Xiaogang Peng

List of Publications by Year
in descending order

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		3334	2332
200	56,026	91	199
papers	citations	h-index	g-index

212	212	212	32295
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental Determination of the Extinction Coefficient of CdTe, CdSe, and CdS Nanocrystals. Chemistry of Materials, 2003, 15, 2854-2860.	6.7	4,738
2	Shape control of CdSe nanocrystals. Nature, 2000, 404, 59-61.	27.8	4,216
3	Organization of 'nanocrystal molecules' using DNA. Nature, 1996, 382, 609-611.	27.8	2,852
4	Formation of High-Quality CdTe, CdSe, and CdS Nanocrystals Using CdO as Precursor. Journal of the American Chemical Society, 2001, 123, 183-184.	13.7	2,648
5	Epitaxial Growth of Highly Luminescent CdSe/CdS Core/Shell Nanocrystals with Photostability and Electronic Accessibility. Journal of the American Chemical Society, 1997, 119, 7019-7029.	13.7	2,305
6	Solution-processed, high-performance light-emitting diodes based on quantum dots. Nature, 2014, 515, 96-99.	27.8	2,119
7	Kinetics of II-VI and III-V Colloidal Semiconductor Nanocrystal Growth:Â â€œFocusingâ€•of Size Distributions. Journal of the American Chemical Society, 1998, 120, 5343-5344.	13.7	1,779
8	Control of Photoluminescence Properties of CdSe Nanocrystals in Growth. Journal of the American Chemical Society, 2002, 124, 2049-2055.	13.7	1,582
9	Large-Scale Synthesis of Nearly Monodisperse CdSe/CdS Core/Shell Nanocrystals Using Air-Stable Reagents via Successive Ion Layer Adsorption and Reaction. Journal of the American Chemical Society, 2003, 125, 12567-12575.	13.7	1,468
10	Nearly Monodisperse and Shape-Controlled CdSe Nanocrystals via Alternative Routes:â€‰ Nucleation and Growth. Journal of the American Chemical Society, 2002, 124, 3343-3353.	13.7	1,461
11	Charge separation and transport in conjugated-polymer/semiconductor-nanocrystal composites studied by photoluminescence quenching and photoconductivity. Physical Review B, 1996, 54, 17628-17637.	3.2	1,421
12	Mechanisms of the Shape Evolution of CdSe Nanocrystals. Journal of the American Chemical Society, 2001, 123, 1389-1395.	13.7	1,243
13	Formation of High-Quality CdS and Other II-VI Semiconductor Nanocrystals in Noncoordinating Solvents: Tunable Reactivity of Monomers. Angewandte Chemie - International Edition, 2002, 41, 2368-2371.	13.8	1,174
14	Size Control of Gold Nanocrystals in Citrate Reduction:â€‰ The Third Role of Citrate. Journal of the American Chemical Society, 2007, 129, 13939-13948.	13.7	1,149
15	Photochemical Instability of CdSe Nanocrystals Coated by Hydrophilic Thiols. Journal of the American Chemical Society, 2001, 123, 8844-8850.	13.7	1,042
16	Alternative Routes toward High Quality CdSe Nanocrystals. Nano Letters, 2001, 1, 333-337.	9.1	942
17	Improved efficiencies in light emitting diodes made with CdSe(CdS) core/shell type nanocrystals and a semiconducting polymer. Journal of Applied Physics, 1997, 82, 5837-5842.	2.5	867
18	Size- and Shape-Controlled Magnetic (Cr, Mn, Fe, Co, Ni) Oxide Nanocrystals via a Simple and General Approach. Chemistry of Materials, 2004, 16, 3931-3935.	6.7	814

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19	Formation and Stability of Size-, Shape-, and Structure-Controlled CdTe Nanocrystals:Â Ligand Effects on Monomers and Nanocrystals. Chemistry of Materials, 2003, 15, 4300-4308.	6.7	752
20	Formation of High-Quality Iâ^'IIIâ^'VI Semiconductor Nanocrystals by Tuning Relative Reactivity of Cationic Precursors. Journal of the American Chemical Society, 2009, 131, 5691-5697.	13.7	715
21	An Alternative of CdSe Nanocrystal Emitters:â€‰ Pure and Tunable Impurity Emissions in ZnSe Nanocrystals. Journal of the American Chemical Society, 2005, 127, 17586-17587.	13.7	667
22	DNA-Based Assembly of Gold Nanocrystals. Angewandte Chemie - International Edition, 1999, 38, 1808-1812.	13.8	639
23	Mechanisms for the Shape-Control and Shape-Evolution of Colloidal Semiconductor Nanocrystals. Advanced Materials, 2003, 15, 459-463.	21.0	628
24	Quantumâ€Dot Lightâ€Emitting Diodes for Largeâ€Area Displays: Towards the Dawn of Commercialization. Advanced Materials, 2017, 29, 1607022.	21.0	620
25	Efficient and Color-Tunable Mn-Doped ZnSe Nanocrystal Emitters:Â Control of Optical Performance via Greener Synthetic Chemistry. Journal of the American Chemical Society, 2007, 129, 3339-3347.	13.7	570
26	CdSe Nanocrystal Rods/Poly(3-hexylthiophene) Composite Photovoltaic Devices. Advanced Materials, 1999, 11, 923-927.	21.0	546
27	Single-Phase and Gram-Scale Routes toward Nearly Monodisperse Au and Other Noble Metal Nanocrystals. Journal of the American Chemical Society, 2003, 125, 14280-14281.	13.7	540
28	Formation of High Quality InP and InAs Nanocrystals in a Noncoordinating Solvent. Nano Letters, 2002, 2, 1027-1030.	9.1	501
29	Surface-Related Emission in Highly Luminescent CdSe Quantum Dots. Nano Letters, 2003, 3, 1103-1106.	9.1	495
30	Colloidal InP Nanocrystals as Efficient Emitters Covering Blue to Near-Infrared. Journal of the American Chemical Society, 2007, 129, 15432-15433.	13.7	454
31	Colloidal chemical synthesis and characterization of InAs nanocrystal quantum dots. Applied Physics Letters, 1996, 69, 1432-1434.	3.3	447
32	Efficient, Stable, Small, and Water-Soluble Doped ZnSe Nanocrystal Emitters as Non-Cadmium Biomedical Labels. Nano Letters, 2007, 7, 312-317.	9.1	435
33	Size-Dependent Dissociation pH of Thiolate Ligands from Cadmium Chalcogenide Nanocrystals. Journal of the American Chemical Society, 2005, 127, 2496-2504.	13.7	360
34	High Quality ZnSe and ZnS Nanocrystals Formed by Activating Zinc Carboxylate Precursors. Nano Letters, 2004, 4, 2261-2264.	9.1	335
35	Stabilization of Inorganic Nanocrystals by Organic Dendrons. Journal of the American Chemical Society, 2002, 124, 2293-2298.	13.7	316
36	Synthesis of Cu-Doped InP Nanocrystals (d-dots) with ZnSe Diffusion Barrier as Efficient and Color-Tunable NIR Emitters. Journal of the American Chemical Society, 2009, 131, 10645-10651.	13.7	311

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37	Luminescent CdSe/CdS Core/Shell Nanocrystals in Dendron Boxes:Â Superior Chemical, Photochemical and Thermal Stability. Journal of the American Chemical Society, 2003, 125, 3901-3909.	13.7	308
38	Formation of Nearly Monodisperse In2O3Nanodots and Oriented-Attached Nanoflowers:Â Hydrolysis and Alcoholysis vs Pyrolysis. Journal of the American Chemical Society, 2006, 128, 10310-10319.	13.7	294
39	Stoichiometry-Controlled InP-Based Quantum Dots: Synthesis, Photoluminescence, and Electroluminescence. Journal of the American Chemical Society, 2019, 141, 6448-6452.	13.7	282
40	Colloidal CdSe Quantum Wires by Oriented Attachment. Nano Letters, 2006, 6, 720-724.	9.1	277
41	Surface Ligand Dynamics in Growth of Nanocrystals. Journal of the American Chemical Society, 2007, 129, 9500-9509.	13.7	274
42	Crystal Structure Control of Zinc-Blende CdSe/CdS Core/Shell Nanocrystals: Synthesis and Structure-Dependent Optical Properties. Journal of the American Chemical Society, 2012, 134, 19685-19693.	13.7	264
43	An essay on synthetic chemistry of colloidal nanocrystals. Nano Research, 2009, 2, 425-447.	10.4	259
44	Ligand Bonding and Dynamics on Colloidal Nanocrystals at Room Temperature: The Case of Alkylamines on CdSe Nanocrystals. Journal of the American Chemical Society, 2008, 130, 5726-5735.	13.7	251
45	Size/Shape-Controlled Synthesis of Colloidal CdSe Quantum Disks: Ligand and Temperature Effects. Journal of the American Chemical Society, 2011, 133, 6578-6586.	13.7	250
46	Photoactivated CdSe Nanocrystals as Nanosensors for Gases. Nano Letters, 2003, 3, 819-822.	9.1	249
47	Spin coherence in semiconductor quantum dots. Physical Review B, 1999, 59, R10421-R10424.	3.2	224
48	Green Chemical Approaches toward High-Quality Semiconductor Nanocrystals. Chemistry - A European Journal, 2002, 8, 334-339.	3.3	204
49	Synthetic Control of Exciton Behavior in Colloidal Quantum Dots. Journal of the American Chemical Society, 2017, 139, 3302-3311.	13.7	198
50	Conjugation Chemistry and Bioapplications of Semiconductor Box Nanocrystals Prepared via Dendrimer Bridging. Chemistry of Materials, 2003, 15, 3125-3133.	6.7	197
51	In Situ Observation of the Nucleation and Growth of CdSe Nanocrystals. Nano Letters, 2004, 4, 465-469.	9.1	196
52	Photogenerated Excitons in Plain Core CdSe Nanocrystals with Unity Radiative Decay in Single Channel: The Effects of Surface and Ligands. Journal of the American Chemical Society, 2015, 137, 4230-4235.	13.7	194
53	To Battle Surface Traps on CdSe/CdS Core/Shell Nanocrystals: Shell Isolation versus Surface Treatment. Journal of the American Chemical Society, 2016, 138, 8134-8142.	13.7	192
54	Bright and Stable Purple/Blue Emitting CdS/ZnS Core/Shell Nanocrystals Grown by Thermal Cycling Using a Single-Source Precursor. Chemistry of Materials, 2010, 22, 1437-1444.	6.7	190

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55	Ideal CdSe/CdS Core/Shell Nanocrystals Enabled by Entropic Ligands and Their Core Size-, Shell Thickness-, and Ligand-Dependent Photoluminescence Properties. Journal of the American Chemical Society, 2017, 139, 16556-16567.	13.7	186
56	Colloidal Two-Dimensional Systems: CdSe Quantum Shells and Wells. Angewandte Chemie - International Edition, 2003, 42, 5035-5039.	13.8	184
57	Electrochemically-stable ligands bridge the photoluminescence-electroluminescence gap of quantum dots. Nature Communications, 2020, 11, 937.	12.8	184
58	Temperature Dependence of â€œElementary Processesâ€•in Doping Semiconductor Nanocrystals. Journal of the American Chemical Society, 2009, 131, 9333-9339.	13.7	183
59	Nucleation Kinetics vs Chemical Kinetics in the Initial Formation of Semiconductor Nanocrystals. Journal of the American Chemical Society, 2009, 131, 15457-15466.	13.7	179
60	Ultrasmall Nearâ€Infrared Nonâ€cadmium Quantum Dots for in vivo Tumor Imaging. Small, 2010, 6, 256-261.	10.0	174
61	Entropic Ligands for Nanocrystals: From Unexpected Solution Properties to Outstanding Processability. Nano Letters, 2016, 16, 2133-2138.	9.1	174
62	Coupled and Decoupled Dual Quantum Systems in One Semiconductor Nanocrystal. Journal of the American Chemical Society, 2005, 127, 10889-10897.	13.7	170
63	Side Reactions in Controlling the Quality, Yield, and Stability of High Quality Colloidal Nanocrystals. Journal of the American Chemical Society, 2005, 127, 13331-13337.	13.7	169
64	Quantum Dots for Display Applications. Angewandte Chemie - International Edition, 2020, 59, 22312-22323.	13.8	168
65	Crystalline Nanoflowers with Different Chemical Compositions and Physical Properties Grown by Limited Ligand Protection. Angewandte Chemie - International Edition, 2006, 45, 5361-5364.	13.8	163
66	Environmental Effects on Photoluminescence of Highly Luminescent CdSe and CdSe/ZnS Core/Shell Nanocrystals in Polymer Thin Films. Journal of Physical Chemistry B, 2004, 108, 5507-5515.	2.6	159
67	Highâ€Performance, Solutionâ€Processed, and Insulatingâ€Layerâ€Free Lightâ€Emitting Diodes Based on Colloidal Quantum Dots. Advanced Materials, 2018, 30, e1801387.	21.0	151
68	Formation of Monodisperse and Shape-Controlled MnO Nanocrystals in Non-Injection Synthesis:â€‰ Self-Focusing via Ripening. Journal of the American Chemical Society, 2007, 129, 10937-10947.	13.7	146
69	Synthesis of Highly Emissive Mn-Doped ZnSe Nanocrystals without Pyrophoric Reagents. Chemistry of Materials, 2010, 22, 2107-2113.	6.7	144
70	Single-Dot Spectroscopy of Zinc-Blende CdSe/CdS Core/Shell Nanocrystals: Nonblinking and Correlation with Ensemble Measurements. Journal of the American Chemical Society, 2014, 136, 179-187.	13.7	141
71	Super-Stable, High-Quality Fe3O4 Dendron-Nanocrystals Dispersible in Both Organic and Aqueous Solutions. Advanced Materials, 2005, 17, 1429-1432.	21.0	140
72	In Vivo Tumor-Targeted Fluorescence Imaging Using Near-Infrared Non-Cadmium Quantum Dots. Bioconjugate Chemistry, 2010, 21, 604-609.	3.6	137

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73	Lattice contraction in free-standing CdSe nanocrystals. Applied Physics Letters, 2002, 81, 2076-2078.	3.3	136
74	Synthetic Scheme for Highâ€Quality InAs Nanocrystals Based on Selfâ€Focusing and Oneâ€Pot Synthesis of InAsâ€Based Coreâ€“Shell Nanocrystals. Angewandte Chemie - International Edition, 2008, 47, 7677-7680.	13.8	130
75	Combinatorial approaches toward patterning nanocrystals. Journal of Applied Physics, 1998, 84, 3664-3670.	2.5	125
76	Synthesis and Isolatin of a Homodimer of Cadmium Selenide Nanocrystals. Angewandte Chemie International Edition in English, 1997, 36, 145-147.	4.4	123
77	Formation and Stability of Gold Nanoflowers by the Seeding Approach: The Effect of Intraparticle Ripening. Journal of Physical Chemistry C, 2009, 113, 16645-16651.	3.1	122
78	Highly reactive, flexible yet green Se precursor for metal selenide nanocrystals: Se-octadecene suspension (Se-SUS). Nano Research, 2013, 6, 652-670.	10.4	121
79	Bright and Water-Soluble Near IR-Emitting CdSe/CdTe/ZnSe Type-II/Type-I Nanocrystals, Tuning the Efficiency and Stability by Growth. Chemistry of Materials, 2008, 20, 4847-4853.	6.7	110
80	Crystal Structure Control of CdSe Nanocrystals in Growth and Nucleation: Dominating Effects of Surface versus Interior Structure. Journal of the American Chemical Society, 2014, 136, 6724-6732.	13.7	110
81	Band Gap and Composition Engineering on a Nanocrystal (BCEN) in Solution. Accounts of Chemical Research, 2010, 43, 1387-1395.	15.6	109
82	Uniform thickness and colloidal-stable CdS quantum disks with tunable thickness: Synthesis and properties. Nano Research, 2012, 5, 337-351.	10.4	107
83	Quantum Dots with Highly Efficient, Stable, and Multicolor Electrochemiluminescence. ACS Central Science, 2020, 6, 1129-1137.	11.3	107
84	Control of the Morphology of Complex Semiconductor Nanocrystals with a Type II Heterojunction, Dots vs Peanuts, by Thermal Cycling. Chemistry of Materials, 2007, 19, 3815-3821.	6.7	105
85	Electrically-driven single-photon sources based on colloidal quantum dots with near-optimal antibunching at room temperature. Nature Communications, 2017, 8, 1132.	12.8	105
86	Correlation of CdS Nanocrystal Formation with Elemental Sulfur Activation and Its Implication in Synthetic Development. Journal of the American Chemical Society, 2011, 133, 17248-17256.	13.7	104
87	InAs/InP/ZnSe core/shell/shell quantum dots as near-infrared emitters: Bright, narrow-band, non-cadmium containing, and biocompatible. Nano Research, 2008, 1, 457-464.	10.4	103
88	Temperature- and Mn²⁺ Concentration-Dependent Emission Properties of Mn²⁺-Doped ZnSe Nanocrystals. Journal of the American Chemical Society, 2019, 141, 2288-2298.	13.7	102
89	Photoluminescence upconversion in colloidal CdTe quantum dots. Physical Review B, 2003, 68, .	3.2	100
90	Deciphering exciton-generation processes in quantum-dot electroluminescence. Nature Communications, 2020, 11, 2309.	12.8	96

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91	Polarization spectroscopy of single CdSe quantum rods. Physical Review B, 2001, 64, .	3.2	94
92	Engineering Auger recombination in colloidal quantum dots via dielectric screening. Nature Communications, 2019, 10, 1750.	12.8	93
93	A Two-Step Synthetic Strategy toward Monodisperse Colloidal CdSe and CdSe/CdS Core/Shell Nanocrystals. Journal of the American Chemical Society, 2016, 138, 6475-6483.	13.7	92
94	Formation of nanoparticulate iron(III) oxide-stearate multilayer through Langmuir-Blodgett method. The Journal of Physical Chemistry, 1992, 96, 3412-3415.	2.9	91
95	Highly Luminescent, Stable, and Water-Soluble CdSe/CdS Coreâ^'Shell Dendron Nanocrystals with Carboxylate Anchoring Groups. Langmuir, 2006, 22, 6341-6345.	3.5	85
96	Intramolecular Entropy and Size-Dependent Solution Properties of Nanocrystalâ€"Ligands Complexes. Nano Letters, 2016, 16, 2127-2132.	9.1	85
97	Identification of Facet-Dependent Coordination Structures of Carboxylate Ligands on CdSe Nanocrystals. Journal of the American Chemical Society, 2019, 141, 15675-15683.	13.7	85
98	Interparticle Influence on Size/Size Distribution Evolution of Nanocrystals. Journal of the American Chemical Society, 2007, 129, 2736-2737.	13.7	81
99	Doped Semiconductor-Nanocrystal Emitters with Optimal Photoluminescence Decay Dynamics in Microsecond to Millisecond Range: Synthesis and Applications. ACS Central Science, 2016, 2, 32-39.	11.3	75
100	Partitioning surface ligands on nanocrystals for maximal solubility. Nature Communications, 2019, 10, 2454.	12.8	74
101	Detection of Pathogens Using Luminescent CdSe/ZnS Dendron Nanocrystals and a Porous Membrane Immunofilter. Analytical Chemistry, 2007, 79, 8796-8802.	6.5	73
102	Fluorescence lifetime of Mn-doped ZnSe quantum dots with size dependence. Applied Physics Letters, 2008, 92, .	3.3	71
103	Structure Identification of Two-Dimensional Colloidal Semiconductor Nanocrystals with Atomic Flat Basal Planes. Nano Letters, 2015, 15, 4477-4482.	9.1	68
104	Photoluminescence Intermittency and Photoâ€Bleaching of Single Colloidal Quantum Dot. Advanced Materials, 2017, 29, 1606923.	21.0	66
105	Symmetry-Breaking for Formation of Rectangular CdSe Two-Dimensional Nanocrystals in Zinc-Blende Structure. Journal of the American Chemical Society, 2017, 139, 10009-10019.	13.7	66
106	Formation of Size-Tunable and Nearly Monodisperse InP Nanocrystals: Chemical Reactions and Controlled Synthesis. Chemistry of Materials, 2019, 31, 5331-5341.	6.7	62
107	Design and Synthesis of Antiblinking and Antibleaching Quantum Dots in Multiple Colors via Wave Function Confinement. Journal of the American Chemical Society, 2016, 138, 15727-15735.	13.7	60
108	One-pot/three-step synthesis of zinc-blende CdSe/CdS core/shell nanocrystals with thick shells. Nano Research, 2017, 10, 1149-1162.	10.4	56

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109	Unusual Loading-Dependent Sintering-Resistant Properties of Gold Nanoparticles Supported within Extra-large Mesopores. Chemistry of Materials, 2013, 25, 1556-1563.	6.7	54
110	Shape control of doped semiconductor nanocrystals (d-dots). Nano Research, 2008, 1, 138-144.	10.4	53
111	Size dependence of nonlinear optical absorption and refraction of Mn-doped ZnSe nanocrystals. Applied Physics Letters, 2007, 91, 201103.	3.3	50
112	Oxygen Stabilizes Photoluminescence of CdSe/CdS Core/Shell Quantum Dots via Deionization. Journal of the American Chemical Society, 2020, 142, 4254-4264.	13.7	50
113	Highâ€Performance Quantumâ€Dot Lightâ€Emitting Diodes Using NiO_x Holeâ€Injection Layers with a High and Stable Work Function. Advanced Functional Materials, 2020, 30, 1907265.	14.9	48
114	Preparation and structure of Q-state lead sulfide monolayers in metastable stearic acid Langmuir-Blodgett films. The Journal of Physical Chemistry, 1992, 96, 3170-3174.	2.9	47
115	Synthesis of Monodisperse, Highly Emissive, and Size-Tunable Cd3P2 Nanocrystals. Chemistry of Materials, 2010, 22, 3820-3822.	6.7	47
116	Visible-Light Photocatalytic Synthesis of Amines from Imines via Transfer Hydrogenation Using Quantum Dots as Catalysts. Journal of Organic Chemistry, 2018, 83, 11886-11895.	3.2	47
117	Controlled Synthesis of High Quality Semiconductor Nanocrystals. , 0, , 79-119.		43
118	Shell-thickness dependent optical properties of CdSe/CdS core/shell nanocrystals coated with thiol ligands. Nano Research, 2016, 9, 260-271.	10.4	41
119	An efficient and surface-benign purification scheme for colloidal nanocrystals based on quantitative assessment. Nano Research, 2015, 8, 3353-3364.	10.4	40
120	Ag Nanocrystals with Nearly Ideal Optical Quality: Synthesis, Growth Mechanism, and Characterizations. Journal of the American Chemical Society, 2018, 140, 17734-17742.	13.7	40
121	Surface activation of colloidal indium phosphide nanocrystals. Nano Research, 2017, 10, 941-958.	10.4	39
122	Quantitative Identification of Basic Growth Channels for Formation of Monodisperse Nanocrystals. Journal of the American Chemical Society, 2018, 140, 5474-5484.	13.7	39
123	Extinction coefficient per CdE (E = Se or S) unit for zinc-blende CdE nanocrystals. Nano Research, 2018, 11, 3991-4004.	10.4	38
124	Modelling the formation of high aspect CdSe quantum wires: axial-growth versus oriented-attachment mechanisms. Nanotechnology, 2006, 17, 5707-5714.	2.6	37
125	Phonon-assisted up-conversion photoluminescence of quantum dots. Nature Communications, 2021, 12, 4283.	12.8	37
126	Formation Process of Nanometer-Sized Cubic Ferric Oxide Single Crystals. Journal of Colloid and Interface Science, 1996, 178, 673-680.	9.4	35

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127	Initialization and read-out of spins in coupled coreâ€“shell quantum dots. Nature Physics, 2006, 2, 831-834.	16.7	35
128	Photoluminescence from single CdSe quantum rods. Journal of Luminescence, 2002, 97, 205-211.	3.1	34
129	Surface and intrinsic contributions to extinction properties of ZnSe quantum dots. Nano Research, 2020, 13, 824-831.	10.4	34
130	Formation of Monodisperse FePt Alloy Nanocrystals Using Air-Stable Precursors: Fatty Acids as Alloying Mediator and Reductant for Fe³⁺ Precursors. Journal of the American Chemical Society, 2009, 131, 5350-5358.	13.7	33
131	On-Surface Reactions in the Growth of High-Quality CdSe Nanocrystals in Nonpolar Solutions. Journal of the American Chemical Society, 2018, 140, 9174-9183.	13.7	33
132	Quantum Dots for Display Applications. Angewandte Chemie, 2020, 132, 22496-22507.	2.0	33
133	Control of Distance and Size of Inorganic Nanoparticles by Organic Matrixes in Ordered LB Monolayers. The Journal of Physical Chemistry, 1994, 98, 7052-7055.	2.9	32
134	Bioreactive Surfaces Prepared via the Self-Assembly of Dendron Thiols and Subsequent Dendrimer Bridging Reactions. Langmuir, 2005, 21, 1858-1865.	3.5	32
135	Pt/Fe₃O₄ Core/Shell Triangular Nanoprisms by Heteroepitaxy: Facet Selectivity at the Ptâ€“Fe₃O₄ Interface and the Fe₃O₄ Outer Surface. ACS Nano, 2015, 9, 10950-10960.	14.6	31
136	Charging and Discharging Channels in Photoluminescence Intermittency of Single Colloidal CdSe/CdS Core/Shell Quantum Dot. Journal of Physical Chemistry Letters, 2016, 7, 5176-5182.	4.6	31
137	Synthesis of Colloidal Quantum Dots with an Ultranarrow Photoluminescence Peak. Chemistry of Materials, 2021, 33, 1799-1810.	6.7	31
138	Polymer Langmuir-Blodgett film of organic-inorganic (Fe2O3) composite microgel. Thin Solid Films, 1994, 248, 106-109.	1.8	30
139	Enhancing Dielectric Screening for Auger Suppression in CdSe/CdS Quantum Dots by Epitaxial Growth of ZnS Shell. Nano Letters, 2021, 21, 3871-3878.	9.1	29
140	Facetâ€Dependent Onâ€Surface Reactions in the Growth of CdSe Nanoplatelets. Angewandte Chemie - International Edition, 2019, 58, 17764-17770.	13.8	28
141	Formation of Cadmium Sulfide Monolayers within Stearic Acid Langmuirâ€“Blodgett Films. Langmuir, 1996, 12, 851-853.	3.5	27
142	Monodisperse CdSe Quantum Dots Encased in Six (100) Facets via Ligand-Controlled Nucleation and Growth. Journal of the American Chemical Society, 2020, 142, 19926-19935.	13.7	27
143	Preparation and Characterization of Quantum-Sized PbS Grown in Amphiphilic Oligomer Langmuirâ€“Blodgett Monolayers. Langmuir, 1997, 13, 6183-6187.	3.5	25
144	Herstellung und Isolierung eines Homodimers aus CdSeâ€Nanokristallen. Angewandte Chemie, 1997, 109, 113-115.	2.0	25

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145	Spin dynamics and level structure of quantum-dot quantum wells. Physical Review B, 2005, 71, .	3.2	25
146	Deciphering Charging Status, Absolute Quantum Efficiency, and Absorption Cross Section of Multicarrier States in Single Colloidal Quantum Dots. Nano Letters, 2017, 17, 7487-7493.	9.1	25
147	CdSe@CdS Dot@Platelet Nanocrystals: Controlled Epitaxy, Monoexponential Decay of Two-Dimensional Exciton, and Nonblinking Photoluminescence of Single Nanocrystal. Journal of the American Chemical Society, 2019, 141, 17617-17628.	13.7	25
148	Structure characterization of the two kinds of nanometer size .alpha.-ferric oxide-stearate alternating Langmuir-Blodgett films by Fourier transform infrared spectroscopy. The Journal of Physical Chemistry, 1993, 97, 4484-4487.	2.9	24
149	Future directions in solid state chemistry: report of the NSF-sponsored workshop. Progress in Solid State Chemistry, 2002, 30, 1-101.	7.2	24
150	Enhanced Fluorescence Intermittency in Mn-Doped Single ZnSe Quantum Dots. Journal of Physical Chemistry C, 2008, 112, 20200-20205.	3.1	24
151	Magnetic and Structural Investigation of ZnSe Semiconductor Nanoparticles Doped With Isolated and Coreâ€Concentrated Mn²⁺ Ions. Advanced Functional Materials, 2009, 19, 2501-2510.	14.9	22
152	Anisotropic Fe₃O₄/Mn₃O₄ Hybrid Nanocrystals with Unique Magnetic Properties. Nano Letters, 2017, 17, 3570-3575.	9.1	22
153	Robust structure and morphology parameters for CdS nanoparticles by combining small-angle X-ray scattering and atomic pair distribution function data in a complex modeling framework. Journal of Applied Crystallography, 2014, 47, 561-565.	4.5	21
154	Effects of interface-potential smoothness and wavefunction delocalization on Auger recombination in colloidal CdSe-based core/shell quantum dots. Journal of Chemical Physics, 2019, 151, 234703.	3.0	21
155	CdSe Nanocrystal Rods/Poly(3-hexylthiophene) Composite Photovoltaic Devices. Advanced Materials, 1999, 11, 923-927.	21.0	21
156	Exciton radiative recombination in spherical CdSâˆ•CdSeâˆ•CdS quantum-well nanostructures. Applied Physics Letters, 2005, 87, 043107.	3.3	19
157	Engineering of Exciton Spatial Distribution in CdS Nanoplatelets. Nano Letters, 2021, 21, 5201-5208.	9.1	18
158	Preparation of pure Y-type Langmuir-Blodgett films of lead stearate and their reaction with hydrogen sulphide. Thin Solid Films, 1994, 242, 118-121.	1.8	17
159	Visible Light Induced Reduction and Pinacol Coupling of Aldehydes and Ketones Catalyzed by Core/Shell Quantum Dots. Journal of Organic Chemistry, 2021, 86, 2474-2488.	3.2	17
160	Effects of Local Dielectric Environment on Single-Molecule Spectroscopy of a CdSe/CdS Core/Shell Quantum Dot. ACS Photonics, 2018, 5, 4139-4146.	6.6	15
161	Entropy of Branching Out: Linear versus Branched Alkylthiols Ligands on CdSe Nanocrystals. ACS Nano, 2022, 16, 4308-4321.	14.6	15
162	A CdSe nanocrystal/MEH-PPV polymer composite photovoltaic. , 1997, , .		14

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