Luigi Carbone

List of Publications by Citations

90 papers	4,581 citations	29 h-index	67 g-index
105 ext. papers	5,075 ext. citations	6.3 avg, IF	5.27 L-index

#	Paper	IF	Citations
90	Synthesis and micrometer-scale assembly of colloidal CdSe/CdS nanorods prepared by a seeded growth approach. *Nano Letters*, **2007**, 7, 2942-50	11.5	929
89	Microwave-assisted synthesis of colloidal inorganic nanocrystals. *Angewandte Chemie - International Edition*, **2011**, 50, 11312-59	16.4	610
88	Colloidal heterostructured nanocrystals: Synthesis and growth mechanisms. *Nano Today*, **2010**, 5, 449-493	17.9	568
87	Metallic-like stoichiometric copper sulfide nanocrystals: phase- and shape-selective synthesis, near-infrared surface plasmon resonance properties, and their modeling. *ACS Nano*, **2013**, 7, 7352-69	16.7	254
86	Selective growth of PbSe on one or both tips of colloidal semiconductor nanorods. *Nano Letters*, **2005**, 5, 445-9	11.5	216
85	Multiple wurtzite twinning in CdTe nanocrystals induced by methylphosphonic acid. *Journal of the American Chemical Society*, **2006**, 128, 748-55	16.4	150
84	Ultrafast electron-hole dynamics in core/shell CdSe/CdS dot/rod nanocrystals. *Nano Letters*, **2008**, 8, 4582-7	11.5	132
83	Polarized light emitting diode by long-range nanorod self-assembling on a water surface. *ACS Nano*, **2009**, 3, 1506-12	16.7	106
82	White organic light-emitting devices with CdSe/ZnS quantum dots as a red emitter. *Journal of Applied Physics*, **2005**, 97, 113501	2.5	100
81	Selective reactions on the tips of colloidal semiconductor nanorods. *Journal of Materials Chemistry*, **2006**, 16, 3952		100
80	Light-controlled one-sided growth of large plasmonic gold domains on quantum rods observed on the single particle level. *Nano Letters*, **2009**, 9, 3710-4	11.5	99
79	Colloidal Arenethiolate-Capped PbS Quantum Dots: Optoelectronic Properties, Self-Assembly, and Application in Solution-Cast Photovoltaics. *Journal of Physical Chemistry C*, **2013**, 117, 13305-13317	3.8	91
78	Mapping the polarization pattern of plasmon modes reveals nanoparticle symmetry. *Nano Letters*, **2008**, 8, 2345-50	11.5	62
77	Intrinsic optical nonlinearity in colloidal seeded grown CdSe/CdS nanostructures: Photoinduced screening of the internal electric field. *Physical Review B*, **2008**, 78,	3.3	59
76	Exciton Fine Structure of CdSe/CdS Nanocrystals Determined by Polarization Microscopy at Room Temperature. *ACS Nano*, **2015**, 9, 7992-8003	16.7	52
75	Non-blinking single-photon generation with anisotropic colloidal nanocrystals: towards room-temperature, efficient, colloidal quantum sources. *Advanced Materials*, **2013**, 25, 1974-80	24	42
74	Optical properties of tetrapod-shaped CdTe nanocrystals. *Applied Physics Letters*, **2005**, 87, 224101	3.4	42

73	Nanoscale Study of the Tarnishing Process in Electron Beam Lithography-Fabricated Silver Nanoparticles for Plasmonic Applications. *Journal of Physical Chemistry C*, **2016**, 120, 24314-24323	3.8	38
72	Self-assembly of highly fluorescent semiconductor nanorods into large scale smectic liquid crystal structures by coffee stain evaporation dynamics. *Journal of Physics Condensed Matter*, **2009**, 21, 264013	1.8	36
71	Two-dimensional photonic crystal resist membrane nanocavity embedding colloidal dot-in-a-rod nanocrystals. *Nano Letters*, **2008**, 8, 260-4	11.5	34
70	Confinement effects on optical phonons in polar tetrapod nanocrystals detected by resonant inelastic light scattering. *Nano Letters*, **2006**, 6, 478-82	11.5	34
69	Mikrowellen-unterstEzte Synthese von kolloidalen anorganischen Nanokristallen. *Angewandte Chemie*, **2011**, 123, 11510-11561	3.6	32
68	Rod-shaped nanocrystals elicit neuronal activity in vivo. *Small*, **2008**, 4, 1747-55	11	32
67	Novel hydroxyapatite nanorods improve anti-caries efficacy of enamel infiltrants. *Dental Materials*, **2016**, 32, 784-93	5.7	32
66	The role of the cosurfactant in the CTAB/water/n-pentanol/n-hexane system: Pentanol effect on the phase equilibria and mesophase structure. *Physical Chemistry Chemical Physics*, **2004**, 6, 1423-1429	3.6	31
65	MZnFe2O4 (M = Ni, Mn) cubic superparamagnetic nanoparticles obtained by hydrothermal synthesis. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	30
64	Fluorescence enhancement in colloidal semiconductor nanocrystals by metallic nanopatterns. *Sensors and Actuators B: Chemical*, **2007**, 126, 187-192	8.5	30
63	Rapid Sonochemical Approach Produces Functionalized Fe3O4 Nanoparticles with Excellent Magnetic, Colloidal, and Relaxivity Properties for MRI Application. *Journal of Physical Chemistry C*, **2017**, 121, 24206-24222	3.8	29
62	Continuous-Flow Production of Injectable Liposomes via a Microfluidic Approach. *Materials*, **2017**, 10,	3.5	29
61	Sustainable Preparation of Cardanol-Based Nanocarriers with Embedded Natural Phenolic Compounds. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1299-1304	8.3	26
60	Alignment of Rod-Shaped Single-Photon Emitters Driven by Line Defects in Liquid Crystals. *Advanced Functional Materials*, **2015**, 25, 1719-1726	15.6	26
59	Macroscale alignment of CdSe/CdS nanorods by porous anodic alumina templates. *Physica Status Solidi - Rapid Research Letters*, **2009**, 3, 151-153	2.5	21
58	Effect of charging on CdSe/CdS dot-in-rods single-photon emission. *Physical Review B*, **2014**, 90,	3.3	20
57	First example of a lipophilic porphyrin-cardanol hybrid embedded in a cardanol-based micellar nanodispersion. *Molecules*, **2012**, 17, 12252-61	4.8	20
56	Magnetic nanosystem for cancer therapy using oncocalyxone a, an antitomour secondary metabolite isolated from a Brazilian plant. *International Journal of Molecular Sciences*, **2013**, 14, 18269-83	6.3	20

55	Novel ferrofluids coated with a renewable material obtained from cashew nut shell liquid. *Microfluidics and Nanofluidics*, **2012**, 12, 677-686	2.8	19
54	Porphyrin synthesized from cashew nut shell liquid as part of a novel superparamagnetic fluorescence nanosystem. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	18
53	Self-assembly of amphiphilic nanocrystals. *Angewandte Chemie - International Edition*, **2009**, 48, 4282-3	16.4	18
52	Magnetic nanoparticles coated with anacardic acid derived from cashew nut shell liquid. *Journal of Materials Science*, **2013**, 48, 7875-7882	4.3	17
51	Carbon nanodot-based heterostructures for improving the charge separation and the photocurrent generation. *Nanoscale*, **2019**, 11, 7414-7423	7.7	16
50	The dynamic surface chemistry of colloidal metal chalcogenide quantum dots. *Nanoscale Advances*, **2019**, 1, 3639-3646	5.1	16
49	Polarimetry-based analysis of dipolar transitions of single colloidal CdSe/CdS dot-in-rods. *New Journal of Physics*, **2014**, 16, 093014	2.9	16
48	Multiphoton nonclassical light from clusters of single-photon emitters. *New Journal of Physics*, **2018**, 20, 073013	2.9	16
47	Electric-Field-Controlled Alignment of Rod-Shaped Fluorescent Nanocrystals in Smectic Liquid Crystal Defect Arrays. *Advanced Functional Materials*, **2016**, 26, 7122-7131	15.6	15
46	New ZnO@Cardanol Porphyrin Composite Nanomaterials with Enhanced Photocatalytic Capability under Solar Light Irradiation. *Materials*, **2017**, 10,	3.5	14
45	Confinement effects on optical phonons in spherical, rod-, and tetrapod-shaped nanocrystals detected by Raman spectroscopy. *Physica Status Solidi (A) Applications and Materials Science*, **2007**, 204, 483-486	1.6	14
44	Lithographic nano-patterning of colloidal nanocrystal emitters for the fabrication of waveguide photonic devices. *Sensors and Actuators B: Chemical*, **2007**, 126, 116-119	8.5	14
43	High Q-factor colloidal nanocrystal-based vertical microcavity by hot embossing technology. *Applied Physics Letters*, **2006**, 88, 181108	3.4	14
42	Photon correlations for colloidal nanocrystals and their clusters. *Optics Letters*, **2014**, 39, 1791-4	3	13
41	Optical trapping of nanoparticles by full solid-angle focusing. *Optica*, **2016**, 3, 1181	8.6	13
40	Synthesis routes for the growth of complex nanostructures. *Physica E: Low-Dimensional Systems and Nanostructures*, **2007**, 37, 128-133	3	12
39	Nanocrystals cylindrical microcavities exploiting thin-walled InGaAs/GaAs microtubes. *Microelectronic Engineering*, **2007**, 84, 1408-1411	2.5	12
38	Simplified preparation and characterization of magnetic hydroxyapatite-based nanocomposites. *Materials Science and Engineering C*, **2017**, 76, 1166-1174	8.3	11

37	Effect of solvent composition on the structural and magnetic properties of MnZn ferrite nanoparticles obtained by hydrothermal synthesis. *Microfluidics and Nanofluidics*, **2014**, 17, 233-244	2.8	11
36	Fast and safe microwave-assisted glass channel-shaped microstructure fabrication. *Lab on A Chip*, **2015**, 15, 2395-9	7.2	11
35	Cardanol-based green nanovesicles with antioxidant and cytotoxic activities. *Journal of Experimental Nanoscience*, **2016**, 11, 1274-1284	1.9	11
34	Grain Size Control of the Magnetic Nanoparticles by Solid State Route Modification. *Journal of Materials Engineering and Performance*, **2013**, 22, 2073-2079	1.6	10
33	Evidence of electron wave function delocalization in CdSe/CdS asymmetric nanocrystals. *Superlattices and Microstructures*, **2010**, 47, 170-173	2.8	10
32	Exciton transitions in tetrapod-shaped CdTe nanocrystals investigated by photomodulated transmittance spectroscopy. *Applied Physics Letters*, **2006**, 89, 094104	3.4	10
31	Synthesis and perspectives of complex crystalline nano-structures. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 1329-1336	1.6	9
30	Exploiting the Transformative Features of Metal Halides for the Synthesis of CsPbBr3@SiO2 Core‐Shell Nanocrystals. *Chemistry of Materials*, **2022**, 34, 405-413	9.6	9
29	Nanopositioning of colloidal nanocrystal emitters by means of photolithography and e-beam lithography. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3972-3975	1.3	8
28	The enhancement of excitonic emission crossing Saha equilibrium in trap passivated CH3NH3PbBr3 perovskite. *Communications Physics*, **2020**, 3,	5.4	7
27	Surface chemistry of arenethiolate-capped PbS quantum dots and application as colloidally stable photovoltaic ink. *Thin Solid Films*, **2014**, 560, 2-9	2.2	7
26	Bio-based benzoxazines synthesized in a deep eutectic solvent: A greener approach toward vesicular nanosystems. *Journal of Heterocyclic Chemistry*, **2020**, 57, 768-773	1.9	7
25	Biomimetic calcium carbonate with hierarchical porosity produced using cork as a sustainable template agent. *Journal of Environmental Chemical Engineering*, **2020**, 8, 103594	6.8	7
24	Localised excitation of a single photon source by a nanowaveguide. *Scientific Reports*, **2016**, 6, 19721	4.9	7
23	Nanomaterials Based on FeO and Phthalocyanines Derived from Cashew Nut Shell Liquid. *Molecules* , **2019**, 24,	4.8	5
22	Radiative recombination dynamics in tetrapod-shaped CdTe nanocrystals: Evidence for a photoinduced screening of the internal electric field. *Applied Physics Letters*, **2008**, 92, 191905	3.4	5
21	Free-standing micropatternable nanocomposites as efficient colour converting filters for light emitting devices. *Journal of Materials Chemistry C*, **2016**, 4, 5001-5009	7.1	5
20	Twofold Self-Assembling of Nanocrystals Into Nanocomposite Polymer. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 1-7	3.8	4

19	A self-assembly of graphene oxide@Fe3O4/metallo-phthalocyanine nanohybrid materials: synthesis, characterization, dielectric and thermal properties. *Journal of Materials Science*, **2017**, 52, 9546-9557	4.3	4
18	An ensemble-based method to assess the quality of a sample of nanocrystals as single photon emitters. *Optics Communications*, **2013**, 300, 215-219	2	4
17	Vapor-phase nucleation of individual CdSe nanostructures from shape-engineered nanocrystal seeds. *Applied Physics Letters*, **2008**, 92, 023106	3.4	4
16	Single Photons Emitted by Nanocrystals Optically Trapped in a Deep Parabolic Mirror. *Physical Review Letters*, **2020**, 124, 013607	7.4	3
15	Evidence for an internal field in CdSe/CdS nanorods by time resolved and single rod experiments. *Superlattices and Microstructures*, **2010**, 47, 174-177	2.8	3
14	Growth mechanism, shape and composition control of semiconductor nanocrystals **2008**, 1-34		3
13	CdSe/CdS Dot-in-Rods Nanocrystals Fast Blinking Dynamics. *ChemPhysChem*, **2018**, 19, 3288	3.2	3
12	Light-controlled one-sided growth of large plasmonic gold domains on quantum rods observed on the single particle level **2010**,		2
11	Fabrication of Colloidal Quantum Dot Microcavities by Imprint Lithography **2006**,		2
10	Tailoring the emission spectrum of colloidal nanocrystals by means of lithographically-imprinted hybrid vertical microcavities **2005**, 5840, 168		2
9	Continuous flow scalable production of injectable size-monodisperse nanoliposomes in easy-fabrication milli-fluidic reactors. *Chemical Engineering Science*, **2021**, 235, 116481	4.4	2
8	The novel heptyl phorolic acid cannabinoids content in different Cannabis sativa L. accessions. *Talanta*, **2021**, 235, 122704	6.2	2
7	Effect of shell size on single photon emission performances of core/shell dot-in-rods colloidal nanocrystals **2013**,		1
6	Kynurenine and kynurenic acid: Two human neuromodulators found in Cannabis sativa L.. *Journal of Pharmaceutical and Biomedical Analysis*, **2022**, 211, 114636	3.5	1
5	Ultrafast carrier dynamics in spherical CdSe core/elongated CdS shell nanocrystals. *Springer Series in Chemical Physics*, **2009**, 289-291	0.3	1
4	Electrochromic evaluation of airbrushed water-dispersible W18O49 nanorods obtained by microwave-assisted synthesis. *Nanotechnology*, **2020**,	3.4	1
3	Interconnection of specific nano-objects by electron beam lithography □A controllable method. *Materials Science and Engineering C*, **2008**, 28, 299-302	8.3	0
2	Magnetic Multicomponent Heterostructured Nanocrystals **2017**, 217-290		

1	Anacardic Acid: A Promising Building Block for the Sustainable Preparation of Vesicular Nanosystems. *Waste and Biomass Valorization*, **2021**, 12, 4367	3.2