Elena V Shevchenko

List of Publications by Year
in descending order

55	14,627	147801	161849
papers	citations	31 h-index	54 g-index

56	56	56	17932
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prospects of Colloidal Nanocrystals for Electronic and Optoelectronic Applications. Chemical Reviews, 2010, 110, 389-458.	47.7	3,708
2	Structural diversity in binary nanoparticle superlattices. Nature, 2006, 439, 55-59.	27.8	1,956
3	Thiol-Capping of CdTe Nanocrystals:â€‰ An Alternative to Organometallic Synthetic Routes. Journal of Physical Chemistry B, 2002, 106, 7177-7185.	2.6	1,485
4	Seeded Growth of Highly Luminescent CdSe/CdS Nanoheterostructures with Rod and Tetrapod Morphologies. Nano Letters, 2007, 7, 2951-2959.	9.1	717
5	Determination of Nanocrystal Sizes:â€‰ A Comparison of TEM, SAXS, and XRD Studies of Highly Monodisperse CoPt3 Particles. Langmuir, 2005, 21, 1931-1936.	3.5	626
6	Quasicrystalline order in self-assembled binary nanoparticle superlattices. Nature, 2009, 461, 964-967.	27.8	551
7	Colloidal Synthesis and Self-Assembly of CoPt3 Nanocrystals. Journal of the American Chemical Society, 2002, 124, 11480-11485.	13.7	533
8	Synergism in binary nanocrystal superlattices leads to enhanced p-type conductivity in self-assembled PbTe/Ag2Te thin films. Nature Materials, 2007, 6, 115-121.	27.5	498
9	Study of Nucleation and Growth in the Organometallic Synthesis of Magnetic Alloy Nanocrystals:â€‰ The Role of Nucleation Rate in Size Control of CoPt3 Nanocrystals. Journal of the American Chemical Society, 2003, 125, 9090-9101.	13.7	484
10	Structural Characterization of Self-Assembled Multifunctional Binary Nanoparticle Superlattices. Journal of the American Chemical Society, 2006, 128, 3620-3637.	13.7	452
11	Hollow Iron Oxide Nanoparticles for Application in Lithium Ion Batteries. Nano Letters, 2012, 12, 2429-2435.	9.1	369
12	Dipoleâ^'Dipole Interactions in Nanoparticle Superlattices. Nano Letters, 2007, 7, 1213-1219.	9.1	316
13	Gold/Iron Oxide Core/Hollowâ€‰Shell Nanoparticles. Advanced Materials, 2008, 20, 4323-4329.	21.0	308
14	Vacancy Coalescence during Oxidation of Iron Nanoparticles. Journal of the American Chemical Society, 2007, 129, 10358-10360.	13.7	298
15	Quantum Dot Chemiluminescence. Nano Letters, 2004, 4, 693-698.	9.1	275
16	Self-Assembled Binary Superlattices of CdSe and Au Nanocrystals and Their Fluorescence Properties. Journal of the American Chemical Society, 2008, 130, 3274-3275.	13.7	197
17	Heterogeneous nucleation and shape transformation of multicomponent metallicÂnanostructures. Nature Materials, 2015, 14, 215-223.	27.5	187
18	The Role of Order, Nanocrystal Size, and Capping Ligands in the Collective Mechanical Response of Three-Dimensional Nanocrystal Solids. Journal of the American Chemical Society, 2010, 132, 8953-8960.	13.7	157

#	Article	IF	Citations
19	Capping Ligands as Selectivity Switchers in Hydrogenation Reactions. Nano Letters, 2012, 12, 5382-5388.	9.1	146
20	Size-Dependent Multiple Twinning in Nanocrystal Superlattices. Journal of the American Chemical Society, 2010, 132, 289-296.	13.7	134
21	Intercalation of Sodium Ions into Hollow Iron Oxide Nanoparticles. Chemistry of Materials, 2013, 25, 245-252.	6.7	104
22	Using Shape to Control Photoluminescence from CdSe/CdS Core/Shell Nanorods. Journal of Physical Chemistry Letters, 2011, 2, 1469-1475.	4.6	91
23	Mechanical Properties of Face-Centered Cubic Supercrystals of Nanocrystals. Nano Letters, 2010, 10, 2363-2367.	9.1	86
24	Sequential Infiltration Synthesis for the Design of Low Refractive Index Surface Coatings with Controllable Thickness. ACS Nano, 2017, 11, 2521-2530.	14.6	84
25	â€œMagnet-in-the-Semiconductorâ€•FePtâ^'PbS and FePtâ^'PbSe Nanostructures: Magnetic Properties, Charge Transport, and Magnetoresistance. Journal of the American Chemical Society, 2010, 132, 6382-6391.	13.7	80
26	High-Pressure Structural Stability and Elasticity of Supercrystals Self-Assembled from Nanocrystals. Nano Letters, 2011, 11, 579-588.	9.1	76
27	Study of Nucleation and Growth Mechanism of the Metallic Nanodumbbells. Journal of the American Chemical Society, 2012, 134, 4384-4392.	13.7	70
28	In Situ Optical and Structural Studies on Photoluminesence Quenching in CdSe/CdS/Au Heterostructures. Journal of the American Chemical Society, 2014, 136, 2342-2350.	13.7	66
29	Comparison of Structural Behavior of Nanocrystals in Randomly Packed Films and Long-Range Ordered Superlattices by Time-Resolved Small Angle X-ray Scattering. Journal of the American Chemical Society, 2009, 131, 16386-16388.	13.7	61
30	Binary Transition-Metal Oxide Hollow Nanoparticles for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2018, 10, 24715-24724.	8.0	60
31	Insulator-to-Metal Transition in Nanocrystal Assemblies Driven by in Situ Mild Thermal Annealing. Nano Letters, 2004, 4, 1289-1293.	9.1	52
32	Revealing the Effects of the Non-solvent on the Ligand Shell of Nanoparticles and Their Crystallization. Journal of the American Chemical Society, 2019, 141, 16651-16662.	13.7	35
33	Controlling the spatial location of photoexcited electrons in semiconductor CdSe/CdS core/shell nanorods. Physical Review B, 2013, 87, .	3.2	31
34	Strain-Driven Stacking Faults in CdSe/CdS Core/Shell Nanorods. Journal of Physical Chemistry Letters, 2018, 9, 1900-1906.	4.6	30
35	Probing the Surface of Transition-Metal Nanocrystals by Chemiluminesence. Journal of the American Chemical Society, 2010, 132, 9102-9110.	13.7	29
36	Design of functional composite and all-inorganic nanostructured materials via infiltration of polymer templates with inorganic precursors. Journal of Materials Chemistry C, 2020, 8, 10604-10627.	5.5	29

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37	How â€œHollowâ€•Are Hollow Nanoparticles?. Journal of the American Chemical Society, 2013, 135, 2435-2438.	13.7	28
38	Design of lithium cobalt oxide electrodes with high thermal conductivity and electrochemical performance using carbon nanotubes and diamond particles. Carbon, 2018, 129, 702-710.	10.3	27
39	Oxidation Induced Doping of Nanoparticles Revealed by in Situ X-ray Absorption Studies. Nano Letters, 2016, 16, 3738-3747.	9.1	25
40	Rapid Synthesis of Nanoporous Conformal Coatings via Plasma-Enhanced Sequential Infiltration of a Polymer Template. ACS Omega, 2017, 2, 7812-7819.	3.5	23
41	Block-Co-polymer-Assisted Synthesis of All Inorganic Highly Porous Heterostructures with Highly Accessible Thermally Stable Functional Centers. ACS Applied Materials & Interfaces, 2019, 11, 30154-30162.	8.0	22
42	Ligand dynamics control structure, elasticity, and high-pressure behavior of nanoparticle superlattices. Nanoscale, 2019, 11, 10655-10666.	5.6	20
43	Accessibility of the pores in highly porous alumina films synthesized via sequential infiltration synthesis. Nanotechnology, 2018, 29, 495703.	2.6	19
44	The surface science of nanoparticles for catalysis: electronic and steric effects of organic ligands. Journal of Nanoparticle Research, 2018, 20, 1.	1.9	16
45	Effect of the Micelle Opening in Self-assembled Amphiphilic Block Co-polymer Films on the Infiltration of Inorganic Precursors. Langmuir, 2019, 35, 796-803.	3.5	16
46	Synthesis, modular composition, and electrochemical properties of lamellar iron sulfides. Journal of Materials Chemistry A, 2020, 8, 15834-15844.	10.3	10
47	Swelling-Assisted Sequential Infiltration Synthesis of Nanoporous ZnO Films with Highly Accessible Pores and Their Sensing Potential for Ethanol. ACS Applied Materials & Interfaces, 2021, 13, 35941-35948.	8.0	10
48	Insights into the extraction of photogenerated holes from CdSe/CdS nanorods for oxidative organic catalysis. Journal of Materials Chemistry A, 2021, 9, 12690-12699.	10.3	8
49	Unexpected compositional and structural modification of CoPt3 nanoparticles by extensive surface purification. Nanoscale, 2018, 10, 6382-6392.	5.6	7
50	Visualizing Heterogeneity of Monodisperse CdSe Nanocrystals by Their Assembly into Three-Dimensional Supercrystals. ACS Nano, 2020, 14, 14989-14998.	14.6	4
51	Effect of Polymer Removal on the Morphology and Phase of the Nanoparticles in All-Inorganic Heterostructures Synthesized via Two-Step Polymer Infiltration. Molecules, 2021, 26, 679.	3.8	3
52	Single-Molecule Measurements Spatially Probe States Involved in Electron Transfer from CdSe/CdS Core/Shell Nanorods. Journal of Physical Chemistry C, 2021, 125, 21246-21253.	3.1	3
53	Syntheses and Characterizations: 3.2 Synthesis of Metal Nanoparticles. , 0, , 185-238.		2
54	Hypoxia-induced biosynthesis of gold nanoparticles in the living brain. Nanoscale, 2019, 11, 19285-19290.	5.6	1

#	Article	IF	Citations
55	Spontaneous formation of anisotropic microrods from paraffin wax in an aqueous environment. Soft Matter, 2021, 18, 156-161.	2.7	1