

Zeger Hens

List of Publications by Year in Descending Order

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

217
papers

12,311
citations

54
h-index

105
g-index

264
ext. papers

14,259
ext. citations

8.9
avg, IF

6.52
L-index

#	Paper	IF	Citations
217	Colloidal III-V Quantum Dot Photodiodes for Short-Wave Infrared Photodetection.. <i>Advanced Science</i> , 2022 , e2200844	13.6	5
216	Intraband dynamics of mid-infrared HgTe quantum dots. <i>Nanoscale</i> , 2021 ,	7.7	2
215	The Fine-Structure Constant as a Ruler for the Band-Edge Light Absorption Strength of Bulk and Quantum-Confined Semiconductors. <i>Nano Letters</i> , 2021 , 21, 9426-9432	11.5	
214	Electrically Pumped QD Light Emission from LEDs to Lasers. <i>Information Display</i> , 2021 , 37, 6-17	0.8	1
213	Cyan Emission in Two-Dimensional Colloidal CsCdCl:Sb Ruddlesden-Popper Phase Nanoplatelets. <i>ACS Nano</i> , 2021 ,	16.7	8
212	Waveguiding of Photoluminescence in a Layer of Semiconductor Nanoparticles. <i>Nanomaterials</i> , 2021 , 11,	5.4	2
211	Extended Nucleation and Superfocusing in Colloidal Semiconductor Nanocrystal Synthesis. <i>Nano Letters</i> , 2021 , 21, 2487-2496	11.5	10
210	Acid-Base Mediated Ligand Exchange on Near-Infrared Absorbing, Indium-Based III-V Colloidal Quantum Dots. <i>Journal of the American Chemical Society</i> , 2021 , 143, 4290-4301	16.4	13
209	Ligand Adsorption Energy and the Postpurification Surface Chemistry of Colloidal Metal Chalcogenide Nanocrystals. <i>Chemistry of Materials</i> , 2021 , 33, 2796-2803	9.6	4
208	Waveguide-Coupled Colloidal Quantum Dot Light Emitting Diodes and Detectors on a Silicon Nitride Platform. <i>Laser and Photonics Reviews</i> , 2021 , 15, 2000230	8.3	2
207	Enhanced electric field sensitivity of quantum dot/rod two-photon fluorescence and its relevance for cell transmembrane voltage imaging. <i>Nanophotonics</i> , 2021 , 10, 2407-2420	6.3	2
206	Localization-limited exciton oscillator strength in colloidal CdSe nanoplatelets revealed by the optically induced stark effect. <i>Light: Science and Applications</i> , 2021 , 10, 112	16.7	10
205	Generating Triplets in Organic Semiconductor Tetracene upon Photoexcitation of Transition Metal Dichalcogenide ReS. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 5256-5260	6.4	7
204	Switching on near-infrared light in lanthanide-doped CsPbCl perovskite nanocrystals. <i>Nanoscale</i> , 2021 , 13, 8118-8125	7.7	8
203	Van Hove Singularities and Trap States in Two-Dimensional CdSe Nanoplatelets. <i>Nano Letters</i> , 2021 , 21, 1702-1708	11.5	3
202	Shape, Electronic Structure, and Trap States in Indium Phosphide Quantum Dots. <i>Chemistry of Materials</i> , 2021 , 33, 6885-6896	9.6	3
201	Unraveling the Photophysics of Liquid-Phase Exfoliated Two-Dimensional ReS ₂ Nanoflakes. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 20993-21002	3.8	3

200	Synthesis of Colloidal WSe ₂ Nanocrystals: Polymorphism Control by Precursor-Ligand Chemistry. <i>Crystal Growth and Design</i> , 2021 , 21, 1451-1460	3.5	4
199	Exciton-phonon coupling in InP quantum dots with ZnS and (Zn,Cd)Se shells. <i>Physical Review B</i> , 2020 , 101,	3.3	6
198	Scalable Approaches to Copper Nanocrystal Synthesis under Ambient Conditions for Printed Electronics. <i>ACS Applied Nano Materials</i> , 2020 , 3, 3523-3531	5.6	5
197	Phonon-Mediated and Weakly Size-Dependent Electron and Hole Cooling in CsPbBr ₃ Nanocrystals Revealed by Atomistic Simulations and Ultrafast Spectroscopy. <i>Nano Letters</i> , 2020 , 20, 1819-1829	11.5	23
196	Boosting the Er ³⁺ 1.5 μ m Luminescence in CsPbCl ₃ Perovskite Nanocrystals for Photonic Devices Operating at Telecommunication Wavelengths. <i>ACS Applied Nano Materials</i> , 2020 , 3, 4699-4707	5.6	23
195	Electrospraying the Triblock Copolymer SEBS: The Effect of Solvent System and the Embedding of Quantum Dots. <i>Macromolecular Materials and Engineering</i> , 2020 , 305, 1900658	3.9	2
194	Colloidal WSe nanocrystals as anodes for lithium-ion batteries. <i>Nanoscale</i> , 2020 , 12, 22307-22316	7.7	8
193	Atomically Precise Nanocrystals. <i>Journal of the American Chemical Society</i> , 2020 , 142, 15627-15637	16.4	23
192	Liquid-Phase Exfoliation of Rhenium Disulfide by Solubility Parameter Matching. <i>Langmuir</i> , 2020 , 36, 15493-15500	4	4
191	Integration of PbS Quantum Dot Photodiodes on Silicon for NIR Imaging. <i>IEEE Sensors Journal</i> , 2020 , 20, 6841-6848	4	18
190	Near-Edge Ligand Stripping and Robust Radiative Exciton Recombination in CdSe/CdS Core/Crown Nanoplatelets. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 3339-3344	6.4	15
189	Hyperfine Interactions and Slow Spin Dynamics in Quasi-isotropic InP-based Core/Shell Colloidal Nanocrystals. <i>ACS Nano</i> , 2019 , 13, 10201-10209	16.7	5
188	A bright future for colloidal quantum dot lasers. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	33
187	Efficient Endocytosis of Inorganic Nanoparticles with Zwitterionic Surface Functionalization. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 38475-38482	9.5	9
186	Strong upconversion emission in CsPbBr ₃ perovskite quantum dots through efficient BaYF ₅ :Yb,Ln sensitization. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 2014-2021	7.1	29
185	Tunable and Efficient Red to Near-Infrared Photoluminescence by Synergistic Exploitation of Core and Surface Silver Doping of CdSe Nanoplatelets. <i>Chemistry of Materials</i> , 2019 , 31, 1450-1459	9.6	42
184	Contrasting Anisotropy of Light Absorption and Emission by Semiconductor Nanoparticles. <i>ACS Photonics</i> , 2019 , 6, 1146-1152	6.3	7
183	Precursor reaction kinetics control compositional grading and size of CdSe S nanocrystal heterostructures. <i>Chemical Science</i> , 2019 , 10, 6539-6552	9.4	12

182	Thermodynamic Equilibrium between Excitons and Excitonic Molecules Dictates Optical Gain in Colloidal CdSe Quantum Wells. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3637-3644	6.4	24
181	Thermal expansion of colloidal CdSe/CdS core/shell quantum dots. <i>Physical Review B</i> , 2019 , 99,	3.3	4
180	Charge Carrier Cooling Bottleneck Opens Up Nonexcitonic Gain Mechanisms in Colloidal CdSe Quantum Wells. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 9640-9650	3.8	22
179	Ultrafast Carrier Dynamics in Few-Layer Colloidal Molybdenum Disulfide Probed by Broadband Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 10571-10577	3.8	21
178	Plasma enhanced atomic layer deposition of gallium sulfide thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 020915	2.9	8
177	Fine Structure of Nearly Isotropic Bright Excitons in InP/ZnSe Colloidal Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 5468-5475	6.4	9
176	Integration of Colloidal PbS/CdS Quantum Dots with Plasmonic Antennas and Superconducting Detectors on a Silicon Nitride Photonic Platform. <i>Nano Letters</i> , 2019 , 19, 5452-5458	11.5	14
175	In Situ Photoluminescence of Colloidal Quantum Dots During Gas Exposure-The Role of Water and Reactive Atomic Layer Deposition Precursors. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 26277-26287	9.5	7
174	Strain in InP/ZnSe, S core/shell quantum dots from lattice mismatch and shell thickness-Material stiffness influence. <i>Journal of Chemical Physics</i> , 2019 , 151, 154704	3.9	8
173	Ultrafast carrier dynamics in colloidal WS nanosheets obtained through a hot injection synthesis. <i>Journal of Chemical Physics</i> , 2019 , 151, 164701	3.9	12
172	Setting Carriers Free: Healing Faulty Interfaces Promotes Delocalization and Transport in Nanocrystal Solids. <i>ACS Nano</i> , 2019 , 13, 12774-12786	16.7	17
171	A comparative study demonstrates strong size tunability of carrier-phonon coupling in CdSe-based 2D and 0D nanocrystals. <i>Nanoscale</i> , 2019 , 11, 3958-3967	7.7	16
170	Ligand Binding to Copper Nanocrystals: Amines and Carboxylic Acids and the Role of Surface Oxides. <i>Chemistry of Materials</i> , 2019 , 31, 2058-2067	9.6	12
169	Micro-Transfer-Printing of Al ₂ O ₃ -Capped Short-Wave-Infrared PbS Quantum Dot Photoconductors. <i>ACS Applied Nano Materials</i> , 2019 , 2, 299-306	5.6	5
168	Bioimprinting for multiplex luminescent detection of deoxynivalenol and zearalenone. <i>Talanta</i> , 2019 , 192, 169-174	6.2	12
167	Sideband pump-probe technique resolves nonlinear modulation response of PbS/CdS quantum dots on a silicon nitride waveguide. <i>APL Photonics</i> , 2018 , 3, 016101	5.2	3
166	Asymmetric Optical Transitions Determine the Onset of Carrier Multiplication in Lead Chalcogenide Quantum Confined and Bulk Crystals. <i>ACS Nano</i> , 2018 , 12, 4796-4802	16.7	14
165	Ligand Displacement Exposes Binding Site Heterogeneity on CdSe Nanocrystal Surfaces. <i>Chemistry of Materials</i> , 2018 , 30, 1178-1186	9.6	77

164	Continuous-wave infrared optical gain and amplified spontaneous emission at ultralow threshold by colloidal HgTe quantum dots. <i>Nature Materials</i> , 2018 , 17, 35-42	27	75
163	Fabrication and characterization of SiN/Au cavities with colloidal nanocrystals. <i>Optics Express</i> , 2018 , 26, 6046-6055	3.3	
162	Probing Solvent-Ligand Interactions in Colloidal Nanocrystals by the NMR Line Broadening. <i>Chemistry of Materials</i> , 2018 , 30, 5485-5492	9.6	72
161	Exciton Fine Structure and Lattice Dynamics in InP/ZnSe Core/Shell Quantum Dots. <i>ACS Photonics</i> , 2018 , 5, 3353-3362	6.3	24
160	Size and Concentration Determination of Colloidal Nanocrystals by Small-Angle X-ray Scattering. <i>Chemistry of Materials</i> , 2018 , 30, 3952-3962	9.6	41
159	Strain Engineering in InP/(Zn,Cd)Se Core/Shell Quantum Dots. <i>Chemistry of Materials</i> , 2018 , 30, 4393-4400	9.6	27
158	Tumbling of Quantum Dots: Rheo-Optics. <i>Langmuir</i> , 2018 , 34, 14633-14642	4	2
157	Colloidal CdSe Nanoplatelets, A Model for Surface Chemistry/Optoelectronic Property Relations in Semiconductor Nanocrystals. <i>Journal of the American Chemical Society</i> , 2018 , 140, 13292-13300	16.4	83
156	The Surface Chemistry of Colloidal HgSe Nanocrystals, toward Stoichiometric Quantum Dots by Design. <i>Chemistry of Materials</i> , 2018 , 30, 7637-7647	9.6	13
155	Optimization of Charge Carrier Extraction in Colloidal Quantum Dots Short-Wave Infrared Photodiodes through Optical Engineering. <i>Advanced Functional Materials</i> , 2018 , 28, 1804502	15.6	19
154	The Impact of Core/Shell Sizes on the Optical Gain Characteristics of CdSe/CdS Quantum Dots. <i>ACS Nano</i> , 2018 , 12, 9011-9021	16.7	34
153	Using Bulk-like Nanocrystals To Probe Intrinsic Optical Gain Characteristics of Inorganic Lead Halide Perovskites. <i>ACS Nano</i> , 2018 , 12, 10178-10188	16.7	41
152	Interfacial Oxidation and Photoluminescence of InP-Based Core/Shell Quantum Dots. <i>Chemistry of Materials</i> , 2018 , 30, 6877-6883	9.6	41
151	Light Absorption Coefficient of CsPbBr Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 3093-3097	6.4	130
150	A Library of Selenourea Precursors to PbSe Nanocrystals with Size Distributions near the Homogeneous Limit. <i>Journal of the American Chemical Society</i> , 2017 , 139, 2296-2305	16.4	68
149	Fluorescently labelled multiplex lateral flow immunoassay based on cadmium-free quantum dots. <i>Methods</i> , 2017 , 116, 141-148	4.6	25
148	On-Chip Integrated Quantum-Dot-Silicon-Nitride Microdisk Lasers. <i>Advanced Materials</i> , 2017 , 29, 1604866	6.4	54
147	Binding and Packing in Two-Component Colloidal Quantum Dot Ligand Shells: Linear versus Branched Carboxylates. <i>Journal of the American Chemical Society</i> , 2017 , 139, 3456-3464	16.4	39

146	Interface formation during silica encapsulation of colloidal CdSe/CdS quantum dots observed by in situ Raman spectroscopy. <i>Journal of Chemical Physics</i> , 2017 , 146, 134708	3.9	11
145	Mechanistic Insights in Seeded Growth Synthesis of Colloidal Core/Shell Quantum Dots. <i>Chemistry of Materials</i> , 2017 , 29, 4719-4727	9.6	20
144	HgSe/CdE (E = S, Se) Core/Shell Nanocrystals by Colloidal Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 13816-13822	3.8	29
143	Hybrid remote quantum dot/powder phosphor designs for display backlights. <i>Light: Science and Applications</i> , 2017 , 6, e16271	16.7	107
142	P-239: Late-News Poster: Quantum Dots for Display Applications, Thermal and Photostability through Shell Design. <i>Digest of Technical Papers SID International Symposium</i> , 2017 , 48, 1722-1724	0.5	2
141	Magnetic polaron on dangling-bond spins in CdSe colloidal nanocrystals. <i>Nature Nanotechnology</i> , 2017 , 12, 569-574	28.7	35
140	On the Origin of Surface Traps in Colloidal II/VI Semiconductor Nanocrystals. <i>Chemistry of Materials</i> , 2017 , 29, 752-761	9.6	160
139	Plasma enhanced atomic layer deposition of zinc sulfide thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 01B111	2.9	14
138	On-Chip Single-Mode Distributed Feedback Colloidal Quantum Dot Laser under Nanosecond Pumping. <i>ACS Photonics</i> , 2017 , 4, 2446-2452	6.3	18
137	Thin-Film Quantum Dot Photodiode for Monolithic Infrared Image Sensors. <i>Sensors</i> , 2017 , 17,	3.8	25
136	Nearly Blinking-Free, High-Purity Single-Photon Emission by Colloidal InP/ZnSe Quantum Dots. <i>Nano Letters</i> , 2017 , 17, 6104-6109	11.5	54
135	Colloidal Quantum Dots Enabling Coherent Light Sources for Integrated Silicon-Nitride Photonics. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017 , 23, 1-13	3.8	12
134	Hybrid fluorescent layer emitting polarized light. <i>APL Materials</i> , 2017 , 5, 076104	5.7	7
133	Novel Light Source Integration Approaches for Silicon Photonics. <i>Laser and Photonics Reviews</i> , 2017 , 11, 1700063	8.3	97
132	Stabilization of Colloidal Ti, Zr, and Hf Oxide Nanocrystals by Protonated Tri-n-octylphosphine Oxide (TOPO) and Its Decomposition Products. <i>Chemistry of Materials</i> , 2017 , 29, 10233-10242	9.6	30
131	Indium Phosphide-Based Quantum Dots with Shell-Enhanced Absorption for Luminescent Down-Conversion. <i>Advanced Materials</i> , 2017 , 29, 1700686	24	39
130	Development of a Rainbow Lateral Flow Immunoassay for the Simultaneous Detection of Four Mycotoxins. <i>Journal of Agricultural and Food Chemistry</i> , 2017 , 65, 7121-7130	5.7	64
129	Selecting the optimal synthesis parameters of InP/CdxZnSe quantum dots for a hybrid remote phosphor white LED for general lighting applications. <i>Optics Express</i> , 2017 , 25, A1009-A1022	3.3	10

128	Fabrication and characterization of on-chip silicon nitride microdisk integrated with colloidal quantum dots. <i>Optics Express</i> , 2016 , 24, A114-22	3.3	13
127	PbS/CdS Core/Shell Quantum Dots by Additive, Layer-by-Layer Shell Growth. <i>Chemistry of Materials</i> , 2016 , 28, 6953-6959	9.6	27
126	Single-exciton optical gain in semiconductor nanocrystals: Positive role of electron-phonon coupling. <i>Physical Review B</i> , 2016 , 93,	3.3	8
125	Insights into the Ligand Shell, Coordination Mode, and Reactivity of Carboxylic Acid Capped Metal Oxide Nanocrystals. <i>ChemPlusChem</i> , 2016 , 81, 1216-1223	2.8	7
124	Colloidal metal oxide nanocrystal catalysis by sustained chemically driven ligand displacement. <i>Nature Materials</i> , 2016 , 15, 517-21	27	62
123	Highly Dynamic Ligand Binding and Light Absorption Coefficient of Cesium Lead Bromide Perovskite Nanocrystals. <i>ACS Nano</i> , 2016 , 10, 2071-81	16.7	1033
122	Amino Acid-Based Stabilization of Oxide Nanocrystals in Polar Media: From Insight in Ligand Exchange to Solution ^1H NMR Probing of Short-Chained Adsorbates. <i>Langmuir</i> , 2016 , 32, 1962-70	4	32
121	Band-Edge Exciton Fine Structure and Recombination Dynamics in InP/ZnS Colloidal Nanocrystals. <i>ACS Nano</i> , 2016 , 10, 3356-64	16.7	46
120	Synthesis of Hydrophilic CuInS ₂ /ZnS Quantum Dots with Different Polymeric Shells and Study of Their Cytotoxicity and Hemocompatibility. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 7613-22	9.5	36
119	Ligand Addition Energies and the Stoichiometry of Colloidal Nanocrystals. <i>ACS Nano</i> , 2016 , 10, 1462-74	16.7	24
118	All-Optical Wavelength Conversion by Picosecond Burst Absorption in Colloidal PbS Quantum Dots. <i>ACS Nano</i> , 2016 , 10, 1265-72	16.7	1
117	Synthesis, modification, bioconjugation of silica coated fluorescent quantum dots and their application for mycotoxin detection. <i>Biosensors and Bioelectronics</i> , 2016 , 79, 476-81	11.8	47
116	41-2: Invited Paper: Quantum Dots and Aligned Quantum Rods for Polarized LC Backlights. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 552-555	0.5	3
115	Chemically Triggered Formation of Two-Dimensional Epitaxial Quantum Dot Superlattices. <i>ACS Nano</i> , 2016 , 10, 6861-70	16.7	39
114	Sensitive QD@SiO ₂ -based immunoassay for triplex determination of cereal-borne mycotoxins. <i>Talanta</i> , 2016 , 160, 66-71	6.2	25
113	Aminophosphines: A Double Role in the Synthesis of Colloidal Indium Phosphide Quantum Dots. <i>Journal of the American Chemical Society</i> , 2016 , 138, 5923-9	16.4	103
112	Revisited Wurtzite CdSe Synthesis: A Gateway for the Versatile Flash Synthesis of Multishell Quantum Dots and Rods. <i>Chemistry of Materials</i> , 2016 , 28, 7311-7323	9.6	26
111	InAs Colloidal Quantum Dots Synthesis via Aminopnictogen Precursor Chemistry. <i>Journal of the American Chemical Society</i> , 2016 , 138, 13485-13488	16.4	23

110	A Case Study of ALD Encapsulation of Quantum Dots: Embedding Supported CdSe/CdS/ZnS Quantum Dots in a ZnO Matrix. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 18039-18045	3.8	25
109	Prospects of nanoscience with nanocrystals. <i>ACS Nano</i> , 2015 , 9, 1012-57	16.7	849
108	A phonon scattering bottleneck for carrier cooling in lead chalcogenide nanocrystals. <i>ACS Nano</i> , 2015 , 9, 778-88	16.7	27
107	Large-Scale and Electroswitchable Polarized Emission from Semiconductor Nanorods Aligned in Polymeric Nanofibers. <i>ACS Photonics</i> , 2015 , 2, 583-588	6.3	31
106	Carboxylic-Acid-Passivated Metal Oxide Nanocrystals: Ligand Exchange Characteristics of a New Binding Motif. <i>Angewandte Chemie</i> , 2015 , 127, 6588-6591	3.6	10
105	Low-loss silicon nitride waveguide hybridly integrated with colloidal quantum dots. <i>Optics Express</i> , 2015 , 23, 12152-60	3.3	26
104	Broadband enhancement of single photon emission and polarization dependent coupling in silicon nitride waveguides. <i>Optics Express</i> , 2015 , 23, 13713-24	3.3	7
103	Nanoscale and Single-Dot Patterning of Colloidal Quantum Dots. <i>Nano Letters</i> , 2015 , 15, 7481-7	11.5	31
102	Slow recombination in quantum dot solid solar cell using p _{III} architecture with organic p-type hole transport material. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 20579-20585	13	40
101	A Phonon Scattering Bottleneck for Carrier Cooling in Lead-Chalcogenide Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , 2015 , 1787, 1-5		2
100	Paper No S2.4: Large-Scale and Electroswitchable Polarized Emission From Semiconductor Nanorods Aligned in Polymeric Nanofibers. <i>Digest of Technical Papers SID International Symposium</i> , 2015 , 46, 12-12	0.5	
99	Silicon and silicon nitride photonic circuits for spectroscopic sensing on-a-chip [Invited]. <i>Photonics Research</i> , 2015 , 3, B47	6	113
98	Carboxylic-Acid-passivated metal oxide nanocrystals: ligand exchange characteristics of a new binding motif. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 6488-91	16.4	60
97	Economic and Size-Tunable Synthesis of InP/ZnE (E = S, Se) Colloidal Quantum Dots.. <i>Chemistry of Materials</i> , 2015 , 27, 4893-4898	9.6	240
96	NANOMATERIALS. Economical routes to colloidal nanocrystals. <i>Science</i> , 2015 , 348, 1211-2	33.3	13
95	The Effect of Intracellular Degradation on Cytotoxicity and Cell Labeling Efficacy of Inorganic Ligand-Stabilized Colloidal CdSe/CdS Quantum Dots. <i>Journal of Biomedical Nanotechnology</i> , 2015 , 11, 631-43	4	17
94	Controlling the size of hot injection made nanocrystals by manipulating the diffusion coefficient of the solute. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2495-505	16.4	35
93	Surface Chemistry of Colloidal Semiconductor Nanocrystals: Organic, Inorganic, and Hybrid 2015 , 233-271		4

92	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014 , 20, 394-404	3.8	85
91	Flash Synthesis of CdSe/CdS Core-Shell Quantum Dots. <i>Chemistry of Materials</i> , 2014 , 26, 1154-1160	9.6	110
90	Polymer-coated fluorescent CdSe-based quantum dots for application in immunoassay. <i>Biosensors and Bioelectronics</i> , 2014 , 53, 225-31	11.8	79
89	Annealing of sulfide stabilized colloidal semiconductor nanocrystals. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 178-183	7.1	7
88	Air-stable short-wave infrared PbS colloidal quantum dot photoconductors passivated with Al ₂ O ₃ atomic layer deposition. <i>Applied Physics Letters</i> , 2014 , 105, 171110	3.4	47
87	Tuning Energy Splitting and Recombination Dynamics of Dark and Bright Excitons in CdSe/CdS Dot-in-Rod Colloidal Nanostructures. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 22309-22316	3.8	35
86	Triplet harvesting in poly(9-vinylcarbazole) and poly(9-(2,3-epoxypropyl)carbazole) doped with CdSe/ZnS quantum dots encapsulated with 16-(N-carbazolyl) hexadecanoic acid ligands. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014 , 52, 539-551	2.6	2
85	Active liquid crystal tuning of metallic nanoantenna enhanced light emission from colloidal quantum dots. <i>Nano Letters</i> , 2014 , 14, 5555-60	11.5	37
84	Coulomb Shifts upon Exciton Addition to Photoexcited PbS Colloidal Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 22284-22290	3.8	26
83	Less is more. Cation exchange and the chemistry of the nanocrystal surface. <i>ACS Nano</i> , 2014 , 8, 7948-57	16.7	52
82	Impact of the Band-Edge Fine Structure on the Energy Transfer between Colloidal Quantum Dots. <i>Advanced Optical Materials</i> , 2014 , 2, 126-130	8.1	11
81	Modeling the Optical Properties of Low-Cost Colloidal Quantum Dot Functionalized Strip SOI Waveguides. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014 , 20, 71-76	3.8	5
80	Cytotoxicity of cadmium-free quantum dots and their use in cell bioimaging. <i>Chemical Research in Toxicology</i> , 2014 , 27, 1050-9	4	70
79	Bright and stable CdSe/CdS@SiO ₂ nanoparticles suitable for long-term cell labeling. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 11714-23	9.5	50
78	Surface Chemistry of CuInS ₂ Colloidal Nanocrystals, Tight Binding of L-Type Ligands. <i>Chemistry of Materials</i> , 2014 , 26, 5950-5957	9.6	53
77	Hydrophilic, bright CuInS ₂ quantum dots as Cd-free fluorescent labels in quantitative immunoassay. <i>Langmuir</i> , 2014 , 30, 7567-75	4	66
76	Unravelling the surface chemistry of metal oxide nanocrystals, the role of acids and bases. <i>Journal of the American Chemical Society</i> , 2014 , 136, 9650-7	16.4	81
75	Polarized light emission by deposition of aligned semiconductor nanorods 2014 ,		3

74	Random-Alloying Induced Signatures in the Absorption Spectra of Colloidal Quantum Dots. <i>Chemistry of Materials</i> , 2014 , 26, 6852-6862	9.6	8
73	The micropatterning of layers of colloidal quantum dots with inorganic ligands using selective wet etching. <i>Nanotechnology</i> , 2014 , 25, 175302	3.4	9
72	Solution NMR Toolbox for Colloidal Nanoparticles 2014 , 273-293		1
71	Fast, microwave-assisted synthesis of monodisperse HfO ₂ nanoparticles. <i>Journal of Nanoparticle Research</i> , 2013 , 15, 1	2.3	32
70	Study of hole mobility in poly(N-vinylcarbazole) films doped with CdSe/ZnS quantum dots encapsulated by 11-(N-carbazolyl) undecanoic acid (C11). <i>Journal of Applied Physics</i> , 2013 , 114, 173704	2.5	5
69	Optical Properties of PbS/CdS Core/Shell Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 2013120138	3.1	38
68	Giant and broad-band absorption enhancement in colloidal quantum dot monolayers through dipolar coupling. <i>ACS Nano</i> , 2013 , 7, 987-93	16.7	35
67	A Solution NMR Toolbox for Characterizing the Surface Chemistry of Colloidal Nanocrystals. <i>Chemistry of Materials</i> , 2013 , 25, 1211-1221	9.6	342
66	Reaction chemistry/nanocrystal property relations in the hot injection synthesis, the role of the solute solubility. <i>ACS Nano</i> , 2013 , 7, 943-9	16.7	60
65	Homogeneously Alloyed CdSe _{1-x} S _x Quantum Dots (0 ≤ x ≤ 1): An Efficient Synthesis for Full Optical Tunability. <i>Chemistry of Materials</i> , 2013 , 25, 2388-2390	9.6	52
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