Moungi G Bawendi

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.

208 29,464 171 77 h-index g-index citations papers 218 7.26 33,156 13.3 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
208	Quantum Shells Boost the Optical Gain of Lasing Media ACS Nano, 2022,	16.7	3
207	Designing Highly Luminescent Molecular Aggregates via Bottom-Up Nanoscale Engineering. Journal of Physical Chemistry C, 2022 , 126, 754-763	3.8	1
206	Supramolecular Lattice Deformation and Exciton Trapping in Nanotubular J-Aggregates. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 4095-4105	3.8	1
205	Predicting Low Toxicity and Scalable Solvent Systems for High-Speed Roll-to-Roll Perovskite Manufacturing. <i>Solar Rrl</i> , 2022 , 6, 2270034	7.1	
204	Magnetic-Field-Switchable Laser via Optical Pumping of Rubrene. <i>Advanced Materials</i> , 2021 , e2103870	24	1
203	Single-nanometer iron oxide nanoparticles as tissue-permeable MRI contrast agents. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	5
202	A data fusion approach to optimize compositional stability of halide perovskites. <i>Matter</i> , 2021 , 4, 1305-	132 7	27
201	Interfacial Trap-Assisted Triplet Generation in Lead Halide Perovskite Sensitized Solid-State Upconversion. <i>Advanced Materials</i> , 2021 , 33, e2100854	24	8
200	Efficient perovskite solar cells via improved carrier management. <i>Nature</i> , 2021 , 590, 587-593	50.4	809
199	Resolving the Triexciton Recombination Pathway in CdSe/CdS Nanocrystals through State-Specific Correlation Measurements. <i>Nano Letters</i> , 2021 , 21, 7457-7464	11.5	3
198	A high-temperature continuous stirred-tank reactor cascade for the multistep synthesis of InP/ZnS quantum dots. <i>Reaction Chemistry and Engineering</i> , 2021 , 6, 459-464	4.9	3
197	Nanocrystal synthesis, fluidic sample dilution and direct extraction of single emission linewidths in continuous flow. <i>Lab on A Chip</i> , 2020 , 20, 1975-1980	7.2	
196	Non-invasive monitoring of chronic liver disease via near-infrared and shortwave-infrared imaging of endogenous lipofuscin. <i>Nature Biomedical Engineering</i> , 2020 , 4, 801-813	19	14
195	Efficient, Flexible, and Ultra-Lightweight Inverted PbS Quantum Dots Solar Cells on All-CVD-Growth of Parylene/Graphene/oCVD PEDOT Substrate with High Power-per-Weight. <i>Advanced Materials Interfaces</i> , 2020 , 7, 2000498	4.6	11
194	Effect of Spectral Diffusion on the Coherence Properties of a Single Quantum Emitter in Hexagonal Boron Nitride. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 1330-1335	6.4	12
193	Scalable Synthesis of InAs Quantum Dots Mediated through Indium Redox Chemistry. <i>Journal of the American Chemical Society</i> , 2020 , 142, 4088-4092	16.4	22
192	Luminescent Surfaces with Tailored Angular Emission for Compact Dark-Field Imaging Devices. Nature Photonics, 2020 , 14, 310-315	33.9	21

(2019-2020)

191	Blue Light Emitting Defective Nanocrystals Composed of Earth-Abundant Elements. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 860-867	16.4	11
190	Blue Light Emitting Defective Nanocrystals Composed of Earth-Abundant Elements. <i>Angewandte Chemie</i> , 2020 , 132, 870-877	3.6	8
189	Room-Temperature Phosphorescence and Low-Energy Induced Direct Triplet Excitation of Alq Engineered Crystals. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 9364-9370	6.4	1
188	Seedless Continuous Injection Synthesis of Indium Phosphide Quantum Dots as a Route to Large Size and Low Size Dispersity. <i>Chemistry of Materials</i> , 2020 , 32, 6532-6539	9.6	8
187	Monodisperse and Water-Soluble Quantum Dots for SWIR Imaging via Carboxylic Acid Copolymer Ligands. <i>ACS Applied Materials & Acs Applied & Acs A</i>	9.5	5
186	How machine learning can help select capping layers to suppress perovskite degradation. <i>Nature Communications</i> , 2020 , 11, 4172	17.4	36
185	Setting an Upper Bound to the Biexciton Binding Energy in CsPbBr Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 5680-5686	6.4	19
184	Discovery of blue singlet exciton fission molecules via a high-throughput virtual screening and experimental approach. <i>Journal of Chemical Physics</i> , 2019 , 151, 121102	3.9	16
183	An interface stabilized perovskite solar cell with high stabilized efficiency and low voltage loss. <i>Energy and Environmental Science</i> , 2019 , 12, 2192-2199	35.4	353
182	Zinc Thiolate Enables Bright Cu-Deficient Cu-In-S/ZnS Quantum Dots. <i>Small</i> , 2019 , 15, e1901462	11	13
181	A Heterogeneous Kinetics Model for Triplet Exciton Transfer in Solid-State Upconversion. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 3147-3152	6.4	17
180	Light Management in Organic Photovoltaics Processed in Ambient Conditions Using ZnO Nanowire and Antireflection Layer with Nanocone Array. <i>Small</i> , 2019 , 15, e1900508	11	24
179	Increasing the penetration depth of temporal focusing multiphoton microscopy for neurobiological applications. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 264001	3	7
178	Triplet-Sensitization by Lead Halide Perovskite Thin Films for Near-Infrared-to-Visible Upconversion. <i>ACS Energy Letters</i> , 2019 , 4, 888-895	20.1	83
177	Micron-Scale Patterning of High Quantum Yield Quantum Dot LEDs. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800727	6.8	22
176	Phosphonic Acid Modification of the Electron Selective Contact: Interfacial Effects in Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019 , 2, 2402-2408	6.1	19
175	Homogenized halides and alkali cation segregation in alloyed organic-inorganic perovskites. <i>Science</i> , 2019 , 363, 627-631	33.3	190
174	High-Speed Vapor Transport Deposition of Perovskite Thin Films. <i>ACS Applied Materials & Amp; Interfaces</i> , 2019 , 11, 32928-32936	9.5	13

173	Efficient Semitransparent CsPbI3 Quantum Dots Photovoltaics Using a Graphene Electrode. <i>Small Methods</i> , 2019 , 3, 1900449	12.8	35
172	Decreased Synthesis Costs and Waste Product Toxicity for Lead Sulfide Quantum Dot Ink Photovoltaics. <i>Advanced Sustainable Systems</i> , 2019 , 3, 1900061	5.9	8
171	The effect of structural dimensionality on carrier mobility in lead-halide perovskites. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 23949-23957	13	26
170	Size-Dependent Biexciton Spectrum in CsPbBr3 Perovskite Nanocrystals. <i>ACS Energy Letters</i> , 2019 , 4, 2639-2645	20.1	30
169	Terahertz-Driven Stark Spectroscopy of CdSe and CdSe-CdS Core-Shell Quantum Dots. <i>Nano Letters</i> , 2019 , 19, 8125-8131	11.5	4
168	Generalized Kashall Model: T-Dependent Spectroscopy Reveals Short-Range Structures of 2D Excitonic Systems. <i>CheM</i> , 2019 , 5, 3135-3150	16.2	11
167	Coherent single-photon emission from colloidal lead halide perovskite quantum dots. <i>Science</i> , 2019 , 363, 1068-1072	33.3	218
166	Biocompatible near-infrared quantum dots delivered to the skin by microneedle patches record vaccination. <i>Science Translational Medicine</i> , 2019 , 11,	17.5	54
165	Single Nanocrystal Spectroscopy of Shortwave Infrared Emitters. ACS Nano, 2019, 13, 1042-1049	16.7	13
164	A Ligand System for the Flexible Functionalization of Quantum Dots via Click Chemistry. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 4652-4656	16.4	22
163	A Ligand System for the Flexible Functionalization of Quantum Dots via Click Chemistry. <i>Angewandte Chemie</i> , 2018 , 130, 4742-4746	3.6	7
162	Using lead chalcogenide nanocrystals as spin mixers: a perspective on near-infrared-to-visible upconversion. <i>Dalton Transactions</i> , 2018 , 47, 8509-8516	4.3	56
161	Shortwave infrared fluorescence imaging with the clinically approved near-infrared dye indocyanine green. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 4465-4470	11.5	317
160	Dimension- and Surface-Tailored ZnO Nanowires Enhance Charge Collection in Quantum Dot Photovoltaic Devices. <i>ACS Applied Energy Materials</i> , 2018 , 1, 1815-1822	6.1	13
159	Brown adipose tissue thermogenic adaptation requires Nrf1-mediated proteasomal activity. <i>Nature Medicine</i> , 2018 , 24, 292-303	50.5	92
158	Stable, small, specific, low-valency quantum dots for single-molecule imaging. <i>Nanoscale</i> , 2018 , 10, 440)6 74/ 114	12
157	Solvent-Engineering Method to Deposit Compact Bismuth-Based Thin Films: Mechanism and Application to Photovoltaics. <i>Chemistry of Materials</i> , 2018 , 30, 336-343	9.6	64
156	Photochemical Control of Exciton Superradiance in Light-Harvesting Nanotubes. <i>ACS Nano</i> , 2018 , 12, 4556-4564	16.7	23

(2017-2018)

155	Synthesis cost dictates the commercial viability of lead sulfide and perovskite quantum dot photovoltaics. <i>Energy and Environmental Science</i> , 2018 , 11, 2295-2305	35.4	75
154	Multiexciton Lifetimes Reveal Triexciton Emission Pathway in CdSe Nanocrystals. <i>Nano Letters</i> , 2018 , 18, 5153-5158	11.5	18
153	Enhanced charge carrier mobility and lifetime suppress hysteresis and improve efficiency in planar perovskite solar cells. <i>Energy and Environmental Science</i> , 2018 , 11, 78-86	35.4	202
152	Mechanistic Insights and Controlled Synthesis of Radioluminescent ZnSe Quantum Dots Using a Microfluidic Reactor. <i>Chemistry of Materials</i> , 2018 , 30, 8562-8570	9.6	22
151	Precursor Concentration Affects Grain Size, Crystal Orientation, and Local Performance in Mixed-Ion Lead Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 6801-6808	6.1	37
150	Solid-state infrared-to-visible upconversion for sub-bandgap sensitization of photovoltaics 2018,		5
149	Morphology of Passivating Organic Ligands around a Nanocrystal. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 26267-26274	3.8	23
148	Initial findings of shortwave infrared otoscopy in a pediatric population. <i>International Journal of Pediatric Otorhinolaryngology</i> , 2018 , 114, 15-19	1.7	5
147	Absorption by water increases fluorescence image contrast of biological tissue in the shortwave infrared. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 90	8 0-9 68	5 ⁴⁸
146	A-Site Cation in Inorganic A3Sb2I9 Perovskite Influences Structural Dimensionality, Exciton Binding Energy, and Solar Cell Performance. <i>Chemistry of Materials</i> , 2018 , 30, 3734-3742	9.6	87
145	Multistage Microfluidic Platform for the Continuous Synthesis of III I Core/Shell Quantum Dots. <i>Angewandte Chemie</i> , 2018 , 130, 11081-11084	3.6	10
144	Multistage Microfluidic Platform for the Continuous Synthesis of III-V Core/Shell Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 10915-10918	16.4	46
143	Exceedingly small iron oxide nanoparticles as positive MRI contrast agents. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 2325-2330	11.5	270
142	Next-generation optical imaging with short-wave infrared quantum dots. <i>Nature Biomedical Engineering</i> , 2017 , 1,	19	360
141	Searching for D efect-Tolerant Photovoltaic Materials: Combined Theoretical and Experimental Screening. <i>Chemistry of Materials</i> , 2017 , 29, 4667-4674	9.6	191
140	Wide-field three-photon excitation in biological samples. <i>Light: Science and Applications</i> , 2017 , 6, e1625	55 16.7	44
139	Multistage extraction platform for highly efficient and fully continuous purification of nanoparticles. <i>Nanoscale</i> , 2017 , 9, 7703-7707	7.7	32
138	Colloidal atomic layer deposition growth of PbS/CdS core/shell quantum dots. <i>Chemical Communications</i> , 2017 , 53, 869-872	5.8	21

137	In-Situ Microfluidic Study of Biphasic Nanocrystal Ligand-Exchange Reactions Using an Oscillatory Flow Reactor. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 16333-16337	16.4	27
136	In-Situ Microfluidic Study of Biphasic Nanocrystal Ligand-Exchange Reactions Using an Oscillatory Flow Reactor. <i>Angewandte Chemie</i> , 2017 , 129, 16551-16555	3.6	5
135	Shortwave Infrared in Vivo Imaging with Gold Nanoclusters. <i>Nano Letters</i> , 2017 , 17, 6330-6334	11.5	109
134	Probing Linewidths and Biexciton Quantum Yields of Single Cesium Lead Halide Nanocrystals in Solution. <i>Nano Letters</i> , 2017 , 17, 6838-6846	11.5	49
133	Radiative Efficiency Limit with Band Tailing Exceeds 30% for Quantum Dot Solar Cells. <i>ACS Energy Letters</i> , 2017 , 2, 2616-2624	20.1	64
132	Minority Carrier Transport in Lead Sulfide Quantum Dot Photovoltaics. <i>Nano Letters</i> , 2017 , 17, 6221-622	271.5	24
131	Improving the Carrier Lifetime of Tin Sulfide via Prediction and Mitigation of Harmful Point Defects. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3661-3667	6.4	21
130	Speed Limit for Triplet-Exciton Transfer in Solid-State PbS Nanocrystal-Sensitized Photon Upconversion. <i>ACS Nano</i> , 2017 , 11, 7848-7857	16.7	97
129	Flavylium Polymethine Fluorophores for Near- and Shortwave Infrared Imaging. <i>Angewandte Chemie</i> , 2017 , 129, 13306-13309	3.6	37
128	Flavylium Polymethine Fluorophores for Near- and Shortwave Infrared Imaging. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 13126-13129	16.4	200
127	Terahertz-Driven Luminescence and Colossal Stark Effect in CdSe-CdS Colloidal Quantum Dots. <i>Nano Letters</i> , 2017 , 17, 5375-5380	11.5	28
126	Near-Infrared Quantum Dot Emission Enhanced by Stabilized Self-Assembled J-Aggregate Antennas. <i>Nano Letters</i> , 2017 , 17, 7665-7674	11.5	29
125	High Tolerance to Iron Contamination in Lead Halide Perovskite Solar Cells. ACS Nano, 2017, 11, 7101-7	1 :09 .7	64
124	Enhanced Photocurrent in PbS Quantum Dot Photovoltaics via ZnO Nanowires and Band Alignment Engineering. <i>Advanced Energy Materials</i> , 2016 , 6, 1600848	21.8	60
123	Using the shortwave infrared to image middle ear pathologies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 9989-94	11.5	24
122	PbS Nanocrystal Emission Is Governed by Multiple Emissive States. <i>Nano Letters</i> , 2016 , 16, 6070-6077	11.5	54
121	Continuous injection synthesis of indium arsenide quantum dots emissive in the short-wavelength infrared. <i>Nature Communications</i> , 2016 , 7, 12749	17.4	156
120	A Low Reabsorbing Luminescent Solar Concentrator Employing EConjugated Polymers. <i>Advanced Materials</i> , 2016 , 28, 497-501	24	61

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119	Evolution of the Single-Nanocrystal Photoluminescence Linewidth with Size and Shell: Implications for Exciton-Phonon Coupling and the Optimization of Spectral Linewidths. <i>Nano Letters</i> , 2016 , 16, 289-	96 ^{1.5}	109	
118	Slow-Injection Growth of Seeded CdSe/CdS Nanorods with Unity Fluorescence Quantum Yield and Complete Shell to Core Energy Transfer. <i>ACS Nano</i> , 2016 , 10, 3295-301	16.7	77	
117	Optical Trapping and Two-Photon Excitation of Colloidal Quantum Dots Using Bowtie Apertures. <i>ACS Photonics</i> , 2016 , 3, 423-427	6.3	84	
116	Photovoltaic Performance of PbS Quantum Dots Treated with Metal Salts. <i>ACS Nano</i> , 2016 , 10, 3382-8	16.7	70	
115	A mouse-human phase 1 co-clinical trial of a protease-activated fluorescent probe for imaging cancer. <i>Science Translational Medicine</i> , 2016 , 8, 320ra4	17.5	163	
114	Solid-state infrared-to-visible upconversion sensitized by colloidal nanocrystals. <i>Nature Photonics</i> , 2016 , 10, 31-34	33.9	324	
113	Extracting the average single-molecule biexciton photoluminescence lifetime from a solution of chromophores. <i>Optics Letters</i> , 2016 , 41, 4823-4826	3	7	
112	Methylammonium Bismuth Iodide as a Lead-Free, Stable Hybrid Organic-Inorganic Solar Absorber. <i>Chemistry - A European Journal</i> , 2016 , 22, 2605-10	4.8	253	
111	Characterization of Indium Phosphide Quantum Dot Growth Intermediates Using MALDI-TOF Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2016 , 138, 13469-13472	16.4	81	
110	Room-Temperature Micron-Scale Exciton Migration in a Stabilized Emissive Molecular Aggregate. <i>Nano Letters</i> , 2016 , 16, 6808-6815	11.5	67	
109	Effect of Trace Water on the Growth of Indium Phosphide Quantum Dots. <i>Chemistry of Materials</i> , 2015 , 27, 5058-5063	9.6	51	
108	Micelle-Encapsulated Quantum Dot-Porphyrin Assemblies as in Vivo Two-Photon Oxygen Sensors. Journal of the American Chemical Society, 2015 , 137, 9832-42	16.4	88	
107	Thermal Recovery of Colloidal Quantum Dot Ensembles Following Photoinduced Dimming. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2933-7	6.4	3	
106	A colloidal quantum dot spectrometer. <i>Nature</i> , 2015 , 523, 67-70	50.4	264	
105	Locating and classifying fluorescent tags behind turbid layers using time-resolved inversion. <i>Nature Communications</i> , 2015 , 6, 6796	17.4	29	
104	Open-circuit voltage deficit, radiative sub-bandgap states, and prospects in quantum dot solar cells. <i>Nano Letters</i> , 2015 , 15, 3286-94	11.5	193	
103	Objective, comparative assessment of the penetration depth of temporal-focusing microscopy for imaging various organs. <i>Journal of Biomedical Optics</i> , 2015 , 20, 61107	3.5	7	
102	Oscillatory Microprocessor for Growth and in Situ Characterization of Semiconductor Nanocrystals. <i>Chemistry of Materials</i> , 2015 , 27, 6131-6138	9.6	61	

101	A path to practical Solar Pumped Lasers via Radiative Energy Transfer. Scientific Reports, 2015, 5, 14758	3 4.9	23
100	Identifying and Eliminating Emissive Sub-bandgap States in Thin Films of PbS Nanocrystals. <i>Advanced Materials</i> , 2015 , 27, 4481-4486	24	68
99	The Unexpected Influence of Precursor Conversion Rate in the Synthesis of III-V Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 14299-303	16.4	60
98	The Unexpected Influence of Precursor Conversion Rate in the Synthesis of IIIIV Quantum Dots. <i>Angewandte Chemie</i> , 2015 , 127, 14507-14511	3.6	17
97	20.2: Ultra-Bright, Highly Efficient, Low Roll-Off Inverted Quantum-Dot Light Emitting Devices (QLEDs). <i>Digest of Technical Papers SID International Symposium</i> , 2015 , 46, 270-273	0.5	60
96	Measuring Ligand-Dependent Transport in Nanopatterned PbS Colloidal Quantum Dot Arrays Using Charge Sensing. <i>Nano Letters</i> , 2015 , 15, 4401-5	11.5	11
95	High-performance shortwave-infrared light-emitting devices using core-shell (PbS-CdS) colloidal quantum dots. <i>Advanced Materials</i> , 2015 , 27, 1437-42	24	136
94	Quantum dot/antibody conjugates for in vivo cytometric imaging in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 1350-5	11.5	93
93	Improved performance and stability in quantum dot solar cells through band alignment engineering. <i>Nature Materials</i> , 2014 , 13, 796-801	27	1282
92	A transferable model for singlet-fission kinetics. <i>Nature Chemistry</i> , 2014 , 6, 492-7	17.6	349
92 91	A transferable model for singlet-fission kinetics. <i>Nature Chemistry</i> , 2014 , 6, 492-7 Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual InAs colloidal nanocrystals. <i>Nano Letters</i> , 2014 , 14, 6787-91	17.6 11.5	349 29
	Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual	•	29
91	Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual InAs colloidal nanocrystals. <i>Nano Letters</i> , 2014 , 14, 6787-91 Coherent exciton dynamics in supramolecular light-harvesting nanotubes revealed by ultrafast	11.5	29
91	Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual InAs colloidal nanocrystals. <i>Nano Letters</i> , 2014 , 14, 6787-91 Coherent exciton dynamics in supramolecular light-harvesting nanotubes revealed by ultrafast quantum process tomography. <i>ACS Nano</i> , 2014 , 8, 5527-34	11.5	29
91 90 89	Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual InAs colloidal nanocrystals. <i>Nano Letters</i> , 2014 , 14, 6787-91 Coherent exciton dynamics in supramolecular light-harvesting nanotubes revealed by ultrafast quantum process tomography. <i>ACS Nano</i> , 2014 , 8, 5527-34 Magneto-fluorescent core-shell supernanoparticles. <i>Nature Communications</i> , 2014 , 5, 5093 Energy harvesting of non-emissive triplet excitons in tetracene by emissive PbS nanocrystals.	11.5 16.7 17.4	29 41 197
91 90 89 88	Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual InAs colloidal nanocrystals. <i>Nano Letters</i> , 2014 , 14, 6787-91 Coherent exciton dynamics in supramolecular light-harvesting nanotubes revealed by ultrafast quantum process tomography. <i>ACS Nano</i> , 2014 , 8, 5527-34 Magneto-fluorescent core-shell supernanoparticles. <i>Nature Communications</i> , 2014 , 5, 5093 Energy harvesting of non-emissive triplet excitons in tetracene by emissive PbS nanocrystals. <i>Nature Materials</i> , 2014 , 13, 1039-43 Enhanced photovoltaic performance with co-sensitization of quantum dots and an organic dye in	11.5 16.7 17.4	29 41 197
91 90 89 88	Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual InAs colloidal nanocrystals. <i>Nano Letters</i> , 2014 , 14, 6787-91 Coherent exciton dynamics in supramolecular light-harvesting nanotubes revealed by ultrafast quantum process tomography. <i>ACS Nano</i> , 2014 , 8, 5527-34 Magneto-fluorescent core-shell supernanoparticles. <i>Nature Communications</i> , 2014 , 5, 5093 Energy harvesting of non-emissive triplet excitons in tetracene by emissive PbS nanocrystals. <i>Nature Materials</i> , 2014 , 13, 1039-43 Enhanced photovoltaic performance with co-sensitization of quantum dots and an organic dye in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 18375-18382 Robust excitons inhabit soft supramolecular nanotubes. <i>Proceedings of the National Academy of</i>	11.5 16.7 17.4 27	29 41 197 196

(2012-2014)

83	Energy level modification in lead sulfide quantum dot thin films through ligand exchange. <i>ACS Nano</i> , 2014 , 8, 5863-72	16.7	667
82	Sample-averaged biexciton quantum yield measured by solution-phase photon correlation. <i>Nano Letters</i> , 2014 , 14, 6792-8	11.5	19
81	A phase I study of the safety and activation of a cathepsin-activatable fluorescent cancer-specific probe LUM015 <i>Journal of Clinical Oncology</i> , 2014 , 32, TPS11135-TPS11135	2.2	2
80	ZnO Nanowire Arrays for Enhanced Photocurrent in PbS Quantum Dot Solar Cells (Adv. Mater. 20/2013). <i>Advanced Materials</i> , 2013 , 25, 2789-2789	24	2
79	The dominant role of exciton quenching in PbS quantum-dot-based photovoltaic devices. <i>Nano Letters</i> , 2013 , 13, 5907-12	11.5	39
78	Graphene cathode-based ZnO nanowire hybrid solar cells. <i>Nano Letters</i> , 2013 , 13, 233-9	11.5	179
77	Emergence of colloidal quantum-dot light-emitting technologies. <i>Nature Photonics</i> , 2013 , 7, 13-23	33.9	1760
76	Compact high-quality CdSe-CdS core-shell nanocrystals with narrow emission linewidths and suppressed blinking. <i>Nature Materials</i> , 2013 , 12, 445-51	27	959
75	Conformational Control of Energy Transfer: A Mechanism for Biocompatible Nanocrystal-Based Sensors. <i>Angewandte Chemie</i> , 2013 , 125, 1203-1207	3.6	2
74	Spatial charge configuration regulates nanoparticle transport and binding behavior in vivo. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 1414-9	16.4	70
73	Low-temperature solution-processed solar cells based on PbS colloidal quantum dot/CdS heterojunctions. <i>Nano Letters</i> , 2013 , 13, 994-9	11.5	118
72	ZnO nanowire arrays for enhanced photocurrent in PbS quantum dot solar cells. <i>Advanced Materials</i> , 2013 , 25, 2790-6	24	226
71	High-efficiency quantum-dot light-emitting devices with enhanced charge injection. <i>Nature Photonics</i> , 2013 , 7, 407-412	33.9	860
70	Direct probe of spectral inhomogeneity reveals synthetic tunability of single-nanocrystal spectral linewidths. <i>Nature Chemistry</i> , 2013 , 5, 602-6	17.6	112
69	Direct observation of rapid discrete spectral dynamics in single colloidal CdSe-CdS core-shell quantum dots. <i>Physical Review Letters</i> , 2013 , 111, 177401	7.4	33
68	Multispectral imaging via luminescent down-shifting with colloidal quantum dots. <i>Optical Materials Express</i> , 2013 , 3, 1167	2.6	10
67	Improved precursor chemistry for the synthesis of III-V quantum dots. <i>Journal of the American Chemical Society</i> , 2012 , 134, 20211-3	16.4	102
66	Energy Transfer of CdSe/ZnS Nanocrystals Encapsulated with Rhodamine-Dye Functionalized Poly(acrylic acid). <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2012 , 248, 24-29	4.7	14

65	Bias-stress effect in 1,2-ethanedithiol-treated PbS quantum dot field-effect transistors. <i>ACS Nano</i> , 2012 , 6, 3121-7	5.7	97
64	COUPLING BETWEEN J-AGGREGATES AND INORGANIC EXCITONS 2012 , 181-193		1
63	Biexciton quantum yield heterogeneities in single CdSe (CdS) core (shell) nanocrystals and its correlation to exciton blinking. <i>Nano Letters</i> , 2012 , 12, 4477-83	1.5	71
62	Nonendocytic delivery of functional engineered nanoparticles into the cytoplasm of live cells using a novel, high-throughput microfluidic device. <i>Nano Letters</i> , 2012 , 12, 6322-7	1.5	66
61	Alternating layer addition approach to CdSe/CdS core/shell quantum dots with near-unity quantum yield and high on-time fractions. <i>Chemical Science</i> , 2012 , 3, 2028-2034	4	180
60	Single photon counting from individual nanocrystals in the infrared. <i>Nano Letters</i> , 2012 , 12, 2953-8	1.5	44
59	A Nanocrystal-based Ratiometric pH Sensor for Natural pH Ranges. Chemical Science, 2012 , 3, 2980-29859.	4	56
58	Estimating Motion and size of moving non-line-of-sight objects in cluttered environments 2011 ,		26
57	Electroluminescence from nanoscale materials via field-driven ionization. <i>Nano Letters</i> , 2011 , 11, 2927-3 2 1	۱.5	42
56	Improved current extraction from ZnO/PbS quantum dot heterojunction photovoltaics using a MoO3 interfacial layer. <i>Nano Letters</i> , 2011 , 11, 2955-61	1.5	237
55	Morphology of contact printed colloidal quantum dots in organic semiconductor films: Implications for QD-LEDs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 120-123		1
54	Investigation of Indium Phosphide Nanocrystal Synthesis Using a High-Temperature and High-Pressure Continuous Flow Microreactor. <i>Angewandte Chemie</i> , 2011 , 123, 653-656	6	27
53	Investigation of indium phosphide nanocrystal synthesis using a high-temperature and high-pressure continuous flow microreactor. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 627-30 ¹⁶	5.4	116
52	Biexciton quantum yield of single semiconductor nanocrystals from photon statistics. <i>Nano Letters</i> , 2011 , 11, 1136-40	1.5	171
51	Extracting spectral dynamics from single chromophores in solution. <i>Physical Review Letters</i> , 2010 , 105, 053005	4	25
50	Development of a bioorthogonal and highly efficient conjugation method for quantum dots using tetrazine-norbornene cycloaddition. <i>Journal of the American Chemical Society,</i> 2010 , 132, 7838-9	5.4	183
49	Quantum dot/J-aggregate blended films for light harvesting and energy transfer. <i>Nano Letters</i> , 2010 , 10, 3995-9	1.5	68
48	Tunable Infrared Emission From Printed Colloidal Quantum Dot/Polymer Composite Films on Flexible Substrates. <i>Journal of Display Technology</i> , 2010 , 6, 90-93		22

(2008-2010)

47	Air-stable operation of transparent, colloidal quantum dot based LEDs with a unipolar device architecture. <i>Nano Letters</i> , 2010 , 10, 24-9	11.5	133
46	InAs(ZnCdS) quantum dots optimized for biological imaging in the near-infrared. <i>Journal of the American Chemical Society</i> , 2010 , 132, 470-1	16.4	164
45	Compact biocompatible quantum dots via RAFT-mediated synthesis of imidazole-based random copolymer ligand. <i>Journal of the American Chemical Society</i> , 2010 , 132, 472-83	16.4	241
44	Charge transport in mixed CdSe and CdTe colloidal nanocrystal films. <i>Physical Review B</i> , 2010 , 82,	3.3	45
43	Colloidal PbS quantum dot solar cells with high fill factor. ACS Nano, 2010 , 4, 3743-52	16.7	385
42	A Nanoparticle Size Series for In Vivo Fluorescence Imaging. <i>Angewandte Chemie</i> , 2010 , 122, 8831-8834	3.6	43
41	Mechanistic insights into the formation of InP quantum dots. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 760-2	16.4	138
40	A nanoparticle size series for in vivo fluorescence imaging. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 8649-52	16.4	262
39	Quantum dot light-emitting devices with electroluminescence tunable over the entire visible spectrum. <i>Nano Letters</i> , 2009 , 9, 2532-6	11.5	713
38	Alternating current driven electroluminescence from ZnSe/ZnS:Mn/ZnS nanocrystals. <i>Nano Letters</i> , 2009 , 9, 2367-71	11.5	177
37	Lateral heterojunction photodetector consisting of molecular organic and colloidal quantum dot thin films. <i>Applied Physics Letters</i> , 2009 , 94, 043307	3.4	29
36	Electrostatic Formation of Quantum Dot/J-aggregate FRET Pairs in Solution. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 9986-9992	3.8	69
35	Narrow-band absorption-enhanced quantum dot/J-aggregate conjugates. <i>Journal of the American Chemical Society</i> , 2009 , 131, 9624-5	16.4	55
34	Monovalent, reduced-size quantum dots for imaging receptors on living cells. <i>Nature Methods</i> , 2008 , 5, 397-9	21.6	365
33	Ternary I-III-VI quantum dots luminescent in the red to near-infrared. <i>Journal of the American Chemical Society</i> , 2008 , 130, 9240-1	16.4	402
32	Experimental evidence of diffusion-induced bias in near-wall velocimetry using quantum dot measurements. <i>Experiments in Fluids</i> , 2008 , 44, 1035-1038	2.5	11
31	Supercritical Continuous-Microflow Synthesis of Narrow Size Distribution Quantum Dots. <i>Advanced Materials</i> , 2008 , 20, 4830-4834	24	135
30	Compact biocompatible quantum dots functionalized for cellular imaging. <i>Journal of the American Chemical Society</i> , 2008 , 130, 1274-84	16.4	537

29	Electroluminescence from a mixed red-green-blue colloidal quantum dot monolayer. <i>Nano Letters</i> , 2007 , 7, 2196-200	11.5	367
28	Multi-island single-electron devices from self-assembled colloidal nanocrystal chains. <i>Applied Physics Letters</i> , 2006 , 88, 143507	3.4	41
27	Size series of small indium arsenide-zinc selenide core-shell nanocrystals and their application to in vivo imaging. <i>Journal of the American Chemical Society</i> , 2006 , 128, 2526-7	16.4	366
26	Photon-correlation Fourier spectroscopy. <i>Optics Express</i> , 2006 , 14, 6333-41	3.3	38
25	35.1: Invited Paper: Quantum Dot Light Emitting Devices for Pixelated Full Color Displays. <i>Digest of Technical Papers SID International Symposium</i> , 2006 , 37, 1368	0.5	1
24	Non-linear transduction strategies for chemo/biosensing on small length scales. <i>Journal of Materials Chemistry</i> , 2005 , 15, 2697		19
23	Intraoperative sentinel lymph node mapping of the lung using near-infrared fluorescent quantum dots. <i>Annals of Thoracic Surgery</i> , 2005 , 79, 269-77; discussion 269-77	2.7	220
22	Quantum dot-based multiplexed fluorescence resonance energy transfer. <i>Journal of the American Chemical Society</i> , 2005 , 127, 18212-21	16.4	209
21	Room-temperature ordered photon emission from multiexciton states in single CdSe core-shell nanocrystals. <i>Physical Review Letters</i> , 2005 , 94, 087403	7.4	145
20	Multiexciton fluorescence from semiconductor nanocrystals. <i>Chemical Physics</i> , 2005 , 318, 71-81	2.3	67
19	Quantum dots spectrally distinguish multiple species within the tumor milieu in vivo. <i>Nature Medicine</i> , 2005 , 11, 678-82	50.5	381
18	A Microfabricated GasIliquid Segmented Flow Reactor for High-Temperature Synthesis: The Case of CdSe Quantum Dots. <i>Angewandte Chemie</i> , 2005 , 117, 5583-5587	3.6	88
17	Single quantum dot (QD) imaging of fluid flow near surfaces. Experiments in Fluids, 2005, 39, 784-786	2.5	38
16	Near-infrared fluorescent type II quantum dots for sentinel lymph node mapping. <i>Nature Biotechnology</i> , 2004 , 22, 93-7	44.5	1835
15	Transient photoluminescence and simultaneous amplified spontaneous emission from multiexciton states in CdSe quantum dots. <i>Physical Review B</i> , 2004 , 70,	3.3	106
14	Emission Intensity Dependence and Single-Exponential Behavior In Single Colloidal Quantum Dot Fluorescence Lifetimes. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 143-148	3.4	413
13	Quantum-dot optical temperature probes. <i>Applied Physics Letters</i> , 2003 , 83, 3555-3557	3.4	316
12	Type-II quantum dots: CdTe/CdSe(core/shell) and CdSe/ZnTe(core/shell) heterostructures. <i>Journal of the American Chemical Society</i> , 2003 , 125, 11466-7	16.4	1075

LIST OF PUBLICATIONS

11	Selection of quantum dot wavelengths for biomedical assays and imaging. <i>Molecular imaging</i> , 2003 , 2, 50-64	3.7	426
10	Electronic transport in films of colloidal CdSe nanocrystals. <i>Physical Review B</i> , 2002 , 66,	3.3	129
9	Color-selective semiconductor nanocrystal laser. <i>Applied Physics Letters</i> , 2002 , 80, 4614-4616	3.4	286
8	Nanocrystal Quantum Dots: Building Blocks for Tunable Optical Amplifiers and Lasers. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 667, 1		2
7	Self-Assembly of CdSeInS Quantum Dot Bioconjugates Using an Engineered Recombinant Protein. <i>Journal of the American Chemical Society</i> , 2000 , 122, 12142-12150	16.4	1526
6	Photoluminescence from Single Semiconductor Nanostructures 1999 , 261-287		
5	Eine aus der L\u00edung zug\u00edgliche neue Kristallstruktur von Cobalt. Angewandte Chemie, 1999 , 111, 1906-1	99,96	34
4	Synthesis and Characterization of Strongly Fluorescent CdTe Nanocrystal Colloids. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 581, 139		2
3	Organometallic Synthesis and Spectroscopic Characterization of Manganese Doped CdSe Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 582, 56		1
2	Electroluminescence from heterostructures of poly(phenylene vinylene) and inorganic CdSe nanocrystals. <i>Journal of Applied Physics</i> , 1998 , 83, 7965-7974	2.5	466
1	Predicting Low Toxicity and Scalable Solvent Systems for High-Speed Roll-to-Roll Perovskite Manufacturing. <i>Solar Rrl</i> ,2100567	7.1	4