

Christopher B Murray

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4067039/publications.pdf>

Version: 2024-02-01

241
papers

30,782
citations

6606

79
h-index

4545

171
g-index

245
all docs

245
docs citations

245
times ranked

32391
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamical Change of Valence States and Structure in NiCu ₃ Nanoparticles during Redox Cycling. <i>Journal of Physical Chemistry C</i> , 2022, 126, 1991-2002.	1.5	14
2	Tunable Plasmonic Microcapsules with Embedded Noble Metal Nanoparticles for Optical Microsensing. <i>ACS Applied Nano Materials</i> , 2022, 5, 2828-2838.	2.4	5
3	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.	5.0	2
4	<i>In Situ</i> EXAFS-Based Nanothermometry of Heterodimer Nanocrystals under Induction Heating. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3623-3634.	1.5	11
5	Evaporation-Driven Coassembly of Hierarchical, Multicomponent Networks. <i>ACS Nano</i> , 2022, 16, 4508-4516.	7.3	6
6	Monodisperse Nanocrystal Superparticles through a Source-Sink Emulsion System. <i>Chemistry of Materials</i> , 2022, 34, 2779-2789.	3.2	9
7	Effect of Graft Length and Matrix Molecular Weight on String Assembly of Aligned Nanoplates in a Lamellar Diblock Copolymer. <i>Macromolecules</i> , 2022, 55, 3166-3175.	2.2	2
8	Synthesis and Characterization of Core-Shell Cu-Ru, Cu-Rh, and Cu-Ir Nanoparticles. <i>Journal of the American Chemical Society</i> , 2022, 144, 7919-7928.	6.6	13
9	Dynamic magnetic field alignment and polarized emission of semiconductor nanoplatelets in a liquid crystal polymer. <i>Nature Communications</i> , 2022, 13, 2507.	5.8	12
10	Nanocrystal Superparticles with Whispering-Gallery Modes Tunable through Chemical and Optical Triggers. <i>Nano Letters</i> , 2022, 22, 4765-4773.	4.5	7
11	Binary icosahedral clusters of hard spheres in spherical confinement. <i>Nature Physics</i> , 2021, 17, 128-134.	6.5	42
12	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.	6.6	31
13	Enhanced Carrier Transport in Strongly Coupled, Epitaxially Fused CdSe Nanocrystal Solids. <i>Nano Letters</i> , 2021, 21, 3318-3324.	4.5	17
14	Broadband Circular Polarizers via Coupling in 3D Plasmonic Meta-Atom Arrays. <i>ACS Photonics</i> , 2021, 8, 1286-1292.	3.2	9
15	Quantitative 3D real-space analysis of Laves phase supraparticles. <i>Nature Communications</i> , 2021, 12, 3980.	5.8	12
16	Anisotropic nanocrystal shape and ligand design for co-assembly. <i>Science Advances</i> , 2021, 7, .	4.7	19
17	Impurities in Nanocrystal Thin-Film Transistors Fabricated by Cation Exchange. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 6514-6518.	2.1	4
18	Grafted Nanoparticle Surface Wetting during Phase Separation in Polymer Nanocomposite Films. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 37628-37637.	4.0	12

#	ARTICLE	IF	CITATIONS
19	Gaussian processes for autonomous data acquisition at large-scale synchrotron and neutron facilities. <i>Nature Reviews Physics</i> , 2021, 3, 685-697.	11.9	44
20	Effect of Ni particle size on the production of renewable methane from CO ₂ over Ni/CeO ₂ catalyst. <i>Journal of Energy Chemistry</i> , 2021, 61, 602-611.	7.1	51
21	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.	1.5	10
22	Structural and Valence State Modification of Cobalt in CoPt Nanocatalysts in Redox Conditions. <i>ACS Nano</i> , 2021, 15, 20619-20632.	7.3	17
23	Chemo- and Thermomechanically Configurable 3D Optical Metamaterials Constructed from Colloidal Nanocrystal Assemblies. <i>ACS Nano</i> , 2020, 14, 1427-1435.	7.3	20
24	Engineering the composition of bimetallic nanocrystals to improve hydrodeoxygenation selectivity for 2-acetylfuran. <i>Applied Catalysis A: General</i> , 2020, 606, 117808.	2.2	2
25	Electron accepting naphthalene bisimide ligand architectures for modulation of π - π stacking in nanocrystal hybrid materials. <i>Nanoscale Horizons</i> , 2020, 5, 1509-1514.	4.1	3
26	Simultaneous Photonic and Excitonic Coupling in Spherical Quantum Dot Supercrystals. <i>ACS Nano</i> , 2020, 14, 13806-13815.	7.3	22
27	Nanorod position and orientation in vertical cylinder block copolymer films. <i>Soft Matter</i> , 2020, 16, 3005-3014.	1.2	9
28	Unusual Dinitrogen Binding and Electron Storage in Dinuclear Iron Complexes. <i>Journal of the American Chemical Society</i> , 2020, 142, 8147-8159.	6.6	24
29	Nanoparticle diffusion during gelation of tetra poly(ethylene glycol) provides insight into nanoscale structural evolution. <i>Soft Matter</i> , 2020, 16, 2256-2265.	1.2	12
30	Efficient photoluminescence of isotropic rare-earth oxychloride nanocrystals from a solvothermal route. <i>Chemical Communications</i> , 2020, 56, 3429-3432.	2.2	9
31	Plasmonic Elastic Capsules as Colorimetric Reversible pH-Microsensors. <i>Small</i> , 2020, 16, 1903897.	5.2	7
32	Favoring the Growth of High-Quality, Three-Dimensional Supercrystals of Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2020, 124, 11256-11264.	1.5	21
33	Emergence of complexity in hierarchically organized chiral particles. <i>Science</i> , 2020, 368, 642-648.	6.0	179
34	<i>Cluster-mining</i>: an approach for determining core structures of metallic nanoparticles from atomic pair distribution function data. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020, 76, 24-31.	0.0	34
35	Tuning the Electrocatalytic Oxygen Reduction Reaction Activity of Pt-Co Nanocrystals by Cobalt Concentration with Atomic-Scale Understanding. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26789-26797.	4.0	40
36	Phase Behavior of Grafted Polymer Nanocomposites from Field-Based Simulations. <i>Macromolecules</i> , 2019, 52, 5110-5121.	2.2	22

#	ARTICLE	IF	CITATIONS
37	General Synthetic Route to High-Quality Colloidal III-V Semiconductor Quantum Dots Based on Pnictogen Chlorides. <i>Journal of the American Chemical Society</i> , 2019, 141, 15145-15152.	6.6	54
38	Generalized Synthetic Strategy for Transition-Metal-Doped Brookite-Phase TiO ₂ Nanorods. <i>Journal of the American Chemical Society</i> , 2019, 141, 16548-16552.	6.6	78
39	Air-Stable CuInSe ₂ Nanocrystal Transistors and Circuits via Post-Deposition Cation Exchange. <i>ACS Nano</i> , 2019, 13, 2324-2333.	7.3	24
40	Nanocrystal Core Size and Shape Substitutional Doping and Underlying Crystalline Order in Nanocrystal Superlattices. <i>ACS Nano</i> , 2019, 13, 5712-5719.	7.3	30
41	The Influence of Surface Platinum Deposits on the Photocatalytic Activity of Anatase TiO ₂ Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10477-10486.	1.5	7
42	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.	2.2	14
43	Dendrimer Ligand Directed Nanoplate Assembly. <i>ACS Nano</i> , 2019, 13, 14241-14251.	7.3	22
44	Plasmonic Optical and Chiroptical Response of Self-Assembled Au Nanorod Equilateral Trimers. <i>ACS Nano</i> , 2019, 13, 1617-1624.	7.3	75
45	Bimetallic synergy in cobalt-palladium nanocatalysts for CO oxidation. <i>Nature Catalysis</i> , 2019, 2, 78-85.	16.1	195
46	A Study of Tetrahydrofurfuryl Alcohol to 1,5-Pentanediol Over Pt-WO _x /C. <i>Catalysis Letters</i> , 2018, 148, 1047-1054.	1.4	49
47	3D Nanofabrication via Chemo-Mechanical Transformation of Nanocrystal/Bulk Heterostructures. <i>Advanced Materials</i> , 2018, 30, e1800233.	11.1	15
48	A comparison of furfural hydrodeoxygenation over Pt-Co and Ni-Fe catalysts at high and low H ₂ pressures. <i>Catalysis Today</i> , 2018, 302, 73-79.	2.2	66
49	Morphological Dependence of the Thermal and Photochemical Reactions of Acetaldehyde on Anatase TiO ₂ Nanocrystals. <i>Topics in Catalysis</i> , 2018, 61, 365-378.	1.3	5
50	Spectroscopic characterization of a highly selective NiCu ₃ /C hydrodeoxygenation catalyst. <i>Catalysis Science and Technology</i> , 2018, 8, 6100-6108.	2.1	9
51	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.	2.3	24
52	Favorable Core/Shell Interface within Co ₂ P/Pt Nanorods for Oxygen Reduction Electrocatalysis. <i>Nano Letters</i> , 2018, 18, 7870-7875.	4.5	68
53	Thermal and Photocatalytic Reactions of Methanol and Acetaldehyde on Pt-Modified Brookite TiO ₂ Nanorods. <i>ACS Catalysis</i> , 2018, 8, 11834-11846.	5.5	23
54	Improved Models for Metallic Nanoparticle Cores from Atomic Pair Distribution Function (PDF) Analysis. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29498-29506.	1.5	41

#	ARTICLE	IF	CITATIONS
55	Nanoimprinted Chiral Plasmonic Substrates with Three-Dimensional Nanostructures. <i>Nano Letters</i> , 2018, 18, 7389-7394.	4.5	36
56	Improved Chemical and Colloidal Stability of Gold Nanoparticles through Dendron Capping. <i>Langmuir</i> , 2018, 34, 13333-13338.	1.6	21
57	Photocatalytic Hydrogen Evolution from Substoichiometric Colloidal WO ₃ Nanowires. <i>ACS Energy Letters</i> , 2018, 3, 1904-1910.	8.8	145
58	A Characterization Study of Reactive Sites in ALD-Synthesized WO _x /ZrO ₂ Catalysts. <i>Catalysts</i> , 2018, 8, 292.	1.6	21
59	Charge Transport Modulation in PbSe Nanocrystal Solids by Au _x Ag _{1-x} Nanoparticle Doping. <i>ACS Nano</i> , 2018, 12, 9091-9100.	7.3	20
60	Interplay between spherical confinement and particle shape on the self-assembly of rounded cubes. <i>Nature Communications</i> , 2018, 9, 2228.	5.8	81
61	Hierarchical Materials Design by Pattern Transfer Printing of Self-Assembled Binary Nanocrystal Superlattices. <i>Nano Letters</i> , 2017, 17, 1387-1394.	4.5	40
62	Directional Carrier Transfer in Strongly Coupled Binary Nanocrystal Superlattice Films Formed by Assembly and <i>in Situ</i> Ligand Exchange at a Liquid-Air Interface. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4146-4157.	1.5	19
63	Engineering Localized Surface Plasmon Interactions in Gold by Silicon Nanowire for Enhanced Heating and Photocatalysis. <i>Nano Letters</i> , 2017, 17, 1839-1845.	4.5	50
64	Plasmon Resonances in Self-Assembled Two-Dimensional Au Nanocrystal Metamolecules. <i>ACS Nano</i> , 2017, 11, 2917-2927.	7.3	78
65	Thermal and Photochemical Reactions of Methanol, Acetaldehyde, and Acetic Acid on Brookite TiO ₂ Nanorods. <i>Journal of Physical Chemistry C</i> , 2017, 121, 11488-11498.	1.5	17
66	A semi-combinatorial approach for investigating polycatenar ligand-controlled synthesis of rare-earth fluoride nanocrystals. <i>Nanoscale</i> , 2017, 9, 8107-8112.	2.8	5
67	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-E4573.	3.3	35
68	Unraveling the surface state and composition of highly selective nanocrystalline Ni-Cu alloy catalysts for hydrodeoxygenation of HMF. <i>Catalysis Science and Technology</i> , 2017, 7, 1735-1743.	2.1	82
69	The dendritic effect and magnetic permeability in dendron coated nickel and manganese zinc ferrite nanoparticles. <i>Nanoscale</i> , 2017, 9, 13922-13928.	2.8	9
70	Plasmonic-Based Mechanochromic Microcapsules as Strain Sensors. <i>Small</i> , 2017, 13, 1701925.	5.2	25
71	Anisotropic Cracking of Nanocrystal Superlattices. <i>Nano Letters</i> , 2017, 17, 6501-6506.	4.5	18
72	Design, Self-Assembly, and Switchable Wettability in Hydrophobic, Hydrophilic, and Janus Dendritic Ligand-Gold Nanoparticle Hybrid Materials. <i>Chemistry of Materials</i> , 2017, 29, 8737-8746.	3.2	40

#	ARTICLE	IF	CITATIONS
73	Nanorod Mobility Influences Polymer Diffusion in Polymer Nanocomposites. ACS Macro Letters, 2017, 6, 869-874.	2.3	10
74	Preparation and Self-Assembly of Dendronized Janus Fe ₃ O ₄ @Pt and Fe ₃ O ₄ @Au Heterodimers. ACS Nano, 2017, 11, 7958-7966.	7.3	46
75	Rapid Large-Scale Assembly and Pattern Transfer of One-Dimensional Gold Nanorod Superstructures. ACS Applied Materials & Interfaces, 2017, 9, 25513-25521.	4.0	27
76	High-strength magnetically switchable plasmonic nanorods assembled from a binary nanocrystal mixture. Nature Nanotechnology, 2017, 12, 228-232.	15.6	75
77	Quasicrystalline nanocrystal superlattice with partial matching rules. Nature Materials, 2017, 16, 214-219.	13.3	114
78	Engineering uniform nanocrystals: Mechanism of formation and self-assembly into bimetallic nanocrystal superlattices. AIChE Journal, 2016, 62, 392-398.	1.8	20
79	Visualizing non-equilibrium lithiation of spinel oxide via in situ transmission electron microscopy. Nature Communications, 2016, 7, 11441.	5.8	162
80	Alternate current magnetic property characterization of nonstoichiometric zinc ferrite nanocrystals for inductor fabrication via a solution based process. Journal of Applied Physics, 2016, 119, .	1.1	13
81	One-step green synthesis of gold and silver nanoparticles with ascorbic acid and their versatile surface post-functionalization. RSC Advances, 2016, 6, 33092-33100.	1.7	141
82	Engineering titania nanostructure to tune and improve its photocatalytic activity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3966-3971.	3.3	106
83	Nanocrystal Size-Dependent Efficiency of Quantum Dot Sensitized Solar Cells in the Strongly Coupled CdSe Nanocrystals/TiO ₂ System. ACS Applied Materials & Interfaces, 2016, 8, 14692-14700.	4.0	66
84	Mechanisms for High Selectivity in the Hydrodeoxygenation of 5-Hydroxymethylfurfural over PtCo Nanocrystals. ACS Catalysis, 2016, 6, 4095-4104.	5.5	124
85	Exploiting the colloidal nanocrystal library to construct electronic devices. Science, 2016, 352, 205-208.	6.0	234
86	Revealing particle growth mechanisms by combining high-surface-area catalysts made with monodisperse particles and electron microscopy conducted at atmospheric pressure. Journal of Catalysis, 2016, 337, 240-247.	3.1	36
87	Statistical Description of CdSe/CdS Dot-in-Rod Heterostructures Using Scanning Transmission Electron Microscopy. Chemistry of Materials, 2016, 28, 3345-3351.	3.2	17
88	Advanced Architecture for Colloidal PbS Quantum Dot Solar Cells Exploiting a CdSe Quantum Dot Buffer Layer. ACS Nano, 2016, 10, 9267-9273.	7.3	69
89	Polycatenar Ligand Control of the Synthesis and Self-Assembly of Colloidal Nanocrystals. Journal of the American Chemical Society, 2016, 138, 10508-10515.	6.6	22
90	Shape-dependence of the thermal and photochemical reactions of methanol on nanocrystalline anatase TiO ₂ . Surface Science, 2016, 654, 1-7.	0.8	24

#	ARTICLE	IF	CITATIONS
91	Protein-directed self-assembly of a fullerene crystal. <i>Nature Communications</i> , 2016, 7, 11429.	5.8	55
92	Ultrafast Photoluminescence from the Core and the Shell in CdSe/CdS Dot-in-Rod Heterostructures. <i>ChemPhysChem</i> , 2016, 17, 759-765.	1.0	22
93	Dendronization-induced phase-transfer, stabilization and self-assembly of large colloidal Au nanoparticles. <i>Nanoscale</i> , 2016, 8, 13192-13198.	2.8	17
94	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.	10.8	100
95	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, 562-568.	1.8	15
96	The H ₂ Pressure Dependence of Hydrodeoxygenation Selectivities for Furfural Over Pt/C Catalysts. <i>Catalysis Letters</i> , 2016, 146, 711-717.	1.4	54
97	Synthesis and Size-Selective Precipitation of Monodisperse Nonstoichiometric M _x Fe _{3-2x} O ₄ (M = Mn, Co) Nanocrystals and Their DC and AC Magnetic Properties. <i>Chemistry of Materials</i> , 2016, 28, 480-489.	3.2	42
98	Coherent Acoustic Phonons in Colloidal Semiconductor Nanocrystal Superlattices. <i>ACS Nano</i> , 2016, 10, 1163-1169.	7.3	52
99	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.	0.9	18
100	In-situ Study of Coarsening Mechanisms of Supported Metal Particles in Reducing Gas. <i>Microscopy and Microanalysis</i> , 2015, 21, 643-644.	0.2	0
101	A comparison of hierarchical Pt@CeO ₂ /SiO ₂ -Al ₂ O ₃ and Pd@CeO ₂ /SiO ₂ -Al ₂ O ₃ . <i>Catalysis Today</i> , 2015, 253, 137-141.	2.2	7
102	Synergistic Oxygen Evolving Activity of a TiO ₂ -Rich Reconstructed SrTiO ₃ (001) Surface. <i>Journal of the American Chemical Society</i> , 2015, 137, 2939-2947.	6.6	58
103	Ultrafast Electron Trapping in Ligand-Exchanged Quantum Dot Assemblies. <i>ACS Nano</i> , 2015, 9, 1440-1447.	7.3	15
104	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, 1820-1828.	7.3	61
105	Prospects of Nanoscience with Nanocrystals. <i>ACS Nano</i> , 2015, 9, 1012-1057.	7.3	1,005
106	Large-Area Nanoimprinted Colloidal Au Nanocrystal-Based Nanoantennas for Ultrathin Polarizing Plasmonic Metasurfaces. <i>Nano Letters</i> , 2015, 15, 5254-5260.	4.5	73
107	Synthesis and X-ray Characterization of Cobalt Phosphide (Co ₂ P) Nanorods for the Oxygen Reduction Reaction. <i>ACS Nano</i> , 2015, 9, 8108-8115.	7.3	132
108	Thermal and photochemical reactions of methanol on nanocrystalline anatase TiO ₂ thin films. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 17190-17201.	1.3	24

#	ARTICLE	IF	CITATIONS
109	Selective p- and n-Doping of Colloidal PbSe Nanowires To Construct Electronic and Optoelectronic Devices. <i>ACS Nano</i> , 2015, 9, 7536-7544.	7.3	32
110	Structure determination and modeling of monoclinic trioctylphosphine oxide. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2015, 71, 239-241.	0.2	14
111	Binary and Ternary Superlattices Self-Assembled from Colloidal Nanodisks and Nanorods. <i>Journal of the American Chemical Society</i> , 2015, 137, 6662-6669.	6.6	110
112	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, 6906-6911.	6.6	208
113	Characterization of Shape and Monodispersity of Anisotropic Nanocrystals through Atomistic X-ray Scattering Simulation. <i>Chemistry of Materials</i> , 2015, 27, 2502-2506.	3.2	26
114	Deposition of Wafer-Scale Single-Component and Binary Nanocrystal Superlattice Thin Films Via Dip-Coating. <i>Advanced Materials</i> , 2015, 27, 2846-2851.	11.1	52
115	Smectic Nanorod Superlattices Assembled on Liquid Subphases: Structure, Orientation, Defects, and Optical Polarization. <i>Chemistry of Materials</i> , 2015, 27, 2998-3008.	3.2	69
116	Flexible, High-Speed CdSe Nanocrystal Integrated Circuits. <i>Nano Letters</i> , 2015, 15, 7155-7160.	4.5	52
117	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, 4605-4609.	2.1	47
118	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.	3.2	27
119	Shape-Controlled Synthesis of Isotopic Yttrium-90-Labeled Rare Earth Fluoride Nanocrystals for Multimodal Imaging. <i>ACS Nano</i> , 2015, 9, 8718-8728.	7.3	41
120	Dendron-Mediated Engineering of Interparticle Separation and Self-Assembly in Dendronized Gold Nanoparticles Superlattices. <i>Journal of the American Chemical Society</i> , 2015, 137, 10728-10734.	6.6	51
121	Spectrally-Resolved Dielectric Functions of Solution-Cast Quantum Dot Thin Films. <i>Chemistry of Materials</i> , 2015, 27, 6463-6469.	3.2	31
122	Fast Nanorod Diffusion through Entangled Polymer Melts. <i>ACS Macro Letters</i> , 2015, 4, 952-956.	2.3	39
123	Probing the Structure, Composition, and Spatial Distribution of Ligands on Gold Nanorods. <i>Nano Letters</i> , 2015, 15, 5730-5738.	4.5	46
124	Substitutional doping in nanocrystal superlattices. <i>Nature</i> , 2015, 524, 450-453.	18.7	174
125	Comparison of HMF hydrodeoxygenation over different metal catalysts in a continuous flow reactor. <i>Applied Catalysis A: General</i> , 2015, 508, 86-93.	2.2	68
126	Quantifying "Softness" of Organic Coatings on Gold Nanoparticles Using Correlated Small-Angle X-ray and Neutron Scattering. <i>Nano Letters</i> , 2015, 15, 8008-8012.	4.5	47

#	ARTICLE	IF	CITATIONS
127	Charge transport in strongly coupled quantum dot solids. <i>Nature Nanotechnology</i> , 2015, 10, 1013-1026.	15.6	473
128	X-ray Mapping of Nanoparticle Superlattice Thin Films. <i>ACS Nano</i> , 2014, 8, 12843-12850.	7.3	19
129	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, 2867-2872.	4.5	155
130	Air-Stable, Nanostructured Electronic and Plasmonic Materials from Solution-Processable, Silver Nanocrystal Building Blocks. <i>ACS Nano</i> , 2014, 8, 2746-2754.	7.3	40
131	Tunable Optical Anisotropy of Seeded CdSe/CdS Nanorods. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 85-91.	2.1	49
132	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, 27097-27105.	1.5	33
133	Enhanced Energy Transfer in Quasi-Quaternary Nanocrystal Superlattices. <i>Advanced Materials</i> , 2014, 26, 2419-2423.	11.1	26
134	Au@TiO ₂ Core-Shell Nanostructures with High Thermal Stability. <i>Catalysis Letters</i> , 2014, 144, 1939-1945.	1.4	14
135	Engineering Charge Injection and Charge Transport for High Performance PbSe Nanocrystal Thin Film Devices and Circuits. <i>Nano Letters</i> , 2014, 14, 6210-6216.	4.5	100
136	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, 15921-15924.	6.6	165
137	Size- and Composition-Dependent Radio Frequency Magnetic Permeability of Iron Oxide Nanocrystals. <i>ACS Nano</i> , 2014, 8, 12323-12337.	7.3	44
138	Supported platinum-zinc oxide core-shell nanoparticle catalysts for methanol steam reforming. <i>Journal of Materials Chemistry A</i> , 2014, 2, 19509-19514.	5.2	31
139	Ligand Coupling Symmetry Correlates with Thermopower Enhancement in Small-Molecule/Nanocrystal Hybrid Materials. <i>ACS Nano</i> , 2014, 8, 10528-10536.	7.3	19
140	Gold nanorod length controls dispersion, local ordering, and optical absorption in polymer nanocomposite films. <i>Soft Matter</i> , 2014, 10, 3404-3413.	1.2	28
141	Bulk Metallic Glass-like Scattering Signal in Small Metallic Nanoparticles. <i>ACS Nano</i> , 2014, 8, 6163-6170.	7.3	26
142	Nanodisco Balls: Control over Surface versus Core Loading of Diagnostically Active Nanocrystals into Polymer Nanoparticles. <i>ACS Nano</i> , 2014, 8, 9143-9153.	7.3	40
143	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.	3.2	46
144	Low-Frequency (1/f) Noise in Nanocrystal Field-Effect Transistors. <i>ACS Nano</i> , 2014, 8, 9664-9672.	7.3	55

#	ARTICLE	IF	CITATIONS
145	Gold Nanorod Translocations and Charge Measurement through Solid-State Nanopores. <i>Nano Letters</i> , 2014, 14, 5358-5364.	4.5	59
146	Gate-Induced Carrier Delocalization in Quantum Dot Field Effect Transistors. <i>Nano Letters</i> , 2014, 14, 5948-5952.	4.5	25
147	Mineralizer-Assisted Shape-Control of Rare Earth Oxide Nanoplates. <i>Chemistry of Materials</i> , 2014, 26, 6328-6332.	3.2	31
148	Plasmon-Enhanced Upconversion Luminescence in Single Nanophosphorâ€“Nanorod Heterodimers Formed through Template-Assisted Self-Assembly. <i>ACS Nano</i> , 2014, 8, 9482-9491.	7.3	127
149	Enhanced Charge Transfer Kinetics of CdSe Quantum Dot-Sensitized Solar Cell by Inorganic Ligand Exchange Treatments. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 3721-3728.	4.0	86
150	Designing High-Performance PbS and PbSe Nanocrystal Electronic Devices through Stepwise, Post-Synthesis, Colloidal Atomic Layer Deposition. <i>Nano Letters</i> , 2014, 14, 1559-1566.	4.5	176
151	Solution-Phase Synthesis of Titanium Dioxide Nanoparticles and Nanocrystals. <i>Chemical Reviews</i> , 2014, 114, 9319-9345.	23.0	343
152	Solution-Processed Phase-Change VO ₂ Metamaterials from Colloidal Vanadium Oxide (VO _x) Nanocrystals. <i>ACS Nano</i> , 2014, 8, 797-806.	7.3	112
153	Methane Oxidation on Pd@ZrO ₂ /Siâ€“Al ₂ O ₃ Is Enhanced by Surface Reduction of ZrO ₂ . <i>ACS Catalysis</i> , 2014, 4, 3902-3909.	5.5	119
154	Expanding the Spectral Tunability of Plasmonic Resonances in Doped Metal-Oxide Nanocrystals through Cooperative Cationâ€“Anion Codoping. <i>Journal of the American Chemical Society</i> , 2014, 136, 11680-11686.	6.6	119
155	High-Temperature Photoluminescence of CdSe/CdS Core/Shell Nanoheterostructures. <i>ACS Nano</i> , 2014, 8, 6466-6474.	7.3	71
156	Seeded Growth of Metal-Doped Plasmonic Oxide Heterodimer Nanocrystals and Their Chemical Transformation. <i>Journal of the American Chemical Society</i> , 2014, 136, 5106-5115.	6.6	65
157	Simultaneous Position and Orientation Imaging of Polarized Fluorescence from Rod-In-Rod Semiconductor Nanoparticles on Cytoplasmic Dynein. <i>Biophysical Journal</i> , 2014, 106, 197a.	0.2	0
158	Plasmonic Enhancement of Nanophosphor Upconversion Luminescence in Au Nanohole Arrays. <i>ACS Nano</i> , 2013, 7, 7186-7192.	7.3	199
159	<i>In Situ</i> Repair of High-Performance, Flexible Nanocrystal Electronics for Large-Area Fabrication and Operation in Air. <i>ACS Nano</i> , 2013, 7, 8275-8283.	7.3	52
160	Control of Metal Nanocrystal Size Reveals Metal-Support Interface Role for Ceria Catalysts. <i>Science</i> , 2013, 341, 771-773.	6.0	1,142
161	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.	1.5	28
162	Shape Alloys of Nanorods and Nanospheres from Self-Assembly. <i>Nano Letters</i> , 2013, 13, 4980-4988.	4.5	104

#	ARTICLE	IF	CITATIONS
163	Solution-Based Stoichiometric Control over Charge Transport in Nanocrystalline CdSe Devices. ACS Nano, 2013, 7, 8760-8770.	7.3	43
164	Shape-Controlled Synthesis of Pt Nanocrystals: The Role of Metal Carbonyls. ACS Nano, 2013, 7, 645-653.	7.3	162
165	Using Binary Surfactant Mixtures To Simultaneously Improve the Dimensional Tunability and Monodispersity in the Seeded Growth of Gold Nanorods. Nano Letters, 2013, 13, 765-771.	4.5	910
166	Ultrafast Electron Trapping at the Surface of Semiconductor Nanocrystals: Excitonic and Biexcitonic Processes. Journal of Physical Chemistry B, 2013, 117, 4412-4421.	1.2	52
167	Bistable Magnetoresistance Switching in Exchange-Coupled CoFe ₂ O ₄ –Fe ₃ O ₄ Binary Nanocrystal Superlattices by Self-Assembly and Thermal Annealing. ACS Nano, 2013, 7, 1478-1486.	7.3	85
168	Tunable Plasmonic Coupling in Self-Assembled Binary Nanocrystal Superlattices Studied by Correlated Optical Microspectrophotometry and Electron Microscopy. Nano Letters, 2013, 13, 1291-1297.	4.5	125
169	Microreactor Chemical Bath Deposition of Laterally Graded Cd _x Zn _{1-x} S Thin Films: A Route to High-Throughput Optimization for Photovoltaic Buffer Layers. Chemistry of Materials, 2013, 25, 297-306.	3.2	22
170	Seeded Growth of Monodisperse Gold Nanorods Using Bromide-Free Surfactant Mixtures. Nano Letters, 2013, 13, 2163-2171.	4.5	200
171	Chemically Tailored Dielectric-to-Metal Transition for the Design of Metamaterials from Nanoimprinted Colloidal Nanocrystals. Nano Letters, 2013, 13, 350-357.	4.5	87
172	Designing Tripodal and Triangular Gadolinium Oxide Nanoplates and Self-Assembled Nanofibrils as Potential Multimodal Bioimaging Probes. ACS Nano, 2013, 7, 2850-2859.	7.3	115
173	Shape-Directed Binary Assembly of Anisotropic Nanoplates: A Nanocrystal Puzzle with Shape-Complementary Building Blocks. Nano Letters, 2013, 13, 2952-2956.	4.5	76
174	Shape-Dependent Plasmonic Response and Directed Self-Assembly in a New Semiconductor Building Block, Indium-Doped Cadmium Oxide (ICO). Nano Letters, 2013, 13, 2857-2863.	4.5	182
175	Stoichiometric Control of Lead Chalcogenide Nanocrystal Solids to Enhance Their Electronic and Optoelectronic Device Performance. ACS Nano, 2013, 7, 2413-2421.	7.3	210
176	Competition of shape and interaction patchiness for self-assembling nanoplates. Nature Chemistry, 2013, 5, 466-473.	6.6	278
177	Three-Dimensional Self-Assembly of Chalcopyrite Copper Indium Diselenide Nanocrystals into Oriented Films. ACS Nano, 2013, 7, 4307-4315.	7.3	38
178	A Technology Overview of the PowerChip Development Program. IEEE Transactions on Power Electronics, 2013, 28, 4182-4201.	5.4	67
179	Engineering Catalytic Contacts and Thermal Stability: Gold/Iron Oxide Binary Nanocrystal Superlattices for CO Oxidation. Journal of the American Chemical Society, 2013, 135, 1499-1505.	6.6	122
180	Design of Pt–Pd Binary Superlattices Exploiting Shape Effects and Synergistic Effects for Oxygen Reduction Reactions. Journal of the American Chemical Society, 2013, 135, 42-45.	6.6	180

#	ARTICLE	IF	CITATIONS
181	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, 2741-2747.	6.6	105
182	Coating Evaluation and Purification of Monodisperse, Water-Soluble, Magnetic Nanoparticles Using Sucrose Density Gradient Ultracentrifugation. <i>Chemistry of Materials</i> , 2012, 24, 4008-4010.	3.2	17
183	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, 20826-20831.	3.3	88
184	The State of Nanoparticle-Based Nanoscience and Biotechnology: Progress, Promises, and Challenges. <i>ACS Nano</i> , 2012, 6, 8468-8483.	7.3	211
185	Functionalizing molecular wires: a tunable class of $\pm 1/4, 1/2$ -diphenyl- $1/4, 1/2$ -dicyano-oligoenes. <i>Chemical Science</i> , 2012, 3, 1007.	3.7	29
186	Improved Size-Tunable Synthesis of Monodisperse Gold Nanorods through the Use of Aromatic Additives. <i>ACS Nano</i> , 2012, 6, 2804-2817.	7.3	749
187	Magnetic anisotropy considerations in magnetic force microscopy studies of single superparamagnetic nanoparticles. <i>Nanotechnology</i> , 2012, 23, 495704.	1.3	36
188	Metal-Enhanced Upconversion Luminescence Tunable through Metal Nanoparticle "Nanophosphor Separation. <i>ACS Nano</i> , 2012, 6, 8758-8766.	7.3	262
189	Highly Active Pt ₃ Pb and Core "Shell Pt ₃ Pb "Pt Electrocatalysts for Formic Acid Oxidation. <i>ACS Nano</i> , 2012, 6, 2818-2825.	7.3	177
190	Synthesis, Shape Control, and Methanol Electro-oxidation Properties of Pt "Zn Alloy and Pt ₃ Zn Intermetallic Nanocrystals. <i>ACS Nano</i> , 2012, 6, 5642-5647.	7.3	273
191	Bandlike Transport in Strongly Coupled and Doped Quantum Dot Solids: A Route to High-Performance Thin-Film Electronics. <i>Nano Letters</i> , 2012, 12, 2631-2638.	4.5	340
192	Nonaqueous Synthesis of TiO ₂ Nanocrystals Using TiF ₄ to Engineer Morphology, Oxygen Vacancy Concentration, and Photocatalytic Activity. <i>Journal of the American Chemical Society</i> , 2012, 134, 6751-6761.	6.6	854
193	Studies of Liquid Crystalline Self-Assembly of GdF ₃ Nanoplates by In-Plane, Out-of-Plane SAXS. <i>ACS Nano</i> , 2011, 5, 8322-8330.	7.3	86
194	Enhanced Thermal Stability and Magnetic Properties in NaCl-Type FePt "MnO Binary Nanocrystal Superlattices. <i>Journal of the American Chemical Society</i> , 2011, 133, 13296-13299.	6.6	54
195	Far-Infrared Absorption of PbSe Nanorods. <i>Nano Letters</i> , 2011, 11, 2786-2790.	4.5	20
196	Polymorphism in Self-Assembled AB ₆ Binary Nanocrystal Superlattices. <i>Journal of the American Chemical Society</i> , 2011, 133, 2613-2620.	6.6	84
197	Multiscale Periodic Assembly of Striped Nanocrystal Superlattice Films on a Liquid Surface. <i>Nano Letters</i> , 2011, 11, 841-846.	4.5	79
198	Ambipolar and Unipolar PbSe Nanowire Field-Effect Transistors. <i>ACS Nano</i> , 2011, 5, 3230-3236.	7.3	31

#	ARTICLE	IF	CITATIONS
199	Investigating the Phosphine Chemistry of Se Precursors for the Synthesis of PbSe Nanorods. <i>Chemistry of Materials</i> , 2011, 23, 1825-1829.	3.2	39
200	Two-Dimensional Binary and Ternary Nanocrystal Superlattices: The Case of Monolayers and Bilayers. <i>Nano Letters</i> , 2011, 11, 1804-1809.	4.5	159
201	Near-Infrared Absorption of Monodisperse Silver Telluride (Ag ₂ Te) Nanocrystals and Photoconductive Response of Their Self-Assembled Superlattices. <i>Chemistry of Materials</i> , 2011, 23, 4657-4659.	3.2	51
202	Enhanced Thermopower via Carrier Energy Filtering in Solution-Processable PtSb ₂ Te ₃ Nanocomposites. <i>Nano Letters</i> , 2011, 11, 2841-2844.	4.5	230
203	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, 15753-15761.	6.6	309
204	A Generalized Ligand-Exchange Strategy Enabling Sequential Surface Functionalization of Colloidal Nanocrystals. <i>Journal of the American Chemical Society</i> , 2011, 133, 998-1006.	6.6	770
205	Platinum nanocrystals selectively shaped using facet-specific peptide sequences. <i>Nature Chemistry</i> , 2011, 3, 393-399.	6.6	404
206	Probing the Fermi Energy Level and the Density of States Distribution in PbTe Nanocrystal (Quantum) Tj ETQq0 0 0,rgBT /Overlock 10 Tf	7.3	56
207	Thiocyanate-Capped PbS Nanocubes: Ambipolar Transport Enables Quantum Dot Based Circuits on a Flexible Substrate. <i>Nano Letters</i> , 2011, 11, 4764-4767.	4.5	171
208	Binary nanocrystal superlattice membranes self-assembled at the liquid-air interface. <i>Nature</i> , 2010, 466, 474-477.	13.7	758
209	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, 22430-22435.	3.3	416
210	Synthesis and Electrocatalytic Properties of Cubic Mn ²⁺ Pt Nanocrystals (Nanocubes). <i>Journal of the American Chemical Society</i> , 2010, 132, 7568-7569.	6.6	341
211	Carrier Distribution and Dynamics of Nanocrystal Solids Doped with Artificial Atoms. <i>Nano Letters</i> , 2010, 10, 1842-1847.	4.5	45
212	Collective Dipolar Interactions in Self-Assembled Magnetic Binary Nanocrystal Superlattice Membranes. <i>Nano Letters</i> , 2010, 10, 5103-5108.	4.5	143
213	Systematic Electron Crystallographic Studies of Self-Assembled Binary Nanocrystal Superlattices. <i>ACS Nano</i> , 2010, 4, 2374-2381.	7.3	52
214	Synthesis of Monodisperse PbSe Nanorods: A Case for Oriented Attachment. <i>Journal of the American Chemical Society</i> , 2010, 132, 3909-3913.	6.6	209
215	Watching Nanocrystals Grow. <i>Science</i> , 2009, 324, 1276-1277.	6.0	43
216	Quasicrystalline order in self-assembled binary nanoparticle superlattices. <i>Nature</i> , 2009, 461, 964-967.	13.7	551

#	ARTICLE	IF	CITATIONS
217	In vivo multiple color lymphatic imaging using upconverting nanocrystals. <i>Journal of Materials Chemistry</i> , 2009, 19, 6481.	6.7	112
218	Cluster-Assembled Materials. <i>ACS Nano</i> , 2009, 3, 244-255.	7.3	598
219	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.	3.9	58
220	Temperature-Tuning of Near-Infrared Monodisperse Quantum Dot Solids at 1.5 μm for Controllable Förster Energy Transfer. <i>Nano Letters</i> , 2008, 8, 2006-2011.	4.5	60
221	Dipole-Dipole Interactions in Nanoparticle Superlattices. <i>Nano Letters</i> , 2007, 7, 1213-1219.	4.5	316
222	Synthesis of Colloidal PbSe/PbS Core-Shell Nanowires and PbS/Au Nanowire-Nanocrystal Heterostructures. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14049-14054.	1.5	122
223	Alignment, Electronic Properties, Doping, and On-Chip Growth of Colloidal PbSe Nanowires. <i>Journal of Physical Chemistry C</i> , 2007, 111, 13244-13249.	1.5	53
224	Synergism in binary nanocrystal superlattices leads to enhanced p-type conductivity in self-assembled PbTe/Ag ₂ Te thin films. <i>Nature Materials</i> , 2007, 6, 115-121.	13.3	498
225	Self-Assembly of PbTe Quantum Dots into Nanocrystal Superlattices and Glassy Films. <i>Journal of the American Chemical Society</i> , 2006, 128, 3248-3255.	6.6	310
226	Structural Characterization of Self-Assembled Multifunctional Binary Nanoparticle Superlattices. <i>Journal of the American Chemical Society</i> , 2006, 128, 3620-3637.	6.6	452
227	Structural diversity in binary nanoparticle superlattices. <i>Nature</i> , 2006, 439, 55-59.	13.7	1,956
228	Designing PbSe Nanowires and Nanorings through Oriented Attachment of Nanoparticles. <i>Journal of the American Chemical Society</i> , 2005, 127, 7140-7147.	6.6	1,195
229	PbSe Nanocrystal Solids for n- and p-Channel Thin Film Field-Effect Transistors. <i>Science</i> , 2005, 310, 86-89.	6.0	1,551
230	Polymorphism in AB ₁₃ Nanoparticle Superlattices: An Example of Semiconductor-Metal Metamaterials. <i>Journal of the American Chemical Society</i> , 2005, 127, 8741-8747.	6.6	158
231	Electric Fields on Oxidized Silicon Surfaces: Static Polarization of PbSe Nanocrystals. <i>Journal of Physical Chemistry A</i> , 2004, 108, 7814-7819.	1.1	30
232	Magnetic, Electronic, and Structural Characterization of Nonstoichiometric Iron Oxides at the Nanoscale. <i>Journal of the American Chemical Society</i> , 2004, 126, 14583-14599.	6.6	393
233	CdSe and CdSe/CdS Nanorod Solids. <i>Journal of the American Chemical Society</i> , 2004, 126, 12984-12988.	6.6	279
234	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, 12085-12086.	6.6	450

#	ARTICLE	IF	CITATIONS
235	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, 7913-7919.	1.2	72
236	Synthesis of 1,3-Diynes in the Purine, Pyrimidine, 1,3,5-Triazine and Acridine Series. <i>Tetrahedron</i> , 2000, 56, 1233-1245.	1.0	68
237	Synthesis and nonlinear optical properties of functionalised polydiacetylenes and their complexes with transition metals. <i>Journal of Materials Chemistry</i> , 1999, 9, 1251-1256.	6.7	10
238	Properties of CdSe nanocrystal dispersions in the dilute regime: Structure and interparticle interactions. <i>Physical Review B</i> , 1998, 58, 7850-7863.	1.1	101
239	Synthesis and Optical Characterization of Polydiacetylenes Containing Carboxylic Acid, Carbamate, Phosphonium, and Quaternary Ammonium Functionalities. <i>Macromolecules</i> , 1996, 29, 6365-6370.	2.2	14
240	Unraveling the Self-Assembly Pathway of Binary Nanocrystal Superlattices. , 0, , .		0
241	In-line Production of Colloidal Microlasers. , 0, , .		0