Christopher B Murray

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/4067039/christopher-b-murray-publications-by-year.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

238
papers

26,271
citations

76
h-index

9-index

245
ext. papers

28,727
ext. citations

13
avg, IF

L-index

#	Paper	IF	Citations
238	Dynamical Change of Valence States and Structure in NiCu3 Nanoparticles during Redox Cycling. Journal of Physical Chemistry C, 2022, 126, 1991-2002	3.8	4
237	Electrochemically deposited molybdenum disulfide surfaces enable polymer adsorption studies using quartz crystal microbalance with dissipation monitoring (QCM-D) <i>Journal of Colloid and Interface Science</i> , 2022 , 614, 522-531	9.3	O
236	Evaporation-Driven Coassembly of Hierarchical, Multicomponent Networks ACS Nano, 2022,	16.7	1
235	Monodisperse Nanocrystal Superparticles through a SourceBink Emulsion System. <i>Chemistry of Materials</i> , 2022 , 34, 2779-2789	9.6	3
234	Dynamic magnetic field alignment and polarized emission of semiconductor nanoplatelets in a liquid crystal polymer <i>Nature Communications</i> , 2022 , 13, 2507	17.4	1
233	Structural and Valence State Modification of Cobalt in CoPt Nanocatalysts in Redox Conditions. <i>ACS Nano</i> , 2021 ,	16.7	7
232	Distinguishing Electron and Hole Dynamics in Functionalized CdSe/CdS Core/Shell Quantum Dots Using Complementary Ultrafast Spectroscopies and Kinetic Modeling. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 31-41	3.8	4
231	Rare-Earth Sulfide Nanocrystals from Wet Colloidal Synthesis: Tunable Compositions, Size-Dependent Light Absorption, and Sensitized Rare-Earth Luminescence. <i>Journal of the American Chemical Society</i> , 2021 , 143, 3300-3305	16.4	8
230	Enhanced Carrier Transport in Strongly Coupled, Epitaxially Fused CdSe Nanocrystal Solids. <i>Nano Letters</i> , 2021 , 21, 3318-3324	11.5	6
229	Broadband Circular Polarizers via Coupling in 3D Plasmonic Meta-Atom Arrays. <i>ACS Photonics</i> , 2021 , 8, 1286-1292	6.3	4
228	Quantitative 3D real-space analysis of Laves phase supraparticles. <i>Nature Communications</i> , 2021 , 12, 3980	17.4	3
227	Anisotropic nanocrystal shape and ligand design for co-assembly. Science Advances, 2021, 7,	14.3	5
226	Impurities in Nanocrystal Thin-Film Transistors Fabricated by Cation Exchange. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 6514-6518	6.4	1
225	Binary icosahedral clusters of hard spheres in spherical confinement. <i>Nature Physics</i> , 2021 , 17, 128-134	16.2	20
224	Grafted Nanoparticle Surface Wetting during Phase Separation in Polymer Nanocomposite Films. <i>ACS Applied Materials & District Action (Control of the Material of the Material</i>	9.5	5
223	Gaussian processes for autonomous data acquisition at large-scale synchrotron and neutron facilities. <i>Nature Reviews Physics</i> , 2021 , 3, 685-697	23.6	9
222	Effect of Ni particle size on the production of renewable methane from CO2 over Ni/CeO2 catalyst. Journal of Energy Chemistry, 2021 , 61, 602-611	12	17

Nanorod position and orientation in vertical cylinder block copolymer films. Soft Matter, 2020, 16, 3005-30614 5 221 Unusual Dinitrogen Binding and Electron Storage in Dinuclear Iron Complexes. Journal of the 16.4 220 10 American Chemical Society, **2020**, 142, 8147-8159 Nanoparticle diffusion during gelation of tetra poly(ethylene glycol) provides insight into 3.6 219 7 nanoscale structural evolution. Soft Matter, 2020, 16, 2256-2265 Efficient photoluminescence of isotropic rare-earth oxychloride nanocrystals from a solvothermal 218 5.8 route. Chemical Communications, 2020, 56, 3429-3432 Plasmonic Elastic Capsules as Colorimetric Reversible pH-Microsensors. Small, 2020, 16, e1903897 217 11 4 Favoring the Growth of High-Quality, Three-Dimensional Supercrystals of Nanocrystals. Journal of 216 3.8 12 Physical Chemistry C, **2020**, 124, 11256-11264 Emergence of complexity in hierarchically organized chiral particles. Science, 2020, 368, 642-648 85 215 33.3 Cluster-mining: an approach for determining core structures of metallic nanoparticles from atomic pair distribution function data. Acta Crystallographica Section A: Foundations and Advances, 2020, 214 17 1.7 76, 24-31 Chemo- and Thermomechanically Configurable 3D Optical Metamaterials Constructed from 16.7 213 10 Colloidal Nanocrystal Assemblies. ACS Nano, 2020, 14, 1427-1435 Engineering the composition of bimetallic nanocrystals to improve hydrodeoxygenation selectivity 212 5.1 for 2-acetylfuran. Applied Catalysis A: General, 2020, 606, 117808 Electron accepting naphthalene bisimide ligand architectures for modulation of Estacking in 211 10.8 2 nanocrystal hybrid materials. Nanoscale Horizons, 2020, 5, 1509-1514 Simultaneous Photonic and Excitonic Coupling in Spherical Quantum Dot Supercrystals. ACS Nano, 16.7 210 13 **2020**, 14, 13806-13815 General Synthetic Route to High-Quality Colloidal III-V Semiconductor Quantum Dots Based on 209 16.4 20 Pnictogen Chlorides. Journal of the American Chemical Society, 2019, 141, 15145-15152 Generalized Synthetic Strategy for Transition-Metal-Doped Brookite-Phase TiO Nanorods. Journal 208 16.4 51 of the American Chemical Society, **2019**, 141, 16548-16552 Air-Stable CuInSe Nanocrystal Transistors and Circuits via Post-Deposition Cation Exchange. ACS 16.7 207 19 Nano, 2019, 13, 2324-2333 Nanocrystal Core Size and Shape Substitutional Doping and Underlying Crystalline Order in 206 16.7 20 Nanocrystal Superlattices. ACS Nano, 2019, 13, 5712-5719 The Influence of Surface Platinum Deposits on the Photocatalytic Activity of Anatase TiO2 205 3.8 7 Nanocrystals. Journal of Physical Chemistry C, 2019, 123, 10477-10486 Tuning the Electrocatalytic Oxygen Reduction Reaction Activity of Pt-Co Nanocrystals by Cobalt 204 Concentration with Atomic-Scale Understanding. ACS Applied Materials & amp; Interfaces, 2019, 11, 2678 9.567974

203	Phase Behavior of Grafted Polymer Nanocomposites from Field-Based Simulations. <i>Macromolecules</i> , 2019 , 52, 5110-5121	5.5	16
202	Experiments and Simulations Probing Local Domain Bulge and String Assembly of Aligned Nanoplates in a Lamellar Diblock Copolymer. <i>Macromolecules</i> , 2019 , 52, 8989-8999	5.5	5
201	Dendrimer Ligand Directed Nanoplate Assembly. ACS Nano, 2019, 13, 14241-14251	16.7	10
200	Plasmonic Optical and Chiroptical Response of Self-Assembled Au Nanorod Equilateral Trimers. <i>ACS Nano</i> , 2019 , 13, 1617-1624	16.7	41
199	Bimetallic synergy in cobaltpalladium nanocatalysts for CO oxidation. <i>Nature Catalysis</i> , 2019 , 2, 78-85	36.5	114
198	A Study of Tetrahydrofurfuryl Alcohol to 1,5-Pentanediol Over PtWOx/C. <i>Catalysis Letters</i> , 2018 , 148, 1047-1054	2.8	32
197	3D Nanofabrication via Chemo-Mechanical Transformation of Nanocrystal/Bulk Heterostructures. <i>Advanced Materials</i> , 2018 , 30, e1800233	24	11
196	A comparison of furfural hydrodeoxygenation over Pt-Co and Ni-Fe catalysts at high and low H2 pressures. <i>Catalysis Today</i> , 2018 , 302, 73-79	5-3	49
195	Photocatalytic Hydrogen Evolution from Substoichiometric Colloidal WO3N Nanowires. <i>ACS Energy Letters</i> , 2018 , 3, 1904-1910	20.1	109
194	A Characterization Study of Reactive Sites in ALD-Synthesized WOx/ZrO2 Catalysts. <i>Catalysts</i> , 2018 , 8, 292	4	12
193	Charge Transport Modulation in PbSe Nanocrystal Solids by Au Ag Nanoparticle Doping. <i>ACS Nano</i> , 2018 , 12, 9091-9100	16.7	16
192	Interplay between spherical confinement and particle shape on the self-assembly of rounded cubes. <i>Nature Communications</i> , 2018 , 9, 2228	17.4	57
191	Morphological Dependence of the Thermal and Photochemical Reactions of Acetaldehyde on Anatase TiO2 Nanocrystals. <i>Topics in Catalysis</i> , 2018 , 61, 365-378	2.3	4
190	Spectroscopic characterization of a highly selective NiCu3/C hydrodeoxygenation catalyst. <i>Catalysis Science and Technology</i> , 2018 , 8, 6100-6108	5.5	9
189	Alignment of Nanoplates in Lamellar Diblock Copolymer Domains and the Effect of Particle Volume Fraction on Phase Behavior. <i>ACS Macro Letters</i> , 2018 , 7, 1400-1407	6.6	17
188	Favorable Core/Shell Interface within CoP/Pt Nanorods for Oxygen Reduction Electrocatalysis. <i>Nano Letters</i> , 2018 , 18, 7870-7875	11.5	46
187	Thermal and Photocatalytic Reactions of Methanol and Acetaldehyde on Pt-Modified Brookite TiO2 Nanorods. <i>ACS Catalysis</i> , 2018 , 8, 11834-11846	13.1	21
186	Improved Models for Metallic Nanoparticle Cores from Atomic Pair Distribution Function (PDF) Analysis. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 29498-29506	3.8	28

(2017-2018)

18	Nanoimprinted Chiral Plasmonic Substrates with Three-Dimensional Nanostructures. <i>Nano Letters</i> , 2018 , 18, 7389-7394	11.5	25
18.	Improved Chemical and Colloidal Stability of Gold Nanoparticles through Dendron Capping. Langmuir, 2018 , 34, 13333-13338	4	12
18	Hierarchical Materials Design by Pattern Transfer Printing of Self-Assembled Binary Nanocrystal Superlattices. <i>Nano Letters</i> , 2017 , 17, 1387-1394	11.5	37
18.	Directional Carrier Transfer in Strongly Coupled Binary Nanocrystal Superlattice Films Formed by Assembly and in Situ Ligand Exchange at a LiquidAir Interface. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 4146-4157	3.8	13
18	Engineering Localized Surface Plasmon Interactions in Gold by Silicon Nanowire for Enhanced Heating and Photocatalysis. <i>Nano Letters</i> , 2017 , 17, 1839-1845	11.5	43
18	Plasmon Resonances in Self-Assembled Two-Dimensional Au Nanocrystal Metamolecules. <i>ACS Nano</i> , 2017 , 11, 2917-2927	16.7	51
17	Thermal and Photochemical Reactions of Methanol, Acetaldehyde, and Acetic Acid on Brookite TiO2 Nanorods. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 11488-11498	3.8	17
17	A semi-combinatorial approach for investigating polycatenar ligand-controlled synthesis of rare-earth fluoride nanocrystals. <i>Nanoscale</i> , 2017 , 9, 8107-8112	7.7	5
17	Angular measurements of the dynein ring reveal a stepping mechanism dependent on a flexible stalk. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E4564-B	11573 E4573	22
17	Unraveling the surface state and composition of highly selective nanocrystalline Ni I Iu alloy catalysts for hydrodeoxygenation of HMF. <i>Catalysis Science and Technology</i> , 2017 , 7, 1735-1743	5.5	64
17.	The dendritic effect and magnetic permeability in dendron coated nickel and manganese zinc ferrite nanoparticles. <i>Nanoscale</i> , 2017 , 9, 13922-13928	7.7	6
17.	Plasmonic-Based Mechanochromic Microcapsules as Strain Sensors. <i>Small</i> , 2017 , 13, 1701925	11	20
17	3 Anisotropic Cracking of Nanocrystal Superlattices. <i>Nano Letters</i> , 2017 , 17, 6501-6506	11.5	13
17.	Design, Self-Assembly, and Switchable Wettability in Hydrophobic, Hydrophilic, and Janus Dendritic LigandCold Nanoparticle Hybrid Materials. <i>Chemistry of Materials</i> , 2017 , 29, 8737-8746	9.6	25
17:	Nanorod Mobility Influences Polymer Diffusion in Polymer Nanocomposites. <i>ACS Macro Letters</i> , 2017 , 6, 869-874	6.6	10
17	Preparation and Self-Assembly of Dendronized Janus FeO-Pt and FeO-Au Heterodimers. <i>ACS Nano</i> , 2017 , 11, 7958-7966	16.7	37
16	Rapid Large-Scale Assembly and Pattern Transfer of One-Dimensional Gold Nanorod Superstructures. <i>ACS Applied Materials & Amp; Interfaces</i> , 2017 , 9, 25513-25521	9.5	24
16	High-strength magnetically switchable plasmonic nanorods assembled from a binary nanocrystal mixture. <i>Nature Nanotechnology</i> , 2017 , 12, 228-232	28.7	56

167	Quasicrystalline nanocrystal superlattice with partial matching rules. <i>Nature Materials</i> , 2017 , 16, 214-27	1 9 27	96
166	The effects of inorganic surface treatments on photogenerated carrier mobility and lifetime in PbSe quantum dot thin films. <i>Chemical Physics</i> , 2016 , 471, 81-88	2.3	15
165	Shape-dependence of the thermal and photochemical reactions of methanol on nanocrystalline anatase TiO2. <i>Surface Science</i> , 2016 , 654, 1-7	1.8	20
164	Protein-directed self-assembly of a fullerene crystal. <i>Nature Communications</i> , 2016 , 7, 11429	17.4	47
163	Ultrafast Photoluminescence from the Core and the Shell in CdSe/CdS Dot-in-Rod Heterostructures. <i>ChemPhysChem</i> , 2016 , 17, 759-65	3.2	17
162	Dendronization-induced phase-transfer, stabilization and self-assembly of large colloidal Au nanoparticles. <i>Nanoscale</i> , 2016 , 8, 13192-8	7.7	15
161	Base metal-Pt alloys: A general route to high selectivity and stability in the production of biofuels from HMF. <i>Applied Catalysis B: Environmental</i> , 2016 , 199, 439-446	21.8	75
160	NeutrAvidin Functionalization of CdSe/CdS Quantum Nanorods and Quantification of Biotin Binding Sites using Biotin-4-Fluorescein Fluorescence Quenching. <i>Bioconjugate Chemistry</i> , 2016 , 27, 562	2-8 ^{.3}	14
159	The H2 Pressure Dependence of Hydrodeoxygenation Selectivities for Furfural Over Pt/C Catalysts. <i>Catalysis Letters</i> , 2016 , 146, 711-717	2.8	39
158	Synthesis and Size-Selective Precipitation of Monodisperse Nonstoichiometric MxFe3NO4 (M = Mn, Co) Nanocrystals and Their DC and AC Magnetic Properties. <i>Chemistry of Materials</i> , 2016 , 28, 480-4	8 ^{9.6}	33
157	Coherent Acoustic Phonons in Colloidal Semiconductor Nanocrystal Superlattices. <i>ACS Nano</i> , 2016 , 10, 1163-9	16.7	47
156	Self-assembled Supraparticles by Spherical Confinement 2016 , 115-116		
155	Engineering uniform nanocrystals: Mechanism of formation and self-assembly into bimetallic nanocrystal superlattices. <i>AICHE Journal</i> , 2016 , 62, 392-398	3.6	18
154	Visualizing non-equilibrium lithiation of spinel oxide via in situ transmission electron microscopy. <i>Nature Communications</i> , 2016 , 7, 11441	17.4	143
153	Alternate current magnetic property characterization of nonstoichiometric zinc ferrite nanocrystals for inductor fabrication via a solution based process. <i>Journal of Applied Physics</i> , 2016 , 119, 113901	2.5	9
152	One-step green synthesis of gold and silver nanoparticles with ascorbic acid and their versatile surface post-functionalization. <i>RSC Advances</i> , 2016 , 6, 33092-33100	3.7	102
151	Engineering titania nanostructure to tune and improve its photocatalytic activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 3966-71	11.5	86
150	Nanocrystal Size-Dependent Efficiency of Quantum Dot Sensitized Solar Cells in the Strongly Coupled CdSe Nanocrystals/TiO2 System. <i>ACS Applied Materials & Amp; Interfaces</i> , 2016 , 8, 14692-700	9.5	54

(2015-2016)

149	Mechanisms for High Selectivity in the Hydrodeoxygenation of 5-Hydroxymethylfurfural over PtCo Nanocrystals. <i>ACS Catalysis</i> , 2016 , 6, 4095-4104	13.1	100
148	Exploiting the colloidal nanocrystal library to construct electronic devices. <i>Science</i> , 2016 , 352, 205-8	33.3	189
147	Revealing particle growth mechanisms by combining high-surface-area catalysts made with monodisperse particles and electron microscopy conducted at atmospheric pressure. <i>Journal of Catalysis</i> , 2016 , 337, 240-247	7:3	28
146	Statistical Description of CdSe/CdS Dot-in-Rod Heterostructures Using Scanning Transmission Electron Microscopy. <i>Chemistry of Materials</i> , 2016 , 28, 3345-3351	9.6	11
145	Advanced Architecture for Colloidal PbS Quantum Dot Solar Cells Exploiting a CdSe Quantum Dot Buffer Layer. <i>ACS Nano</i> , 2016 , 10, 9267-9273	16.7	59
144	Polycatenar Ligand Control of the Synthesis and Self-Assembly of Colloidal Nanocrystals. <i>Journal of the American Chemical Society</i> , 2016 , 138, 10508-15	16.4	17
143	Prospects of nanoscience with nanocrystals. <i>ACS Nano</i> , 2015 , 9, 1012-57	16.7	849
142	Large-Area Nanoimprinted Colloidal Au Nanocrystal-Based Nanoantennas for Ultrathin Polarizing Plasmonic Metasurfaces. <i>Nano Letters</i> , 2015 , 15, 5254-60	11.5	56
141	Synthesis and X-ray Characterization of Cobalt Phosphide (Co2P) Nanorods for the Oxygen Reduction Reaction. <i>ACS Nano</i> , 2015 , 9, 8108-15	16.7	109
140	Thermal and photochemical reactions of methanol on nanocrystalline anatase TiO2 thin films. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 17190-201	3.6	22
139	Selective p- and n-Doping of Colloidal PbSe Nanowires To Construct Electronic and Optoelectronic Devices. <i>ACS Nano</i> , 2015 , 9, 7536-44	16.7	28
138	Structure determination and modeling of monoclinic trioctylphosphine oxide. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2015 , 71, 239-41	0.8	8
137	Binary and ternary superlattices self-assembled from colloidal nanodisks and nanorods. <i>Journal of the American Chemical Society</i> , 2015 , 137, 6662-9	16.4	89
136	Efficient removal of organic ligands from supported nanocrystals by fast thermal annealing enables catalytic studies on well-defined active phases. <i>Journal of the American Chemical Society</i> , 2015 , 137, 690	o ₫. 6.4	156
135	Characterization of Shape and Monodispersity of Anisotropic Nanocrystals through Atomistic X-ray Scattering Simulation. <i>Chemistry of Materials</i> , 2015 , 27, 2502-2506	9.6	25
134	Deposition of wafer-scale single-component and binary nanocrystal superlattice thin films via dip-coating. <i>Advanced Materials</i> , 2015 , 27, 2846-51	24	45
133	Smectic Nanorod Superlattices Assembled on Liquid Subphases: Structure, Orientation, Defects, and Optical Polarization. <i>Chemistry of Materials</i> , 2015 , 27, 2998-3008	9.6	59
132	Flexible, High-Speed CdSe Nanocrystal Integrated Circuits. <i>Nano Letters</i> , 2015 , 15, 7155-60	11.5	47

131	Increased carrier mobility and lifetime in CdSe quantum dot thin films through surface trap passivation and doping. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 4605-9	6.4	36
130	Uniform Bimetallic Nanocrystals by High-Temperature Seed-Mediated Colloidal Synthesis and Their Catalytic Properties for Semiconducting Nanowire Growth. <i>Chemistry of Materials</i> , 2015 , 27, 5833-5838	9.6	23
129	Shape-Controlled Synthesis of Isotopic Yttrium-90-Labeled Rare Earth Fluoride Nanocrystals for Multimodal Imaging. <i>ACS Nano</i> , 2015 , 9, 8718-28	16.7	37
128	Dendron-Mediated Engineering of Interparticle Separation and Self-Assembly in Dendronized Gold Nanoparticles Superlattices. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10728-34	16.4	41
127	Spectrally-Resolved Dielectric Functions of Solution-Cast Quantum Dot Thin Films. <i>Chemistry of Materials</i> , 2015 , 27, 6463-6469	9.6	29
126	Fast Nanorod Diffusion through Entangled Polymer Melts. ACS Macro Letters, 2015 , 4, 952-956	6.6	25
125	Probing the Structure, Composition, and Spatial Distribution of Ligands on Gold Nanorods. <i>Nano Letters</i> , 2015 , 15, 5730-8	11.5	33
124	Substitutional doping in nanocrystal superlattices. <i>Nature</i> , 2015 , 524, 450-3	50.4	133
123	Comparison of HMF hydrodeoxygenation over different metal catalysts in a continuous flow reactor. <i>Applied Catalysis A: General</i> , 2015 , 508, 86-93	5.1	57
122	Quantifying "Softness" of Organic Coatings on Gold Nanoparticles Using Correlated Small-Angle X-ray and Neutron Scattering. <i>Nano Letters</i> , 2015 , 15, 8008-12	11.5	34
121	Charge transport in strongly coupled quantum dot solids. <i>Nature Nanotechnology</i> , 2015 , 10, 1013-26	28.7	364
120	In-situ Study of Coarsening Mechanisms of Supported Metal Particles in Reducing Gas. <i>Microscopy and Microanalysis</i> , 2015 , 21, 643-644	0.5	
119	A comparison of hierarchical Pt@CeO2/SiAl2O3 and Pd@CeO2/SiAl2O3. <i>Catalysis Today</i> , 2015 , 253, 137-141	5.3	7
118	Synergistic oxygen evolving activity of a TiO2-rich reconstructed SrTiO3(001) surface. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2939-47	16.4	55
117	Ultrafast electron trapping in ligand-exchanged quantum dot assemblies. ACS Nano, 2015, 9, 1440-7	16.7	14
116	Lifetime, mobility, and diffusion of photoexcited carriers in ligand-exchanged lead selenide nanocrystal films measured by time-resolved terahertz spectroscopy. <i>ACS Nano</i> , 2015 , 9, 1820-8	16.7	53
115	Doubling the efficiency of third harmonic generation by positioning ITO nanocrystals into the hot-spot of plasmonic gap-antennas. <i>Nano Letters</i> , 2014 , 14, 2867-72	11.5	137
114	Air-stable, nanostructured electronic and plasmonic materials from solution-processable, silver nanocrystal building blocks. <i>ACS Nano</i> , 2014 , 8, 2746-54	16.7	33

113	Tunable Optical Anisotropy of Seeded CdSe/CdS Nanorods. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 85-91	6.4	40
112	Effects of Post-Synthesis Processing on CdSe Nanocrystals and Their Solids: Correlation between Surface Chemistry and Optoelectronic Properties. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 27097-271	ı <i>6</i> 58	28
111	Enhanced energy transfer in quasi-quaternary nanocrystal superlattices. <i>Advanced Materials</i> , 2014 , 26, 2419-23	24	21
110	Au@TiO2 CoreBhell Nanostructures with High Thermal Stability. <i>Catalysis Letters</i> , 2014 , 144, 1939-1945	5 2.8	13
109	Engineering charge injection and charge transport for high performance PbSe nanocrystal thin film devices and circuits. <i>Nano Letters</i> , 2014 , 14, 6210-6	11.5	90
108	Monodisperse core/shell Ni/FePt nanoparticles and their conversion to Ni/Pt to catalyze oxygen reduction. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15921-4	16.4	144
107	Size- and composition-dependent radio frequency magnetic permeability of iron oxide nanocrystals. <i>ACS Nano</i> , 2014 , 8, 12323-37	16.7	34
106	Supported platinumlinc oxide corellhell nanoparticle catalysts for methanol steam reforming. Journal of Materials Chemistry A, 2014 , 2, 19509-19514	13	27
105	Ligand coupling symmetry correlates with thermopower enhancement in small-molecule/nanocrystal hybrid materials. <i>ACS Nano</i> , 2014 , 8, 10528-36	16.7	16
104	Gold nanorod length controls dispersion, local ordering, and optical absorption in polymer nanocomposite films. <i>Soft Matter</i> , 2014 , 10, 3404-13	3.6	25
103	Bulk metallic glass-like scattering signal in small metallic nanoparticles. ACS Nano, 2014, 8, 6163-70	16.7	23
102	Nanodisco balls: control over surface versus core loading of diagnostically active nanocrystals into polymer nanoparticles. <i>ACS Nano</i> , 2014 , 8, 9143-53	16.7	38
101	Synthesis of N-Type Plasmonic Oxide Nanocrystals and the Optical and Electrical Characterization of their Transparent Conducting Films. <i>Chemistry of Materials</i> , 2014 , 26, 4579-4588	9.6	41
100	Low-frequency (1/f) noise in nanocrystal field-effect transistors. ACS Nano, 2014 , 8, 9664-72	16.7	43
99	Gold nanorod translocations and charge measurement through solid-state nanopores. <i>Nano Letters</i> , 2014 , 14, 5358-64	11.5	48
98	Gate-induced carrier delocalization in quantum dot field effect transistors. <i>Nano Letters</i> , 2014 , 14, 5948	8- 52 .5	25
97	Mineralizer-Assisted Shape-Control of Rare Earth Oxide Nanoplates. <i>Chemistry of Materials</i> , 2014 , 26, 6328-6332	9.6	27
96	Plasmon-enhanced upconversion luminescence in single nanophosphor-nanorod heterodimers formed through template-assisted self-assembly. <i>ACS Nano</i> , 2014 , 8, 9482-91	16.7	105

95	Enhanced charge transfer kinetics of CdSe quantum dot-sensitized solar cell by inorganic ligand exchange treatments. <i>ACS Applied Materials & Date of the Samp; Interfaces</i> , 2014 , 6, 3721-8	9.5	76
94	Designing high-performance PbS and PbSe nanocrystal electronic devices through stepwise, post-synthesis, colloidal atomic layer deposition. <i>Nano Letters</i> , 2014 , 14, 1559-66	11.5	166
93	Solution-phase synthesis of titanium dioxide nanoparticles and nanocrystals. <i>Chemical Reviews</i> , 2014 , 114, 9319-45	68.1	291
92	Solution-processed phase-change VO(2) metamaterials from colloidal vanadium oxide (VO(x)) nanocrystals. <i>ACS Nano</i> , 2014 , 8, 797-806	16.7	96
91	Methane Oxidation on [email[protected]2/SiAl2O3 Is Enhanced by Surface Reduction of ZrO2. <i>ACS Catalysis</i> , 2014 , 4, 3902-3909	13.1	96
90	Expanding the spectral tunability of plasmonic resonances in doped metal-oxide nanocrystals through cooperative cation-anion codoping. <i>Journal of the American Chemical Society</i> , 2014 , 136, 11680	-6 ^{6.4}	92
89	High-temperature photoluminescence of CdSe/CdS core/shell nanoheterostructures. <i>ACS Nano</i> , 2014 , 8, 6466-74	16.7	63
88	Seeded growth of metal-doped plasmonic oxide heterodimer nanocrystals and their chemical transformation. <i>Journal of the American Chemical Society</i> , 2014 , 136, 5106-15	16.4	60
87	X-ray mapping of nanoparticle superlattice thin films. ACS Nano, 2014, 8, 12843-50	16.7	18
86	Plasmonic enhancement of nanophosphor upconversion luminescence in Au nanohole arrays. <i>ACS Nano</i> , 2013 , 7, 7186-92	16.7	174
85	In situ repair of high-performance, flexible nanocrystal electronics for large-area fabrication and operation in air. <i>ACS Nano</i> , 2013 , 7, 8275-83	16.7	48
84	Control of metal nanocrystal size reveals metal-support interface role for ceria catalysts. <i>Science</i> , 2013 , 341, 771-3	33.3	916
83	Interpreting the Energy-Dependent Anisotropy of Colloidal Nanorods Using Ensemble and Single-Particle Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 23928-23937	3.8	22
82	Shape alloys of nanorods and nanospheres from self-assembly. <i>Nano Letters</i> , 2013 , 13, 4980-8	11.5	87
81	Solution-based stoichiometric control over charge transport in nanocrystalline CdSe devices. <i>ACS Nano</i> , 2013 , 7, 8760-70	16.7	41
80	Shape-controlled synthesis of Pt nanocrystals: the role of metal carbonyls. <i>ACS Nano</i> , 2013 , 7, 645-53	16.7	149
79	Using binary surfactant mixtures to simultaneously improve the dimensional tunability and monodispersity in the seeded growth of gold nanorods. <i>Nano Letters</i> , 2013 , 13, 765-71	11.5	708
7 ⁸	Ultrafast electron trapping at the surface of semiconductor nanocrystals: excitonic and biexcitonic processes. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 4412-21	3.4	47

77	Bistable magnetoresistance switching in exchange-coupled CoFeD日FeDDinary nanocrystal superlattices by self-assembly and thermal annealing. <i>ACS Nano</i> , 2013 , 7, 1478-86	16.7	73
76	Tunable plasmonic coupling in self-assembled binary nanocrystal superlattices studied by correlated optical microspectrophotometry and electron microscopy. <i>Nano Letters</i> , 2013 , 13, 1291-7	11.5	103
75	Microreactor Chemical Bath Deposition of Laterally Graded Cd1\(\text{Z}\) Thin Films: A Route to High-Throughput Optimization for Photovoltaic Buffer Layers. <i>Chemistry of Materials</i> , 2013 , 25, 297-306	₅ 9.6	21
74	Seeded growth of monodisperse gold nanorods using bromide-free surfactant mixtures. <i>Nano Letters</i> , 2013 , 13, 2163-71	11.5	161
73	Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals. <i>Nano Letters</i> , 2013 , 13, 350-7	11.5	75
72	Designing tripodal and triangular gadolinium oxide nanoplates and self-assembled nanofibrils as potential multimodal bioimaging probes. <i>ACS Nano</i> , 2013 , 7, 2850-9	16.7	93
71	Shape-directed binary assembly of anisotropic nanoplates: a nanocrystal puzzle with shape-complementary building blocks. <i>Nano Letters</i> , 2013 , 13, 2952-6	11.5	68
70	Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO). <i>Nano Letters</i> , 2013 , 13, 2857-63	11.5	153
69	Stoichiometric control of lead chalcogenide nanocrystal solids to enhance their electronic and optoelectronic device performance. <i>ACS Nano</i> , 2013 , 7, 2413-21	16.7	188
68	Competition of shape and interaction patchiness for self-assembling nanoplates. <i>Nature Chemistry</i> , 2013 , 5, 466-73	17.6	253
67	Three-dimensional self-assembly of chalcopyrite copper indium diselenide nanocrystals into oriented films. <i>ACS Nano</i> , 2013 , 7, 4307-15	16.7	37
66	. IEEE Transactions on Power Electronics, 2013 , 28, 4182-4201	7.2	59
65	Engineering catalytic contacts and thermal stability: gold/iron oxide binary nanocrystal superlattices for CO oxidation. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1499-505	16.4	107
64	Design of Pt-Pd binary superlattices exploiting shape effects and synergistic effects for oxygen reduction reactions. <i>Journal of the American Chemical Society</i> , 2013 , 135, 42-5	16.4	166
63	Heterogeneous catalysts need not be so "heterogeneous": monodisperse Pt nanocrystals by combining shape-controlled synthesis and purification by colloidal recrystallization. <i>Journal of the American Chemical Society</i> , 2013 , 135, 2741-7	16.4	93
62	Coating Evaluation and Purification of Monodisperse, Water-Soluble, Magnetic Nanoparticles Using Sucrose Density Gradient Ultracentrifugation. <i>Chemistry of Materials</i> , 2012 , 24, 4008-4010	9.6	15
61	Dendritic upconverting nanoparticles enable in vivo multiphoton microscopy with low-power continuous wave sources. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 20826-31	11.5	85
60	The state of nanoparticle-based nanoscience and biotechnology: progress, promises, and challenges. <i>ACS Nano</i> , 2012 , 6, 8468-83	16.7	188

59	Functionalizing molecular wires: a tunable class of #diphenyl-#dicyano-oligoenes. <i>Chemical Science</i> , 2012 , 3, 1007	9.4	24
58	Improved size-tunable synthesis of monodisperse gold nanorods through the use of aromatic additives. <i>ACS Nano</i> , 2012 , 6, 2804-17	16.7	641
57	Magnetic anisotropy considerations in magnetic force microscopy studies of single superparamagnetic nanoparticles. <i>Nanotechnology</i> , 2012 , 23, 495704	3.4	32
56	Metal-enhanced upconversion luminescence tunable through metal nanoparticle-nanophosphor separation. <i>ACS Nano</i> , 2012 , 6, 8758-66	16.7	240
55	Highly active Pt3Pb and core-shell Pt3Pb-Pt electrocatalysts for formic acid oxidation. <i>ACS Nano</i> , 2012 , 6, 2818-25	16.7	155
54	Synthesis, shape control, and methanol electro-oxidation properties of Pt-Zn alloy and Pt3Zn intermetallic nanocrystals. <i>ACS Nano</i> , 2012 , 6, 5642-7	16.7	242
53	Bandlike transport in strongly coupled and doped quantum dot solids: a route to high-performance thin-film electronics. <i>Nano Letters</i> , 2012 , 12, 2631-8	11.5	310
52	Nonaqueous synthesis of TiO2 nanocrystals using TiF4 to engineer morphology, oxygen vacancy concentration, and photocatalytic activity. <i>Journal of the American Chemical Society</i> , 2012 , 134, 6751-61	16.4	745
51	Investigating the Phosphine Chemistry of Se Precursors for the Synthesis of PbSe Nanorods. <i>Chemistry of Materials</i> , 2011 , 23, 1825-1829	9.6	37
50	Two-dimensional binary and ternary nanocrystal superlattices: the case of monolayers and bilayers. <i>Nano Letters</i> , 2011 , 11, 1804-9	11.5	144
49	Near-Infrared Absorption of Monodisperse Silver Telluride (Ag2Te) Nanocrystals and Photoconductive Response of Their Self-Assembled Superlattices. <i>Chemistry of Materials</i> , 2011 , 23, 465	724659	9 ⁴¹
48	Enhanced thermopower via carrier energy filtering in solution-processable Pt-Sb2Te3 nanocomposites. <i>Nano Letters</i> , 2011 , 11, 2841-4	11.5	200
47	Thiocyanate-capped nanocrystal colloids: vibrational reporter of surface chemistry and solution-based route to enhanced coupling in nanocrystal solids. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15753-61	16.4	278
46	A generalized ligand-exchange strategy enabling sequential surface functionalization of colloidal nanocrystals. <i>Journal of the American Chemical Society</i> , 2011 , 133, 998-1006	16.4	631
45	Platinum nanocrystals selectively shaped using facet-specific peptide sequences. <i>Nature Chemistry</i> , 2011 , 3, 393-9	17.6	361
44	Probing the Fermi energy level and the density of states distribution in PbTe nanocrystal (quantum dot) solids by temperature-dependent thermopower measurements. <i>ACS Nano</i> , 2011 , 5, 4810-7	16.7	45
43	Thiocyanate-capped PbS nanocubes: ambipolar transport enables quantum dot based circuits on a flexible substrate. <i>Nano Letters</i> , 2011 , 11, 4764-7	11.5	160
42	Synthesis and Oxygen Storage Capacity of Two-Dimensional Ceria Nanocrystals. <i>Angewandte Chemie</i> , 2011 , 123, 4470-4473	3.6	14

(2008-2011)

41	Studies of liquid crystalline self-assembly of GdF[hanoplates by in-plane, out-of-plane SAXS. <i>ACS Nano</i> , 2011 , 5, 8322-30	16.7	79
40	Enhanced thermal stability and magnetic properties in NaCl-type FePt-MnO binary nanocrystal superlattices. <i>Journal of the American Chemical Society</i> , 2011 , 133, 13296-9	16.4	45
39	Far-infrared absorption of PbSe nanorods. <i>Nano Letters</i> , 2011 , 11, 2786-90	11.5	18
38	Polymorphism in self-assembled AB6 binary nanocrystal superlattices. <i>Journal of the American Chemical Society</i> , 2011 , 133, 2613-20	16.4	78
37	Multiscale periodic assembly of striped nanocrystal superlattice films on a liquid surface. <i>Nano Letters</i> , 2011 , 11, 841-6	11.5	73
36	Ambipolar and unipolar PbSe nanowire field-effect transistors. <i>ACS Nano</i> , 2011 , 5, 3230-6	16.7	29
35	Binary nanocrystal superlattice membranes self-assembled at the liquid-air interface. <i>Nature</i> , 2010 , 466, 474-7	50.4	661
34	Morphologically controlled synthesis of colloidal upconversion nanophosphors and their shape-directed self-assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 22430-5	11.5	385
33	Synthesis and electrocatalytic properties of cubic Mn-Pt nanocrystals (nanocubes). <i>Journal of the American Chemical Society</i> , 2010 , 132, 7568-9	16.4	310
32	Carrier distribution and dynamics of nanocrystal solids doped with artificial atoms. <i>Nano Letters</i> , 2010 , 10, 1842-7	11.5	40
31	Collective dipolar interactions in self-assembled magnetic binary nanocrystal superlattice membranes. <i>Nano Letters</i> , 2010 , 10, 5103-8	11.5	125
30	Systematic electron crystallographic studies of self-assembled binary nanocrystal superlattices. <i>ACS Nano</i> , 2010 , 4, 2374-81	16.7	46
29	Synthesis of monodisperse PbSe nanorods: a case for oriented attachment. <i>Journal of the American Chemical Society</i> , 2010 , 132, 3909-13	16.4	191
28	Materials science. Watching nanocrystals grow. <i>Science</i> , 2009 , 324, 1276-7	33.3	41
27	Quasicrystalline order in self-assembled binary nanoparticle superlattices. <i>Nature</i> , 2009 , 461, 964-7	50.4	485
26	In vivo multiple color lymphatic imaging using upconverting nanocrystals. <i>Journal of Materials Chemistry</i> , 2009 , 19, 6481		104
25	Cluster-assembled materials. ACS Nano, 2009, 3, 244-55	16.7	528
24	Report from the third workshop on future directions of solid-state chemistry: The status of solid-state chemistry and its impact in the physical sciences. <i>Progress in Solid State Chemistry</i> , 2008 , 36, 1-133	8	51

23	Temperature-tuning of near-infrared monodisperse quantum dot solids at 1.5 microm for controllable forster energy transfer. <i>Nano Letters</i> , 2008 , 8, 2006-11	11.5	53
22	Alignment, Electronic Properties, Doping, and On-Chip Growth of Colloidal PbSe Nanowires. Journal of Physical Chemistry C, 2007 , 111, 13244-13249	3.8	50
21	Synergism in binary nanocrystal superlattices leads to enhanced p-type conductivity in self-assembled PbTe/Ag2 Te thin films. <i>Nature Materials</i> , 2007 , 6, 115-21	27	460
20	Dipole-dipole interactions in nanoparticle superlattices. <i>Nano Letters</i> , 2007 , 7, 1213-9	11.5	294
19	Synthesis of Colloidal PbSe/PbS CoreBhell Nanowires and PbS/Au NanowireNanocrystal Heterostructures. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 14049-14054	3.8	114
18	Self-assembly of PbTe quantum dots into nanocrystal superlattices and glassy films. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3248-55	16.4	287
17	Structural characterization of self-assembled multifunctional binary nanoparticle superlattices. Journal of the American Chemical Society, 2006 , 128, 3620-37	16.4	412
16	Structural diversity in binary nanoparticle superlattices. <i>Nature</i> , 2006 , 439, 55-9	50.4	1776
15	Designing PbSe nanowires and nanorings through oriented attachment of nanoparticles. <i>Journal of the American Chemical Society</i> , 2005 , 127, 7140-7	16.4	1119
14	PbSe nanocrystal solids for n- and p-channel thin film field-effect transistors. <i>Science</i> , 2005 , 310, 86-9	33.3	1455
13	Polymorphism in AB(13) nanoparticle superlattices: an example of semiconductor-metal metamaterials. <i>Journal of the American Chemical Society</i> , 2005 , 127, 8741-7	16.4	143
12	Electric Fields on Oxidized Silicon Surfaces: Static Polarization of PbSe Nanocrystals Journal of Physical Chemistry A, 2004 , 108, 7814-7819	2.8	29
11	Magnetic, electronic, and structural characterization of nonstoichiometric iron oxides at the nanoscale. <i>Journal of the American Chemical Society</i> , 2004 , 126, 14583-99	16.4	365
10	CdSe and CdSe/CdS nanorod solids. <i>Journal of the American Chemical Society</i> , 2004 , 126, 12984-8	16.4	267
9	Synthesis of monodisperse nanoparticles of barium titanate: toward a generalized strategy of oxide nanoparticle synthesis. <i>Journal of the American Chemical Society</i> , 2001 , 123, 12085-6	16.4	410
8	Crystalline, Shape, and Surface Anisotropy in Two Crystal Morphologies of Superparamagnetic Cobalt Nanoparticles by Ferromagnetic Resonance. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 7913-79	19 ^{.4}	65
7	Synthesis of 1,3-Diynes in the Purine, Pyrimidine, 1,3,5-Triazine and Acridine Series. <i>Tetrahedron</i> , 2000 , 56, 1233-1245	2.4	63
6	Synthesis and nonlinear optical properties of functionalised polydiacetylenes and their complexes with transition metals. <i>Journal of Materials Chemistry</i> , 1999 , 9, 1251-1256		10

LIST OF PUBLICATIONS

5	Properties of CdSe nanocrystal dispersions in the dilute regime: Structure and interparticle interactions. <i>Physical Review B</i> , 1998 , 58, 7850-7863	3.3	89
4	Synthesis and Optical Characterization of Polydiacetylenes Containing Carboxylic Acid, Carbamate, Phosphonium, and Quaternary Ammonium Functionalities. <i>Macromolecules</i> , 1996 , 29, 6365-6370	5.5	11
3	Tunable Plasmonic Microcapsules with Embedded Noble Metal Nanoparticles for Optical Microsensing. ACS Applied Nano Materials,	5.6	1
2	In Situ EXAFS-Based Nanothermometry of Heterodimer Nanocrystals under Induction Heating. Journal of Physical Chemistry C,	3.8	4
1	Nanocrystal Superparticles with Whispering-Gallery Modes Tunable through Chemical and Optical Triggers. <i>Nano Letters</i> ,	11.5	О