Zeger Hens

List of Publications by Year
in descending order

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254 papers	16,025 citations	18436 62 h-index	19136 118 g-index
264 all docs	264 docs citations	264 times ranked	14761 citing authors

#	Article	IF	Citations
1	Highly Dynamic Ligand Binding and Light Absorption Coefficient of Cesium Lead Bromide Perovskite Nanocrystals. ACS Nano, 2016, 10, 2071-2081.	7.3	1,448
2	Size-Dependent Optical Properties of Colloidal PbS Quantum Dots. ACS Nano, 2009, 3, 3023-3030.	7.3	1,024
3	Prospects of Nanoscience with Nanocrystals. ACS Nano, 2015, 9, 1012-1057.	7.3	1,005
4	Composition and Size-Dependent Extinction Coefficient of Colloidal PbSe Quantum Dots. Chemistry of Materials, 2007, 19, 6101-6106.	3.2	475
5	Size-Tunable, Bright, and Stable PbS Quantum Dots: A Surface Chemistry Study. ACS Nano, 2011, 5, 2004-2012.	7.3	446
6	A Solution NMR Toolbox for Characterizing the Surface Chemistry of Colloidal Nanocrystals. Chemistry of Materials, 2013, 25, 1211-1221.	3.2	428
7	Surface Chemistry of Colloidal PbSe Nanocrystals. Journal of the American Chemical Society, 2008, 130, 15081-15086.	6.6	352
8	Economic and Size-Tunable Synthesis of InP/ZnE (E = S, Se) Colloidal Quantum Dots.. Chemistry of Materials, 2015, 27, 4893-4898.	3.2	333
9	Utilizing Self-Exchange To Address the Binding of Carboxylic Acid Ligands to CdSe Quantum Dots. Journal of the American Chemical Society, 2010, 132, 10195-10201.	6.6	320
10	Binding of Phosphonic Acids to CdSe Quantum Dots: A Solution NMR Study. Journal of Physical Chemistry Letters, 2011, 2, 145-152.	2.1	236
11	On the Origin of Surface Traps in Colloidal IIâ€“VI Semiconductor Nanocrystals. Chemistry of Materials, 2017, 29, 752-761.	3.2	231
12	Luminescence in Sulfides: A Rich History and a Bright Future. Materials, 2010, 3, 2834-2883.	1.3	228
13	Short-Chain Alcohols Strip X-Type Ligands and Quench the Luminescence of PbSe and CdSe Quantum Dots, Acetonitrile Does Not. Journal of the American Chemical Society, 2012, 134, 20705-20712.	6.6	221
14	Light Absorption Coefficient of CsPbBr₃ Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2018, 9, 3093-3097.	2.1	219
15	In Situ Observation of Rapid Ligand Exchange in Colloidal Nanocrystal Suspensions Using Transfer NOE Nuclear Magnetic Resonance Spectroscopy. Journal of the American Chemical Society, 2009, 131, 3024-3032.	6.6	190
16	Silicon and silicon nitride photonic circuits for spectroscopic sensing on-a-chip [Invited]. Photonics Research, 2015, 3, B47.	3.4	173
17	Light absorption by colloidal semiconductor quantum dots. Journal of Materials Chemistry, 2012, 22, 10406.	6.7	153
18	Probing the Wave Function Delocalization in CdSe/CdS Dot-in-Rod Nanocrystals by Time- and Temperature-Resolved Spectroscopy. ACS Nano, 2011, 5, 4031-4036.	7.3	148

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19	Interfacial Alloying in CdSe/CdS Heteronanocrystals: A Raman Spectroscopy Analysis. Chemistry of Materials, 2012, 24, 311-318.	3.2	146
20	Anisotropic Cation Exchange in PbSe/CdSe Core/Shell Nanocrystals of Different Geometry. Chemistry of Materials, 2012, 24, 294-302.	3.2	144
21	Optical Properties of Zincblende Cadmium Selenide Quantum Dots. Journal of Physical Chemistry C, 2010, 114, 6371-6376.	1.5	143
22	Novel Light Source Integration Approaches for Silicon Photonics. Laser and Photonics Reviews, 2017, 11, 1700063.	4.4	143
23	An integrated optic ethanol vapor sensor based on a silicon-on-insulator microring resonator coated with a porous ZnO film. Optics Express, 2010, 18, 11859.	1.7	142
24	Tuning the Postfocused Size of Colloidal Nanocrystals by the Reaction Rate: From Theory to Application. ACS Nano, 2012, 6, 42-53.	7.3	133
25	Hybrid remote quantum dot/powder phosphor designs for display backlights. Light: Science and Applications, 2017, 6, e16271-e16271.	7.7	133
26	Aminophosphines: A Double Role in the Synthesis of Colloidal Indium Phosphide Quantum Dots. Journal of the American Chemical Society, 2016, 138, 5923-5929.	6.6	127
27	Colloidal CdSe Nanoplatelets, A Model for Surface Chemistry/Optoelectronic Property Relations in Semiconductor Nanocrystals. Journal of the American Chemical Society, 2018, 140, 13292-13300.	6.6	126
28	â€œFlashâ€•Synthesis of CdSe/CdS Coreâ€“Shell Quantum Dots. Chemistry of Materials, 2014, 26, 1154-1160.	3.2	124
29	PbTe|CdTe Core|Shell Particles by Cation Exchange, a HR-TEM study. Chemistry of Materials, 2009, 21, 778-780.	3.2	121
30	Probing Solventâ€“Ligand Interactions in Colloidal Nanocrystals by the NMR Line Broadening. Chemistry of Materials, 2018, 30, 5485-5492.	3.2	117
31	Ligand Displacement Exposes Binding Site Heterogeneity on CdSe Nanocrystal Surfaces. Chemistry of Materials, 2018, 30, 1178-1186.	3.2	116
32	Silicon-Based Photonic Integration Beyond the Telecommunication Wavelength Range. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 394-404.	1.9	106
33	Nuclear Magnetic Resonance Spectroscopy Demonstrating Dynamic Stabilization of CdSe Quantum Dots by Alkylamines. Journal of Physical Chemistry Letters, 2010, 1, 2577-2581.	2.1	102
34	Unravelling the Surface Chemistry of Metal Oxide Nanocrystals, the Role of Acids and Bases. Journal of the American Chemical Society, 2014, 136, 9650-9657.	6.6	100
35	Continuous-wave infrared optical gain and amplified spontaneous emission at ultralow threshold by colloidal HgTe quantum dots. Nature Materials, 2018, 17, 35-42.	13.3	99
36	A Library of Selenourea Precursors to PbSe Nanocrystals with Size Distributions near the Homogeneous Limit. Journal of the American Chemical Society, 2017, 139, 2296-2305.	6.6	96

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37	Polymer-coated fluorescent CdSe-based quantum dots for application in immunoassay. Biosensors and Bioelectronics, 2014, 53, 225-231.	5.3	95
38	In Situ1H NMR Study on the Trioctylphosphine Oxide Capping of Colloidal InP Nanocrystals. ChemPhysChem, 2005, 6, 2578-2584.	1.0	91
39	Development of a Rainbow Lateral Flow Immunoassay for the Simultaneous Detection of Four Mycotoxins. Journal of Agricultural and Food Chemistry, 2017, 65, 7121-7130.	2.4	89
40	Nearly Blinking-Free, High-Purity Single-Photon Emission by Colloidal InP/ZnSe Quantum Dots. Nano Letters, 2017, 17, 6104-6109.	4.5	85
41	The Different Nature of Band Edge Absorption and Emission in Colloidal PbSe/CdSe Core/Shell Quantum Dots. ACS Nano, 2011, 5, 58-66.	7.3	84
42	Selfâ€Assembled Multilayers of Vertically Aligned Semiconductor Nanorods on Deviceâ€Scale Areas. Advanced Materials, 2011, 23, 2205-2209.	11.1	83
43	Colloidal metal oxide nanocrystal catalysis by sustained chemically driven ligand displacement. Nature Materials, 2016, 15, 517-521.	13.3	82
44	Ligand Adsorption/Desorption on Sterically Stabilized InP Colloidal Nanocrystals: Observation and Thermodynamic Analysis. ChemPhysChem, 2006, 7, 1028-1031.	1.0	81
45	Hydrophilic, Bright CuInS₂ Quantum Dots as Cd-Free Fluorescent Labels in Quantitative Immunoassay. Langmuir, 2014, 30, 7567-7575.	1.6	81
46	Interfacial Oxidation and Photoluminescence of InP-Based Core/Shell Quantum Dots. Chemistry of Materials, 2018, 30, 6877-6883.	3.2	78
47	Cytotoxicity of Cadmium-Free Quantum Dots and Their Use in Cell Bioimaging. Chemical Research in Toxicology, 2014, 27, 1050-1059.	1.7	77
48	Onâ€Chip Integrated Quantumâ€Dotâ€“Siliconâ€Nitride Microdisk Lasers. Advanced Materials, 2017, 29, 1604866.	11.1	77
49	Reaction Chemistry/Nanocrystal Property Relations in the Hot Injection Synthesis, the Role of the Solute Solubility. ACS Nano, 2013, 7, 943-949.	7.3	76
50	Nearly Temperatureâ€Independent Threshold for Amplified Spontaneous Emission in Colloidal CdSe/CdS Quantum Dotâ€inâ€Rods. Advanced Materials, 2012, 24, OP231-5.	11.1	74
51	Carboxylicâ€Acidâ€Passivated Metal Oxide Nanocrystals: Ligand Exchange Characteristics of a New Binding Motif. Angewandte Chemie - International Edition, 2015, 54, 6488-6491.	7.2	74
52	Direct determination of absorption anisotropy in colloidal quantum rods. Physical Review B, 2012, 85, .	1.1	73
53	Size and Concentration Determination of Colloidal Nanocrystals by Small-Angle X-ray Scattering. Chemistry of Materials, 2018, 30, 3952-3962.	3.2	73
54	Selective and reversible ammonia gas detection with nanoporous film functionalized silicon photonic micro-ring resonator. Optics Express, 2012, 20, 11855.	1.7	69

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55	Optical Properties of PbS/CdS Core/Shell Quantum Dots. Journal of Physical Chemistry C, 2013, 117, 20171-20177.	1.5	68
56	Bright and Stable CdSe/CdS@SiO₂ Nanoparticles Suitable for Long-Term Cell Labeling. ACS Applied Materials & Interfaces, 2014, 6, 11714-11723.	4.0	67
57	Synthesis of Extremely Small CdSe and Bright Blue Luminescent CdSe/ZnS Nanoparticles by a Prefocused Hot-Injection Approach. Chemistry of Materials, 2009, 21, 1743-1749.	3.2	66
58	Dielectric function of colloidal lead chalcogenide quantum dots obtained by a Kramers-KrÃ¶nig analysis of the absorbance spectrum. Physical Review B, 2010, 81, .	1.1	66
59	Photoluminescence properties of Co2+-doped ZnO nanocrystals. Journal of Luminescence, 2006, 118, 245-250.	1.5	65
60	Silicon-based heterogeneous photonic integrated circuits for the mid-infrared. Optical Materials Express, 2013, 3, 1523.	1.6	65
61	Less Is More. Cation Exchange and the Chemistry of the Nanocrystal Surface. ACS Nano, 2014, 8, 7948-7957.	7.3	65
62	Band-Edge Exciton Fine Structure and Recombination Dynamics in InP/ZnS Colloidal Nanocrystals. ACS Nano, 2016, 10, 3356-3364.	7.3	65
63	A bright future for colloidal quantum dot lasers. NPG Asia Materials, 2019, 11, .	3.8	65
64	Fast, High Yield, and High Solid Loading Synthesis of Metal Selenide Nanocrystals. Chemistry of Materials, 2013, 25, 2476-2483.	3.2	64
65	Tunable and Efficient Red to Near-Infrared Photoluminescence by Synergistic Exploitation of Core and Surface Silver Doping of CdSe Nanoplatelets. Chemistry of Materials, 2019, 31, 1450-1459.	3.2	64
66	Synthesis, modification, bioconjugation of silica coated fluorescent quantum dots and their application for mycotoxin detection. Biosensors and Bioelectronics, 2016, 79, 476-481.	5.3	62
67	Dopant Incorporation in Colloidal Quantum Dots:â€‰ A Case Study on Co²⁺ Doped ZnO. Chemistry of Materials, 2007, 19, 5576-5583.	3.2	60
68	Band-Edge Exciton Fine Structure of Small, Nearly Spherical Colloidal CdSe/ZnS Quantum Dots. ACS Nano, 2011, 5, 8033-8039.	7.3	60
69	Surface Chemistry of CuInS₂ Colloidal Nanocrystals, Tight Binding of L-Type Ligands. Chemistry of Materials, 2014, 26, 5950-5957.	3.2	60
70	Size-Dependent Optical Properties of Zinc Blende Cadmium Telluride Quantum Dots. Journal of Physical Chemistry C, 2012, 116, 5049-5054.	1.5	58
71	Homogeneously Alloyed CdSe1â€“xSx Quantum Dots (0 â‰‰ x â‰‰ 1): An Efficient Synthesis for Full Optical Tunability. Chemistry of Materials, 2013, 25, 2388-2390.	3.2	58
72	Binding and Packing in Two-Component Colloidal Quantum Dot Ligand Shells: Linear versus Branched Carboxylates. Journal of the American Chemical Society, 2017, 139, 3456-3464.	6.6	58

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73	The Impact of Core/Shell Sizes on the Optical Gain Characteristics of CdSe/CdS Quantum Dots. ACS Nano, 2018, 12, 9011-9021.	7.3	56
74	Using Bulk-like Nanocrystals To Probe Intrinsic Optical Gain Characteristics of Inorganic Lead Halide Perovskites. ACS Nano, 2018, 12, 10178-10188.	7.3	56
75	Air-stable short-wave infrared PbS colloidal quantum dot photoconductors passivated with Al2O3 atomic layer deposition. Applied Physics Letters, 2014, 105, .	1.5	55
76	Langmuirâ^'Schaefer Deposition of Quantum Dot Multilayers. Langmuir, 2010, 26, 7732-7736.	1.6	54
77	Controlling the Size of Hot Injection Made Nanocrystals by Manipulating the Diffusion Coefficient of the Solute. Journal of the American Chemical Society, 2015, 137, 2495-2505.	6.6	54
78	Langmuirâ€"Blodgett monolayers of colloidal lead chalcogenide quantum dots: morphology and photoluminescence. Nanotechnology, 2010, 21, 295606.	1.3	51
79	Nanoscale and Single-Dot Patterning of Colloidal Quantum Dots. Nano Letters, 2015, 15, 7481-7487.	4.5	49
80	Chemically Triggered Formation of Two-Dimensional Epitaxial Quantum Dot Superlattices. ACS Nano, 2016, 10, 6861-6870.	7.3	49
81	The absorption coefficient of PbSe/CdSe core/shell colloidal quantum dots. Applied Physics Letters, 2010, 97, 161908.	1.5	48
82	Controlling the Exciton Fine Structure Splitting in CdSe/CdS Dot-in-Rod Nanojunctions. ACS Nano, 2012, 6, 1979-1987.	7.3	48
83	Indium Phosphideâ€Based Quantum Dots with Shellâ€Enhanced Absorption for Luminescent Downâ€Conversion. Advanced Materials, 2017, 29, 1700686.	11.1	48
84	Boosting the Er³⁺ 1.5 Î¼m Luminescence in CsPbCl₃ Perovskite Nanocrystals for Photonic Devices Operating at Telecommunication Wavelengths. ACS Applied Nano Materials, 2020, 3, 4699-4707.	2.4	48
85	Active Liquid Crystal Tuning of Metallic Nanoantenna Enhanced Light Emission from Colloidal Quantum Dots. Nano Letters, 2014, 14, 5555-5560.	4.5	47
86	Stabilization of Colloidal Ti, Zr, and Hf Oxide Nanocrystals by Protonated Tri-n-octylphosphine Oxide (TOPO) and Its Decomposition Products. Chemistry of Materials, 2017, 29, 10233-10242.	3.2	47
87	Solution NMR techniques for investigating colloidal nanocrystal ligands: A case study on trioctylphosphine oxide at InP quantum dots. Sensors and Actuators B: Chemical, 2007, 126, 283-288.	4.0	46
88	On-Chip Arrayed Waveguide Grating Interrogated Silicon-on-Insulator Microring Resonator-Based Gas Sensor. IEEE Photonics Technology Letters, 2011, 23, 1505-1507.	1.3	46
89	Slow recombination in quantum dot solid solar cell using pâ€"iâ€"n architecture with organic p-type hole transport material. Journal of Materials Chemistry A, 2015, 3, 20579-20585.	5.2	46
90	Fast, microwave-assisted synthesis of monodisperse HfO2 nanoparticles. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	45

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91	Atomically Precise Nanocrystals. Journal of the American Chemical Society, 2020, 142, 15627-15637.	6.6	45
92	Multiple Dot-in-Rod PbS/CdS Heterostructures with High Photoluminescence Quantum Yield in the Near-Infrared. Journal of the American Chemical Society, 2012, 134, 5484-5487.	6.6	44
93	Synthesis of Hydrophilic CuInS₂/ZnS Quantum Dots with Different Polymeric Shells and Study of Their Cytotoxicity and Hemocompatibility. ACS Applied Materials & Interfaces, 2016, 8, 7613-7622.	4.0	44
94	Magnetic polaron on dangling-bond spins in CdSe colloidal nanocrystals. Nature Nanotechnology, 2017, 12, 569-574.	15.6	44
95	Integration of PbS Quantum Dot Photodiodes on Silicon for NIR Imaging. IEEE Sensors Journal, 2020, 20, 6841-6848.	2.4	44
96	Full-Spectrum InP-Based Quantum Dots with Near-Unity Photoluminescence Quantum Efficiency. ACS Nano, 2022, 16, 9701-9712.	7.3	44
97	Strain Engineering in InP/(Zn,Cd)Se Core/Shell Quantum Dots. Chemistry of Materials, 2018, 30, 4393-4400.	3.2	43
98	Tuning Energy Splitting and Recombination Dynamics of Dark and Bright Excitons in CdSe/CdS Dot-in-Rod Colloidal Nanostructures. Journal of Physical Chemistry C, 2014, 118, 22309-22316.	1.5	42
99	Exciton Fine Structure and Lattice Dynamics in InP/ZnSe Core/Shell Quantum Dots. ACS Photonics, 2018, 5, 3353-3362.	3.2	42
100	Phonon-Mediated and Weakly Size-Dependent Electron and Hole Cooling in CsPbBr₃ Nanocrystals Revealed by Atomistic Simulations and Ultrafast Spectroscopy. Nano Letters, 2020, 20, 1819-1829.	4.5	41
101	Engineering the Spinâ€“Flip Limited Exciton Dephasing in Colloidal CdSe/CdS Quantum Dots. ACS Nano, 2012, 6, 5227-5233.	7.3	40
102	Fluorescently labelled multiplex lateral flow immunoassay based on cadmium-free quantum dots. Methods, 2017, 116, 141-148.	1.9	40
103	Optimization of Charge Carrier Extraction in Colloidal Quantum Dots Shortâ€Wave Infrared Photodiodes through Optical Engineering. Advanced Functional Materials, 2018, 28, 1804502.	7.8	40
104	Giant and Broad-Band Absorption Enhancement in Colloidal Quantum Dot Monolayers through Dipolar Coupling. ACS Nano, 2013, 7, 987-993.	7.3	39
105	Revisited Wurtzite CdSe Synthesis: A Gateway for the Versatile Flash Synthesis of Multishell Quantum Dots and Rods. Chemistry of Materials, 2016, 28, 7311-7323.	3.2	39
106	Thermodynamic Equilibrium between Excitons and Excitonic Molecules Dictates Optical Gain in Colloidal CdSe Quantum Wells. Journal of Physical Chemistry Letters, 2019, 10, 3637-3644.	2.1	39
107	Charge Carrier Cooling Bottleneck Opens Up Nonexcitonic Gain Mechanisms in Colloidal CdSe Quantum Wells. Journal of Physical Chemistry C, 2019, 123, 9640-9650.	1.5	39
108	The Growth of Co:ZnO/ZnO Core/Shell Colloidal Quantum Dots: Changes in Nanocrystal Size, Concentration and Dopant Coordination. ChemPhysChem, 2008, 9, 484-491.	1.0	38

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109	Large-Scale and Electroswitchable Polarized Emission from Semiconductor Nanorods Aligned in Polymeric Nanofibers. ACS Photonics, 2015, 2, 583-588.	3.2	38
110	Amino Acid-Based Stabilization of Oxide Nanocrystals in Polar Media: From Insight in Ligand Exchange to Solution ¹H NMR Probing of Short-Chained Adsorbates. Langmuir, 2016, 32, 1962-1970.	1.6	38
111	Strong upconversion emission in CsPbBr₃ perovskite quantum dots through efficient BaYF₅:Yb,Ln sensitization. Journal of Materials Chemistry C, 2019, 7, 2014-2021.	2.7	38
112	Acidâ€“Base Mediated Ligand Exchange on Near-Infrared Absorbing, Indium-Based IIIâ€“V Colloidal Quantum Dots. Journal of the American Chemical Society, 2021, 143, 4290-4301.	6.6	38
113	Thin-Film Quantum Dot Photodiode for Monolithic Infrared Image Sensors. Sensors, 2017, 17, 2867.	2.1	36
114	Extended Nucleation and Superfocusing in Colloidal Semiconductor Nanocrystal Synthesis. Nano Letters, 2021, 21, 2487-2496.	4.5	36
115	PbS/CdS Core/Shell Quantum Dots by Additive, Layer-by-Layer Shell Growth. Chemistry of Materials, 2016, 28, 6953-6959.	3.2	35
116	Ultrafast Carrier Dynamics in Few-Layer Colloidal Molybdenum Disulfide Probed by Broadband Transient Absorption Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 10571-10577.	1.5	35
117	Coulomb Shifts upon Exciton Addition to Photoexcited PbS Colloidal Quantum Dots. Journal of Physical Chemistry C, 2014, 118, 22284-22290.	1.5	34
118	InAs Colloidal Quantum Dots Synthesis via Aminopnictogen Precursor Chemistry. Journal of the American Chemical Society, 2016, 138, 13485-13488.	6.6	34
119	Cyan Emission in Two-Dimensional Colloidal Cs₂CdCl₄:Sb³⁺Ruddlesdenâ€“Popper Phase Nanoplatelets. ACS Nano, 2021, 15, 17729-17737.	7.3	34
120	A Case Study of ALD Encapsulation of Quantum Dots: Embedding Supported CdSe/CdS/ZnS Quantum Dots in a ZnO Matrix. Journal of Physical Chemistry C, 2016, 120, 18039-18045.	1.5	33
121	Ligand Addition Energies and the Stoichiometry of Colloidal Nanocrystals. ACS Nano, 2016, 10, 1462-1474.	7.3	33
122	HgSe/CdE (E = S, Se) Core/Shell Nanocrystals by Colloidal Atomic Layer Deposition. Journal of Physical Chemistry C, 2017, 121, 13816-13822.	1.5	33
123	On-Chip Single-Mode Distributed Feedback Colloidal Quantum Dot Laser under Nanosecond Pumping. ACS Photonics, 2017, 4, 2446-2452.	3.2	33
124	Broadband and Picosecond Intraband Absorption in Lead-Based Colloidal Quantum Dots. ACS Nano, 2012, 6, 6067-6074.	7.3	31
125	Low-loss silicon nitride waveguide hybridly integrated with colloidal quantum dots. Optics Express, 2015, 23, 12152.	1.7	31
126	Colloidal IIIâ€“V Quantum Dot Photodiodes for Shortâ€Wave Infrared Photodetection. Advanced Science, 2022, 9, e2200844.	5.6	31

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127	Localization-limited exciton oscillator strength in colloidal CdSe nanoplatelets revealed by the optically induced stark effect. Light: Science and Applications, 2021, 10, 112.	7.7	30
128	General Expression for the Size-Dependent Optical Properties of Quantum Dots. Nano Letters, 2022, 22, 1778-1785.	4.5	30
129	Embedding Quantum Dot Monolayers in Al₂O₃ Using Atomic Layer Deposition. Chemistry of Materials, 2011, 23, 126-128.	3.2	29
130	Fast and versatile deposition of aligned semiconductor nanorods by dip-coating on a substrate with interdigitated electrodes. Optical Materials Express, 2013, 3, 2045.	1.6	29
131	A Phonon Scattering Bottleneck for Carrier Cooling in Lead Chalcogenide Nanocrystals. ACS Nano, 2015, 9, 778-788.	7.3	29
132	Sensitive QD@SiO2-based immunoassay for triplex determination of cereal-borne mycotoxins. Talanta, 2016, 160, 66-71.	2.9	28
133	On the Interpretation of Colloidal Quantumâ€Dot Absorption Spectra. Small, 2008, 4, 1866-1868.	5.2	26
134	Surface Chemistry of CdTe Quantum Dots Synthesized in Mixtures of Phosphonic Acids and Amines: Formation of a Mixed Ligand Shell. Journal of Physical Chemistry C, 2013, 117, 13936-13943.	1.5	26
135	Colloidal WSe₂ nanocrystals as anodes for lithium-ion batteries. Nanoscale, 2020, 12, 22307-22316.	2.8	26
136	Mechanistic Insights in Seeded Growth Synthesis of Colloidal Core/Shell Quantum Dots. Chemistry of Materials, 2017, 29, 4719-4727.	3.2	25
137	The Surface Chemistry of Colloidal HgSe Nanocrystals, toward Stoichiometric Quantum Dots by Design. Chemistry of Materials, 2018, 30, 7637-7647.	3.2	25
138	Integration of Colloidal PbS/CdS Quantum Dots with Plasmonic Antennas and Superconducting Detectors on a Silicon Nitride Photonic Platform. Nano Letters, 2019, 19, 5452-5458.	4.5	24
139	Ligand Binding to Copper Nanocrystals: Amines and Carboxylic Acids and the Role of Surface Oxides. Chemistry of Materials, 2019, 31, 2058-2067.	3.2	24
140	Near-Edge Ligand Stripping and Robust Radiative Exciton Recombination in CdSe/CdS Core/Crown Nanoplatelets. Journal of Physical Chemistry Letters, 2020, 11, 3339-3344.	2.1	24
141	A comparative study demonstrates strong size tunability of carrierâ€“phonon coupling in CdSe-based 2D and 0D nanocrystals. Nanoscale, 2019, 11, 3958-3967.	2.8	24
142	Filtration performance of electrospun polyamide nanofibres loaded with bactericides. Textile Reseach Journal, 2012, 82, 37-44.	1.1	23
143	Exciton Dynamics within the Band-Edge Manifold States: The Onset of an Acoustic Phonon Bottleneck. Nano Letters, 2012, 12, 5224-5229.	4.5	23
144	Switching on near-infrared light in lanthanide-doped CsPbCl₃ perovskite nanocrystals. Nanoscale, 2021, 13, 8118-8125.	2.8	23

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145	Strain in InP/ZnSe, S core/shell quantum dots from lattice mismatch and shell thicknessâ€"Material stiffness influence. Journal of Chemical Physics, 2019, 151, 154704.	1.2	22
146	Setting Carriers Free: Healing Faulty Interfaces Promotes Delocalization and Transport in Nanocrystal Solids. ACS Nano, 2019, 13, 12774-12786.	7.3	22
147	Shape, Electronic Structure, and Trap States in Indium Phosphide Quantum Dots. Chemistry of Materials, 2021, 33, 6885-6896.	3.2	22
148	Langmuirâ€"Blodgett monolayers of InP quantum dots with short chain ligands. Journal of Colloid and Interface Science, 2006, 300, 597-602.	5.0	21
149	Exciton dephasing in lead sulfide quantum dots by<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>X</mml:mi></mml:mrow></mml:math>-point phonons. Physical Review B, 2011, 83, .	1.1	21
150	Plasma enhanced atomic layer deposition of zinc sulfide thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	21
151	Bioimprinting for multiplex luminescent detection of deoxynivalenol and zearalenone. Talanta, 2019, 192, 169-174.	2.9	21
152	From fabrication to mode mapping in silicon nitride microdisks with embedded colloidal quantum dots. Applied Physics Letters, 2012, 101, .	1.5	19
153	The Effect of Intracellular Degradation on Cytotoxicity and Cell Labeling Efficacy of Inorganic Ligand-Stabilized Colloidal CdSe/CdS Quantum Dots. Journal of Biomedical Nanotechnology, 2015, 11, 631-643.	0.5	19
154	Ultrafast carrier dynamics in colloidal WS2 nanosheets obtained through a hot injection synthesis. Journal of Chemical Physics, 2019, 151, 164701.	1.2	19
155	Thermal Charging of Colloidal Quantum Dots in Apolar Solvents: A Current Transient Analysis. ACS Nano, 2011, 5, 1345-1352.	7.3	18
156	The micropatterning of layers of colloidal quantum dots with inorganic ligands using selective wet etching. Nanotechnology, 2014, 25, 175302.	1.3	18
157	Fine Structure of Nearly Isotropic Bright Excitons in InP/ZnSe Colloidal Quantum Dots. Journal of Physical Chemistry Letters, 2019, 10, 5468-5475.	2.1	18
158	Precursor reaction kinetics control compositional grading and size of CdSe_{1âˆ'x}S_x nanocrystal heterostructures. Chemical Science, 2019, 10, 6539-6552.	3.7	18
159	Role of interband and photoinduced absorption in the nonlinear refraction and absorption of resonantly excited PbS quantum dots around 1550 nm. Physical Review B, 2012, 85, .	1.1	17
160	Colloidal Quantum Dots Enabling Coherent Light Sources for Integrated Silicon-Nitride Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-13.	1.9	17
161	Liquid-Phase Exfoliation of Rhenium Disulfide by Solubility Parameter Matching. Langmuir, 2020, 36, 15493-15500.	1.6	17
162	Generating Triplets in Organic Semiconductor Tetracene upon Photoexcitation of Transition Metal Dichalcogenide ReS₂. Journal of Physical Chemistry Letters, 2021, 12, 5256-5260.	2.1	17

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163	Efficient, high-CRI white LEDs by combining traditional phosphors with cadmium-free InP/ZnSe red quantum dots. Photonics Research, 2022, 10, 155.	3.4	17
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