oxide trilayer obtained by pulsed laser deposition. Applied Physics Letters, 2007, 91, 023106.	3.3	18
116	Electronic surface reconstruction and correlation in the fcc and dimer phases ofRbC60. Physical Review B, 2007, 75, .	3.2	6
117	Structural Characterization of Erbium doped LAS Glass Ceramic Obtained by Glass Melting Technique. Materials Science Forum, 2007, 555, 377-381.	0.3	0
118	Hybrid Diamondâ€Graphite Nanowires Produced by Microwave Plasma Chemical Vapor Deposition. Advanced Materials, 2007, 19, 4058-4062.	21.0	107
119	Formation of carbon nitride nanospheres by ion implantation. Materials Chemistry and Physics, 2007, 103, 290-294.	4.0	4
120	Quantification of crystalline and amorphous content in porous samples from electron energy loss spectroscopy. Ultramicroscopy, 2006, 106, 630-635.	1.9	86
121	Model-based quantification of EELS spectra: Including the fine structure. Ultramicroscopy, 2006, 106, 976-980.	1.9	40
122	First-principles calculation of the electronic structure and energy loss near edge spectra of chiral carbon nanotubes. Micron, 2006, 37, 486-491.	2.2	14
123	Structure and spectroscopic properties of Câ€“Ni and CNxâ€“Ni nanocomposite films. Journal of Applied Physics, 2005, 98, 034313.	2.5	15
124	First-principles calculation of the electronic structure and EELS spectra at the graphene/Ni(111) interface. Physical Review B, 2005, 71, .	3.2	214
125	Growth of multi-wall and single-wall carbon nanotubes with in situ high vacuum catalyst deposition. Carbon, 2004, 42, 440-443.	10.3	15
126	Temperature-dependent interaction of C60 with Ge(1 1 1)-c(2 Ã— 8). Applied Surface Science, 2003, 212-213, 52-56.	6.1	10

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127	Ag island nucleation on Ge(1 1 1)-c(2 Ã— 8). Applied Surface Science, 2003, 212-213, 213-218.	6.1	10
128	Adsorption sites at Cs nanowires grown on the InAs(110) surface. Surface Science, 2001, 477, 35-42.	1.9	12
129	Single-particle and collective excitations of a two-dimensional electron gas at the Cs/InAs(110) surface. Physical Review B, 2001, 64, .	3.2	5
130	Density of states of a two-dimensional electron gas at semiconductor surfaces. Physical Review B, 2001, 63, .	3.2	45
131	Metal-induced gap states at InAs(110) surface. Surface Science, 2000, 454-456, 539-542.	1.9	10