

Roberto Comparelli

List of Publications by Year in descending order

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117
papers

4,104
citations

109321

35
h-index

128289

60
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121
all docs

121
docs citations

121
times ranked

6331
citing authors

#	ARTICLE	IF	CITATIONS
1	Opto-Electronic Characterization of Photocatalysts Based on p,n-Junction Ternary and Quaternary Mixed Oxides Semiconductors (Cu ₂ O-In ₂ O ₃ and Cu ₂ O-In ₂ O ₃ -TiO ₂). <i>Catalysts</i> , 2022, 12, 153.	3.5	8
2	Selective Aerobic Oxidation of Furfural into Furoic Acid over a Highly Recyclable MnO ₂ @CeO ₂ Core-Shell Oxide: The Role of the Morphology of the Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 8615-8623.	6.7	8
3	Peripheral thioester functionalization induces <i>J</i> -aggregation in bithiophene-DPP films and nanoparticles. <i>RSC Advances</i> , 2021, 11, 11536-11540.	3.6	8
4	Nanomaterials in Photo (Electro) Catalysis. <i>Catalysts</i> , 2021, 11, 149.	3.5	4
5	Polydopamine/Ethylenediamine Nanoparticles Embedding a Photosynthetic Bacterial Reaction Center for Efficient Photocurrent Generation. <i>Advanced Sustainable Systems</i> , 2021, 5, 2000303.	5.3	13
6	High Surface Area Mesoporous Silica Nanoparticles with Tunable Size in the Sub-Micrometer Regime: Insights on the Size and Porosity Control Mechanisms. <i>Molecules</i> , 2021, 26, 4247.	3.8	22
7	PbS nanocrystals decorated Reduced Graphene Oxide for NIR responsive capacitive cathodes. <i>Carbon</i> , 2021, 182, 57-69.	10.3	8
8	Photocatalytic TiO ₂ -based coatings for environmental applications. <i>Catalysis Today</i> , 2021, 380, 62-83.	4.4	46
9	TiO ₂ -based nanomaterials assisted photocatalytic treatment for virus inactivation: perspectives and applications. <i>Current Opinion in Chemical Engineering</i> , 2021, 34, 100716.	7.8	15
10	Nanoparticle enhanced laser ablation inductively coupled plasma mass spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 163, 105731.	2.9	8
11	Photocatalytic TiO ₂ -Based Nanostructured Materials for Microbial Inactivation. <i>Catalysts</i> , 2020, 10, 1382.	3.5	44
12	Low Temperature Synthesis of Photocatalytic Mesoporous TiO ₂ Nanomaterials. <i>Catalysts</i> , 2020, 10, 893.	3.5	15
13	Photoelectrodes with Polydopamine Thin Films Incorporating a Bacterial Photoenzyme. <i>Advanced Electronic Materials</i> , 2020, 6, 2000140.	5.1	15
14	PbS Quantum Dots Decorating TiO ₂ Nanocrystals: Synthesis, Topology, and Optical Properties of the Colloidal Hybrid Architecture. <i>Molecules</i> , 2020, 25, 2939.	3.8	2
15	Gold-Speckled SPION@SiO ₂ Nanoparticles Decorated with Thiocarbohydrates for ASGPR1 Targeting: Towards HCC Dual Mode Imaging Potential Applications. <i>Chemistry - A European Journal</i> , 2020, 26, 11048-11059.	3.3	8
16	Coupling effects in QD dimers at sub-nanometer interparticle distance. <i>Nano Research</i> , 2020, 13, 1071-1080.	10.4	16
17	Eudragit S100 Entrapped Liposome for Curcumin Delivery: Anti-Oxidative Effect in Caco-2 Cells. <i>Coatings</i> , 2020, 10, 114.	2.6	37
18	Thermo-Plasmonic Killing of Escherichia coli TG1 Bacteria. <i>Materials</i> , 2019, 12, 1530.	2.9	27

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19	Scalable Synthesis of Mesoporous TiO ₂ for Environmental Photocatalytic Applications. <i>Materials</i> , 2019, 12, 1853.	2.9	42
20	Thermoplasmonic Activated Reverse-Mode Liquid Crystal Gratings. <i>ACS Applied Nano Materials</i> , 2019, 2, 3315-3322.	5.0	14
21	Photocatalytic Application of Ag/TiO ₂ Hybrid Nanoparticles. , 2019, , 373-394.		2
22	Gram-scale synthesis of UV-Vis light active plasmonic photocatalytic nanocomposite based on TiO ₂ /Au nanorods for degradation of pollutants in water. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 604-613.	20.2	76
23	Preparation of drug-loaded small unilamellar liposomes and evaluation of their potential for the treatment of chronic respiratory diseases. <i>International Journal of Pharmaceutics</i> , 2018, 545, 378-388.	5.2	42
24	Ascorbic acid-sensitized Au nanorods-functionalized nanostructured TiO ₂ transparent electrodes for photoelectrochemical genosensing. <i>Electrochimica Acta</i> , 2018, 276, 389-398.	5.2	29
25	One pot environmental friendly synthesis of gold nanoparticles using Punica Granatum Juice: A novel antioxidant agent for future dermatological and cosmetic applications. <i>Journal of Colloid and Interface Science</i> , 2018, 521, 50-61.	9.4	45
26	TiO ₂ Nanocrystal Based Coatings for the Protection of Architectural Stone: The Effect of Solvents in the Spray-Coating Application for a Self-Cleaning Surfaces. <i>Coatings</i> , 2018, 8, 356.	2.6	21
27	Photocatalytic Activity of TiO ₂ /AuNRs@SiO ₂ Nanocomposites Applied to Building Materials. <i>Coatings</i> , 2018, 8, 296.	2.6	12
28	Photo-Induced Heating in Plasmonic Nanoparticles Trapped in Thermo-Sensitive Liquid Crystals. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 6708-6718.	0.9	2
29	A designed UV-Vis light curable coating nanocomposite based on colloidal TiO ₂ NRs in a hybrid resin for stone protection. <i>Progress in Organic Coatings</i> , 2018, 122, 290-301.	3.9	19
30	TiO ₂ @PEI-Grafted-MWCNTs Hybrids Nanocomposites Catalysts for CO ₂ Photoreduction. <i>Materials</i> , 2018, 11, 307.	2.9	11
31	Encapsulation of Curcumin-Loaded Liposomes for Colonic Drug Delivery in a pH-Responsive Polymer Cluster Using a pH-Driven and Organic Solvent-Free Process. <i>Molecules</i> , 2018, 23, 739.	3.8	78
32	Surface Engineering of Gold Nanorods for Cytochrome <i>c</i> Bioconjugation: An Effective Strategy To Preserve the Protein Structure. <i>ACS Omega</i> , 2018, 3, 4959-4967.	3.5	11
33	Interaction between the photosynthetic anoxygenic microorganism <i>Rhodobacter sphaeroides</i> and soluble gold compounds. From toxicity to gold nanoparticle synthesis. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 172, 362-371.	5.0	18
34	Nanocomposite materials for photocatalytic degradation of pollutants. <i>Catalysis Today</i> , 2017, 281, 85-100.	4.4	161
35	Lipid-based systems loaded with PbS nanocrystals: near infrared emitting trackable nanovectors. <i>Journal of Materials Chemistry B</i> , 2017, 5, 1471-1481.	5.8	17
36	Enhanced photoactivity and conductivity in transparent TiO ₂ nanocrystals/graphene hybrid anodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9307-9315.	10.3	18

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37	Towards highly stable aqueous dispersions of multi-walled carbon nanotubes: the effect of oxygen plasma functionalization. <i>Journal of Colloid and Interface Science</i> , 2017, 491, 255-264.	9.4	66
38	Luminescent CdSe@ZnS nanocrystals embedded in liposomes: a cytotoxicity study in HeLa cells. <i>Toxicology Research</i> , 2017, 6, 947-957.	2.1	9
39	Nanostructured Photoelectrochemical Biosensing Platform for Cancer Biomarker Detection. <i>Procedia Technology</i> , 2017, 27, 144-145.	1.1	3
40	Multifunctional TiO ₂ /Fe _x O _y /Ag based nanocrystalline heterostructures for photocatalytic degradation of a recalcitrant pollutant. <i>Catalysis Today</i> , 2017, 284, 100-106.	4.4	16
41	Preparation and Characterization of Soybean Oil-Based Polyurethanes for Digital Dosing Applications. <i>Materials</i> , 2017, 10, 848.	2.9	13
42	Evaluating the NO _x Storage Catalysts (NSC) Aging: A Preliminary Analytical Study with Electronic Microscopy. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 1059.	2.5	0
43	Visible-Light-Active TiO ₂ -Based Hybrid Nanocatalysts for Environmental Applications. <i>Catalysts</i> , 2017, 7, 100.	3.5	93
44	Colloidal Nanocrystalline Semiconductor Materials as Photocatalysts for Environmental Protection of Architectural Stone. <i>Crystals</i> , 2017, 7, 30.	2.2	17
45	Liquid crystalline DNA. , 2017, , 409-421.		0
46	Plasmonic photoheating of gold nanorods in thermo-responsive chiral liquid crystals. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 125005.	2.2	7
47	TiO ₂ Nanocrystals Decorated CVD Graphene Based Hybrid for UV-Light Active Photoanodes. <i>Procedia Engineering</i> , 2016, 168, 396-402.	1.2	4
48	Electrophoretic deposition of colloidal TiO ₂ nanorods towards nano-porous thin-films. <i>Materials Letters</i> , 2016, 174, 226-229.	2.6	4
49	Integrin-targeting with peptide-bioconjugated semiconductor-magnetic nanocrystalline heterostructures. <i>Nano Research</i> , 2016, 9, 644-662.	10.4	19
50	Surface Functionalized Luminescent Nanocrystals Electrostatically Assembled onto a Patterned Substrate. <i>Current Nanoscience</i> , 2016, 12, 386-395.	1.2	2
51	Plasmonics Meets Biology through Optics. <i>Nanomaterials</i> , 2015, 5, 1022-1033.	4.1	1
52	Tuning light emission of PbS nanocrystals from infrared to visible range by cation exchange. <i>Science and Technology of Advanced Materials</i> , 2015, 16, 055007.	6.1	13
53	Photoactive Hybrid Material Based on Pyrene Functionalized PbS Nanocrystals Decorating CVD Monolayer Graphene. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 4151-4159.	8.0	29
54	In vitro characterization of 6-Coumarin loaded solid lipid nanoparticles and their uptake by immunocompetent fish cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 127, 79-88.	5.0	26

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55	Templating gold nanorods with liquid crystalline DNA. <i>Journal of Optics (United Kingdom)</i> , 2015, 17, 025001.	2.2	5
56	UV-Curable Nanocomposite Based on Methacrylic-Siloxane Resin and Surface-Modified TiO ₂ Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 15494-15505.	8.0	45
57	Transforming anatase TiO ₂ nanorods into ultrafine nanoparticles for advanced electrochemical performance. <i>Journal of Power Sources</i> , 2015, 294, 406-413.	7.8	11
58	Lipid/detergent mixed micelles as a tool for transferring antioxidant power from hydrophobic natural extracts into bio-deliverable liposome carriers: the case of lycopene rich oleoresins. <i>RSC Advances</i> , 2015, 5, 3081-3093.	3.6	15
59	Assembly of a photosynthetic reaction center with ABA tri-block polymersomes: highlights on protein localization. <i>Photochemical and Photobiological Sciences</i> , 2015, 14, 1844-1852.	2.9	13
60	Photo-thermal effects in gold nanoparticles dispersed in thermotropic nematic liquid crystals. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 20281-20287.	2.8	46
61	Applications of nanomaterials in modern medicine. <i>Rendiconti Lincei</i> , 2015, 26, 231-237.	2.2	5
62	Next-generation thermo-plasmonic technologies and plasmonic nanoparticles in optoelectronics. <i>Progress in Quantum Electronics</i> , 2015, 41, 23-70.	7.0	65
63	Plasmonic Thermometer Based on Thermotropic Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2015, 614, 93-99.	0.9	11
64	Photo-thermal effects in gold nanorods/DNA complexes. <i>Micro and Nano Systems Letters</i> , 2015, 3, .	3.7	6
65	Human elastin polypeptides improve the biomechanical properties of three-dimensional matrices through the regulation of elastogenesis. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 1218-1230.	4.0	8
66	Direct growth of shape controlled TiO ₂ nanocrystals onto SWCNTs for highly active photocatalytic materials in the visible. <i>Applied Catalysis B: Environmental</i> , 2015, 178, 91-99.	20.2	28
67	UV and solar-based photocatalytic degradation of organic pollutants by nano-sized TiO ₂ grown on carbon nanotubes. <i>Catalysis Today</i> , 2015, 240, 114-124.	4.4	122
68	Recombination Dynamics of Colloidal Nanocrystals in Functionalized-Poly-Methylmethacrylate Nanocomposites. <i>Nanoscience and Nanotechnology Letters</i> , 2015, 7, 67-73.	0.4	4
69	Uniform TiO ₂ /In ₂ O ₃ surface films effective in bacterial inactivation under visible light. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2014, 279, 1-7.	3.9	24
70	Excitation-Dependent Ultrafast Carrier Dynamics of Colloidal TiO ₂ Nanorods in Organic Solvent. <i>Journal of Physical Chemistry C</i> , 2014, 118, 25215-25222.	3.1	17
71	Patterned assembly of luminescent nanocrystals: role of the molecular chemistry at the interface. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	3
72	SERS Properties of Gold Nanorods at Resonance with Molecular, Transverse, and Longitudinal Plasmon Excitations. <i>Plasmonics</i> , 2014, 9, 581-593.	3.4	36

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73	Hybrid Assemblies of Fluorescent Nanocrystals and Membrane Proteins in Liposomes. <i>Langmuir</i> , 2014, 30, 1599-1608.	3.5	30
74	Segmented poly(styrene-co-vinylpyridine) as multivalent host for CdSe nanocrystal based nanocomposites. <i>European Polymer Journal</i> , 2014, 60, 222-234.	5.4	12
75	Electroactive Layer-by-Layer Plasmonic Architectures Based on Au Nanorods. <i>Langmuir</i> , 2014, 30, 2608-2618.	3.5	19
76	Photodegradation of nalidixic acid assisted by TiO ₂ nanorods/Ag nanoparticles based catalyst. <i>Chemosphere</i> , 2013, 91, 941-947.	8.2	37
77	Nano-Localized Heating Source for Photonics and Plasmonics. <i>Advanced Optical Materials</i> , 2013, 1, 899-904.	7.3	35
78	Assembly of Gold Nanorods for Highly Sensitive Detection of Mercury Ions. <i>IEEE Sensors Journal</i> , 2013, 13, 2834-2841.	4.7	12
79	Ion-Directed Assembly of Gold Nanorods: A Strategy for Mercury Detection. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 1084-1092.	8.0	58
80	Functionalized luminescent nanocrystals on patterned surfaces obtained by radio frequency glow discharges. <i>Nanotechnology</i> , 2013, 24, 145302.	2.6	4
81	Liquid Crystals: Nano-Localized Heating Source for Photonics and Plasmonics (Advanced Optical) Tj ETQq1 1 0.784314 rgBT ₅ /Overlo	7.3	35
82	Polyelectrolyte Multilayers As a Platform for Luminescent Nanocrystal Patterned Assemblies. <i>Langmuir</i> , 2012, 28, 5964-5974.	3.5	10
83	Assembly of gold nanorods for highly sensitive detection of heavy metals. , 2012, , .		0
84	Phase Transfer of CdS Nanocrystals Mediated by Heptamine β -Cyclodextrin. <i>Langmuir</i> , 2012, 28, 8711-8720.	3.5	7
85	Nanocrystalline TiO ₂ based films onto fibers for photocatalytic degradation of organic dye in aqueous solution. <i>Applied Catalysis B: Environmental</i> , 2012, 121-122, 190-197.	20.2	47
86	A Cast-Mold Approach to Iron Oxide and Pt/Iron Oxide Nanocontainers and Nanoparticles with a Reactive Concave Surface. <i>Journal of the American Chemical Society</i> , 2011, 133, 2205-2217.	13.7	71
87	Biofunctionalization of Anisotropic Nanocrystalline Semiconductor "Magnetic Heterostructures. <i>Langmuir</i> , 2011, 27, 6962-6970.	3.5	22
88	Photocatalytic Activity of Nanocomposite Catalyst Films Based on Nanocrystalline Metal/Semiconductors. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12033-12040.	3.1	39
89	Colloidal Inorganic Nanocrystal Based Nanocomposites: Functional Materials for Micro and Nanofabrication. <i>Materials</i> , 2010, 3, 1316-1352.	2.9	47
90	<title>Paint ablation process vs. different laser wavelengths for 18 diverse spray paints used for graffiti on the monuments and historical mansions</title>. , 2010, , .		0

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91	Colloidal chemistry routes for fabrication of nanoparticle-based metamaterials. Proceedings of SPIE, 2010, , .	0.8	1
92	Emerging methods for fabricating functional structures by patterning and assembling engineered nanocrystals. Physical Chemistry Chemical Physics, 2010, 12, 11197.	2.8	35
93	Chemically Directed Assembling of Functionalized Luminescent Nanocrystals onto Plasma Modified Substrates Towards Sensing and Optoelectronic Applications. Plasma Processes and Polymers, 2009, 6, S870.	3.0	5
94	A Multifrequency EPR Study on Organic-Capped Anatase TiO ₂ Nanocrystals. Journal of Physical Chemistry C, 2009, 113, 6221-6226.	3.1	25
95	Photochemical Synthesis of Water-Soluble Gold Nanorods: The Role of Silver in Assisting Anisotropic Growth. Chemistry of Materials, 2009, 21, 4192-4202.	6.7	85
96	The fate of silver ions in the photochemical synthesis of gold nanorods: an Extended X-ray Absorption Fine Structure Analysis. Dalton Transactions, 2009, , 10367.	3.3	21
97	Photocurrent generation in a CdS nanocrystals/poly[2-methoxy-5-(2-ethyl-oxo)phenylene vinylene] electrochemical cell. Thin Solid Films, 2008, 516, 5010-5015.	1.8	13
98	Interactions between surfactant capped CdS nanocrystals and organic solvent. Journal of Thermal Analysis and Calorimetry, 2008, 92, 271-277.	3.6	15
99	Luminescent nanocrystals in phospholipid micelles for bioconjugation: An optical and structural investigation. Journal of Colloid and Interface Science, 2008, 325, 558-566.	9.4	21
100	Photocatalytic degradation of methyl red by TiO ₂ : Comparison of the efficiency of immobilized nanoparticles versus conventional suspended catalyst. Journal of Hazardous Materials, 2007, 142, 130-137.	12.4	141
101	β-Cyclodextrin Functionalized CdS Nanocrystals for Fabrication of 2/3 D Assemblies. Journal of Physical Chemistry B, 2006, 110, 17388-17399.	2.6	31
102	Determination of optical parameters of colloidal TiO ₂ nanocrystals-based thin films by using surface plasmon resonance measurements for sensing applications. Sensors and Actuators B: Chemical, 2006, 115, 365-373.	7.8	16
103	Water phase transfer of oleic capped semiconductor nanocrystals mediated by β-cyclodextrins. , 2005, , .		2
104	Photocatalytic degradation of azo dyes by organic-capped anatase TiO ₂ nanocrystals immobilized onto substrates. Applied Catalysis B: Environmental, 2005, 55, 81-91.	20.2	190
105	UV-induced photocatalytic degradation of azo dyes by organic-capped ZnO nanocrystals immobilized onto substrates. Applied Catalysis B: Environmental, 2005, 60, 1-11.	20.2	262
106	Hybrid nanocomposites based on CdS and CdSe colloidal nanocrystals in organic polymers. , 2005, , .		5
107	Cyclodextrin mediated phase transfer in water of organic capped CdS nanocrystals. Synthetic Metals, 2005, 148, 43-46.	3.9	15
108	Photocatalytic degradation of methyl-red by immobilised nanoparticles of TiO ₂ and ZnO. Water Science and Technology, 2004, 49, 183-188.	2.5	43

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109	Role of Metal Nanoparticles in TiO ₂ /Ag Nanocomposite-Based Microheterogeneous Photocatalysis. Journal of Physical Chemistry B, 2004, 108, 9623-9630.	2.6	188
110	Optical properties of hybrid composites based on highly luminescent CdS nanocrystals in polymer. Nanotechnology, 2004, 15, S240-S244.	2.6	150
111	Photocatalytic Synthesis of Silver Nanoparticles Stabilized by TiO ₂ Nanorods: A Semiconductor/Metal Nanocomposite in Homogeneous Nonpolar Solution. Journal of the American Chemical Society, 2004, 126, 3868-3879.	13.7	304
112	Improved optical properties of CdS quantum dots by ligand exchange. Materials Science and Engineering C, 2003, 23, 1083-1086.	7.3	46
113	Photocatalytic activity of organic-capped anatase TiO ₂ nanocrystals in homogeneous organic solutions. Materials Science and Engineering C, 2003, 23, 707-713.	7.3	60
114	Colloidal oxide nanoparticles for the photocatalytic degradation of organic dye. Materials Science and Engineering C, 2003, 23, 285-289.	7.3	218
115	High quality CdS nanocrystals: surface effects. Synthetic Metals, 2003, 139, 597-600.	3.9	42
116	7. Characterization of inorganic nanostructured materials by electron microscopy. , 0, , .		1
117	Gold Nanorods: Plasmonic Photoheating. , 0, , 1-8.		0