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	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
2	Strongly emissive perovskite nanocrystal inks for high-voltage solar cells. Nature Energy, 2017, 2, .	39.5	544
3	Hierarchical self-assembly of suspended branched colloidal nanocrystals into superlattice structures. Nature Materials, 2011, 10, 872-876.	27.5	415
4	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
5	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
6	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
7	First-principles calculation of the electronic structure and EELS spectra at the graphene/Ni(111) interface. Physical Review B, 2005, 71, .	3.2	214
8	Enhancement of Neurite Outgrowth in Neuronal-Like Cells following Boron Nitride Nanotube-Mediated Stimulation. ACS Nano, 2010, 4, 6267-6277.	14.6	208
9	Light-assisted delithiation of lithium iron phosphate nanocrystals towards photo-rechargeable lithium ion batteries. Nature Communications, 2017, 8, 14643.	12.8	179
10	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
11	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
12	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
13	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
14	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
15	Colloidal CuFeS₂ Nanocrystals: Intermediate Fe d-Band Leads to High Photothermal Conversion Efficiency. Chemistry of Materials, 2016, 28, 4848-4858.	6.7	126
16	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
17	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
18	MnO_x-decorated carbonized porous silicon nanowire electrodes for high performance supercapacitors. Energy and Environmental Science, 2017, 10, 1505-1516.	30.8	109

#	Article	IF	Citations
19	Hybrid Diamondâ€Graphite Nanowires Produced by Microwave Plasma Chemical Vapor Deposition. Advanced Materials, 2007, 19, 4058-4062.	21.0	107
20	Colloidal Monolayer Î²-In₂Se₃ Nanosheets with High Photoresponsivity. Journal of the American Chemical Society, 2017, 139, 3005-3011.	13.7	105
21	Water-Repellent Cellulose Fiber Networks with Multifunctional Properties. ACS Applied Materials & Interfaces, 2011, 3, 4024-4031.	8.0	103
22	Co-axial heterostructures integrating palladium/titanium dioxide with carbon nanotubes for efficient electrocatalytic hydrogen evolution. Nature Communications, 2016, 7, 13549.	12.8	98
23	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
24	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
25	Dynamical Formation of Spatially Localized Arrays of Aligned Nanowires in Plastic Films with Magnetic Anisotropy. ACS Nano, 2010, 4, 1873-1878.	14.6	87
26	Quantification of crystalline and amorphous content in porous samples from electron energy loss spectroscopy. Ultramicroscopy, 2006, 106, 630-635.	1.9	86
27	In Vivo toxicity assessment of gold nanoparticles in Drosophila melanogaster. Nano Research, 2011, 4, 405-413.	10.4	83
28	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
29	Direct Imaging of DNA Fibers: The Visage of Double Helix. Nano Letters, 2012, 12, 6453-6458.	9.1	73
30	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
31	Decoration of graphene with nickel nanoparticles: study of the interaction with hydrogen. Journal of Materials Chemistry A, 2014, 2, 1039-1046.	10.3	67
32	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
33	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
34	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
35	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
36	Assembly of shape-controlled nanocrystals by depletion attraction. Chemical Communications, 2011, 47, 203-205.	4.1	64

#	Article	IF	Citations
37	Direct Determination of Polarity, Faceting, and Core Location in Colloidal Core/Shell Wurtzite Semiconductor Nanocrystals. ACS Nano, 2012, 6, 6453-6461.	14.6	61
38	Low-Temperature Electron Beam-Induced Transformations of Cesium Lead Halide Perovskite Nanocrystals. ACS Omega, 2017, 2, 5660-5665.	3.5	60
39	Super-activated biochar from poultry litter for high-performance supercapacitors. Microporous and Mesoporous Materials, 2019, 285, 161-169.	4.4	58
40	Redox Centers Evolution in Phospho-Olivine Type (LiFe_{0.5}Mn_{0.5}) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 To	9.1	56
41	Cation exchange mediated elimination of the Fe-antisites in the hydrothermal synthesis of LiFePO4. Nano Energy, 2015, 16, 256-267.	16.0	54
42	Etched Colloidal LiFePO4 Nanoplatelets toward High-Rate Capable Li-Ion Battery Electrodes. Nano Letters, 2014, 14, 6828-6835.	9.1	53
43	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
44	Accelerated Removal of Fe-Antisite Defects while Nanosizing Hydrothermal LiFePO₄ with Ca²⁺. Nano Letters, 2016, 16, 2692-2697.	9.1	52
45	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
46	Accuracy and precision in model based EELS quantification. Ultramicroscopy, 2008, 108, 782-790.	1.9	49
47	Electrospinning of Polystyrene/Polyhydroxybutyrate Nanofibers Doped with Porphyrin and Graphene for Chemiresistor Gas Sensors. Nanomaterials, 2019, 9, 280.	4.1	49
48	Discovering the Influence of Lithium Loss on Garnet Li₇La₃Zr₂O₁₂ Electrolyte Phase Stability. ACS Applied Energy Materials, 2020, 3, 3415-3424.	5.1	49
49	Energy Product Enhancement in Imperfectly Exchangeâ€Coupled Nanocomposite Magnets. Advanced Electronic Materials, 2016, 2, 1500365.	5.1	47
50	Colloidal PbTeâ€“Aunanocrystal heterostructures. Journal of Materials Chemistry, 2010, 20, 1357-1366.	6.7	46
51	Density of states of a two-dimensional electron gas at semiconductor surfaces. Physical Review B, 2001, 63, .	3.2	45
52	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
53	Model-based quantification of EELS spectra: Including the fine structure. Ultramicroscopy, 2006, 106, 976-980.	1.9	40
54	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

#	Article	IF	Citations
55	The Role of Metal Disulfide Interlayer in Liâ€“S Batteries. Journal of Physical Chemistry C, 2018, 122, 1014-1023.	3.1	40
56	Superparamagnetic cellulose fiber networks via nanocomposite functionalization. Journal of Materials Chemistry, 2012, 22, 1662-1666.	6.7	39
57	Facile transformation of FeO/Fe3O4 core-shell nanocubes to Fe3O4 via magnetic stimulation. Scientific Reports, 2016, 6, 33295.	3.3	37
58	In situ decoration of laser-scribed graphene with TiO2 nanoparticles for scalable high-performance micro-supercapacitors. Carbon, 2021, 176, 296-306.	10.3	37
59	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
60	Electrical switching in Feâ•Crâ•MgOâ•Fe magnetic tunnel junctions. Applied Physics Letters, 2008, 92, 212115.	3.3	33
61	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
62	Enabling Highâ€Performance NASICONâ€Based Solidâ€State Lithium Metal Batteries Towards Practical Conditions. Advanced Functional Materials, 2021, 31, 2102765.	14.9	32
63	â€œMagnetic Force Microscopy and Energy Loss Imaging of Superparamagnetic Iron Oxide Nanoparticlesâ€• Scientific Reports, 2011, 1, 202.	3.3	31
64	Nanochains Formation of Superparamagnetic Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 7249-7254.	3.1	29
65	Topotaxial Phase Transformation in Cobalt Doped Iron Oxide Core/Shell Hard Magnetic Nanoparticles. Chemistry of Materials, 2017, 29, 1279-1289.	6.7	29
66	Nanoscale mapping of plasmon and exciton in ZnO tetrapods coupled with Au nanoparticles. Scientific Reports, 2016, 6, 19168.	3.3	27
67	Highly efficient plasmon-mediated electron injection into cerium oxide from embedded silver nanoparticles. Nanoscale, 2019, 11, 10282-10291.	5.6	27
68	Addition of transition metals to lithium intercalated fullerides enhances hydrogen storage properties. International Journal of Hydrogen Energy, 2014, 39, 2124-2131.	7.1	25
69	Atomic Scale Structure and Reduction of Cerium Oxide at the Interface with Platinum. Advanced Materials Interfaces, 2015, 2, 1500375.	3.7	25
70	Pyramid-Shaped Wurtzite CdSe Nanocrystals with Inverted Polarity. ACS Nano, 2015, 9, 8537-8546.	14.6	25
71	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
72	Solid solutions and phase transitions in (Ca,M2+)M2+Si2O6 pyroxenes (M2+ = Co, Fe, Mg). American Mineralogist, 2014, 99, 704-711.	1.9	23

#	Article	IF	Citations
73	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
74	Model-based quantification of EELS spectra: Treating the effect of correlated noise. Ultramicroscopy, 2008, 108, 74-83.	1.9	22
75	Formation and magnetic manipulation of periodically aligned microchains in thin plastic membranes. Journal of Applied Physics, 2012, 112, 083927.	2.5	22
76	The Fresnel effect of a defocused biprism on the fringes in inelastic holography. Ultramicroscopy, 2008, 108, 263-269.	1.9	21
77	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
78	Magnetoresistive phenomena in an Fe-filled carbon nanotube/elastomer composite. Nanotechnology, 2010, 21, 125505.	2.6	20
79	Magnetic Shape Memory Turns to Nano: Microstructure Controlled Actuation of Freeâ€Standing Nanodisks. Small, 2018, 14, e1803027.	10.0	19
80	Asymmetric supercapacitors based on nickel decorated graphene and porous graphene electrodes. Electrochimica Acta, 2022, 424, 140626.	5.2	19
81	Nanoscale analysis of interfaces in a metal/oxide/oxide trilayer obtained by pulsed laser deposition. Applied Physics Letters, 2007, 91, 023106.	3.3	18
82	Birth and Growth of Octapod-Shaped Colloidal Nanocrystals Studied by Electron Tomography. Journal of Physical Chemistry C, 2011, 115, 20128-20133.	3.1	18
83	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
84	A holographic biprism as a perfect energy filter?. Ultramicroscopy, 2011, 111, 887-893.	1.9	17
85	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
86	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
87	Electrical response from nanocomposite PDMSâ€“Ag NPs generated byin situlaser ablation in solution. Nanotechnology, 2013, 24, 035707.	2.6	16
88	Influence of defect distribution on the reducibility of CeO_{2â^'x}nanoparticles. Nanotechnology, 2016, 27, 425705.	2.6	16
89	Modulation of the magnetic properties of gold-spinel ferrite heterostructured nanocrystals. Nano Research, 2020, 13, 785-794.	10.4	16
90	Growth of multi-wall and single-wall carbon nanotubes with in situ high vacuum catalyst deposition. Carbon, 2004, 42, 440-443.	10.3	15

#	Article	IF	Citations
91	Structure and spectroscopic properties of Câ€“Ni and CNxâ€“Ni nanocomposite films. Journal of Applied Physics, 2005, 98, 034313.	2.5	15
92	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
93	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
94	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
95	Deconvolution of core electron energy loss spectra. Ultramicroscopy, 2009, 109, 1343-1352.	1.9	14
96	Structural characterization of Er-doped Li2Oâ€“Al2O3â€“SiO2 glass ceramics. Optical Materials, 2008, 30, 1183-1188.	3.6	13
97	Morphology, structural properties and reducibility of size-selected CeO_{2â^’}_x nanoparticle films. Beilstein Journal of Nanotechnology, 2015, 6, 60-67.	2.8	13
98	Direct Quantification of Cu Vacancies and Spatial Localization of Surface Plasmon Resonances in Copper Phosphide Nanocrystals. , 2019, 1, 665-670.		13
99	Adsorption sites at Cs nanowires grown on the InAs(110) surface. Surface Science, 2001, 477, 35-42.	1.9	12
100	Contraction, cation oxidation state and size effects in cerium oxide nanoparticles. Nanotechnology, 2017, 28, 495702.	2.6	12
101	Optical and electronic properties of silver nanoparticles embedded in cerium oxide. Journal of Chemical Physics, 2020, 152, 114704.	3.0	12
102	Formation and microscopic investigation of iron oxide aligned nanowires into polymeric nanocomposite films. Microscopy Research and Technique, 2010, 73, 952-958.	2.2	11
103	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
104	Metal-induced gap states at InAs(110) surface. Surface Science, 2000, 454-456, 539-542.	1.9	10
105	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
106	Ag island nucleation on Ge(1 1 1)-c(2 Ã— 8). Applied Surface Science, 2003, 212-213, 213-218.	6.1	10
107	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
108	Platinum carbonyl clusters decomposition on defective graphene surface. Surface Science, 2020, 691, 121499.	1.9	8

#	Article	IF	Citations
109	Bandgap determination from individual orthorhombic thin cesium lead bromide nanosheets by electron energy-loss spectroscopy. Nanoscale Horizons, 2020, 5, 1610-1617.	8.0	8
110	New Approach for the Step by Step Control of Magnetic Nanostructure Functionalization. Inorganic Chemistry, 2014, 53, 9166-9173.	4.0	7
111	Origin of the visible emission of black silicon microstructures. Applied Physics Letters, 2015, 107, .	3.3	7
112	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
113	High Temperature Stability of Onion-Like Carbon vs Highly Oriented Pyrolytic Graphite. PLoS ONE, 2014, 9, e105788.	2.5	7
114	Electronic surface reconstruction and correlation in the fcc and dimer phases ofRbC60. Physical Review B, 2007, 75, .	3.2	6
115	Fitting the momentum dependent loss function in EELS. Microscopy Research and Technique, 2011, 74, 212-218.	2.2	6
116	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
117	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
118	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
119	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
120	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
121	Formation of carbon nitride nanospheres by ion implantation. Materials Chemistry and Physics, 2007, 103, 290-294.	4.0	4
122	Magnetism of aniline modified graphene-based materials. Journal of Magnetism and Magnetic Materials, 2016, 415, 45-50.	2.3	4
123	Investigation of Ni@CoO core-shell nanoparticle films synthesized by sequential layer deposition. Applied Surface Science, 2017, 396, 1860-1865.	6.1	4
124	Ag/MgO Nanoparticles via Gas Aggregation Nanocluster Source for Perovskite Solar Cell Engineering. Materials, 2021, 14, 5507.	2.9	4
125	Model-based quantification of EELS: is standardless quantification possible?. Mikrochimica Acta, 2008, 161, 439-443.	5.0	3
126	Laser-induced disaggregation of TiO₂nanofillers for uniform nanocomposites. Nanotechnology, 2014, 25, 125702.	2.6	3

#	Article	IF	Citations
127	Nickel addition to optimize the hydrogen storage performance of lithium intercalated fullerides. Materials Research Bulletin, 2020, 126, 110848.	5.2	3
128	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
129	Electron microscopy studies of electronâ€beam sensitive PbTeâ€based nanostructures. Microscopy Research and Technique, 2010, 73, 944-951.	2.2	2
130	Antiferromagnetic transition in graphene functionalized with nitroaniline. Journal of Nanophotonics, 2017, 11, 032512.	1.0	1
131	Structural Characterization of Erbium doped LAS Glass Ceramic Obtained by Glass Melting Technique. Materials Science Forum, 2007, 555, 377-381.	0.3	0