

Moungi G Bawendi

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208
papers

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218
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33,156
ext. citations

13.3
avg, IF

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L-index

#	Paper	IF	Citations
208	Near-infrared fluorescent type II quantum dots for sentinel lymph node mapping. <i>Nature Biotechnology</i> , 2004 , 22, 93-7	44.5	1835
207	Emergence of colloidal quantum-dot light-emitting technologies. <i>Nature Photonics</i> , 2013 , 7, 13-23	33.9	1760
206	Self-Assembly of CdSe/ZnS Quantum Dot Bioconjugates Using an Engineered Recombinant Protein. <i>Journal of the American Chemical Society</i> , 2000 , 122, 12142-12150	16.4	1526
205	Improved performance and stability in quantum dot solar cells through band alignment engineering. <i>Nature Materials</i> , 2014 , 13, 796-801	27	1282
204	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
203	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
202	High-efficiency quantum-dot light-emitting devices with enhanced charge injection. <i>Nature Photonics</i> , 2013 , 7, 407-412	33.9	860
201	Efficient perovskite solar cells via improved carrier management. <i>Nature</i> , 2021 , 590, 587-593	50.4	809
200	Quantum dot light-emitting devices with electroluminescence tunable over the entire visible spectrum. <i>Nano Letters</i> , 2009 , 9, 2532-6	11.5	713
199	Energy level modification in lead sulfide quantum dot thin films through ligand exchange. <i>ACS Nano</i> , 2014 , 8, 5863-72	16.7	667
198	Compact biocompatible quantum dots functionalized for cellular imaging. <i>Journal of the American Chemical Society</i> , 2008 , 130, 1274-84	16.4	537
197	Electroluminescence from heterostructures of poly(phenylene vinylene) and inorganic CdSe nanocrystals. <i>Journal of Applied Physics</i> , 1998 , 83, 7965-7974	2.5	466
196	Selection of quantum dot wavelengths for biomedical assays and imaging. <i>Molecular Imaging</i> , 2003 , 2, 50-64	3.7	426
195	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
194	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
193	Colloidal PbS quantum dot solar cells with high fill factor. <i>ACS Nano</i> , 2010 , 4, 3743-52	16.7	385
192	Quantum dots spectrally distinguish multiple species within the tumor milieu in vivo. <i>Nature Medicine</i> , 2005 , 11, 678-82	50.5	381

191	Electroluminescence from a mixed red-green-blue colloidal quantum dot monolayer. <i>Nano Letters</i> , 2007 , 7, 2196-200	11.5	367
190	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
189	Monovalent, reduced-size quantum dots for imaging receptors on living cells. <i>Nature Methods</i> , 2008 , 5, 397-9	21.6	365
188	Next-generation optical imaging with short-wave infrared quantum dots. <i>Nature Biomedical Engineering</i> , 2017 , 1,	19	360
187	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
186	A transferable model for singlet-fission kinetics. <i>Nature Chemistry</i> , 2014 , 6, 492-7	17.6	349
185	Solid-state infrared-to-visible upconversion sensitized by colloidal nanocrystals. <i>Nature Photonics</i> , 2016 , 10, 31-34	33.9	324
184	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
183	Quantum-dot optical temperature probes. <i>Applied Physics Letters</i> , 2003 , 83, 3555-3557	3.4	316
182	Color-selective semiconductor nanocrystal laser. <i>Applied Physics Letters</i> , 2002 , 80, 4614-4616	3.4	286
181	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
180	A colloidal quantum dot spectrometer. <i>Nature</i> , 2015 , 523, 67-70	50.4	264
179	A nanoparticle size series for in vivo fluorescence imaging. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 8649-52	16.4	262
178	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
177	Core/shell quantum dot based luminescent solar concentrators with reduced reabsorption and enhanced efficiency. <i>Nano Letters</i> , 2014 , 14, 4097-101	11.5	251
176	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
175	Improved current extraction from ZnO/PbS quantum dot heterojunction photovoltaics using a MoO ₃ interfacial layer. <i>Nano Letters</i> , 2011 , 11, 2955-61	11.5	237
174	ZnO nanowire arrays for enhanced photocurrent in PbS quantum dot solar cells. <i>Advanced Materials</i> , 2013 , 25, 2790-6	24	226

173	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
172	Coherent single-photon emission from colloidal lead halide perovskite quantum dots. <i>Science</i> , 2019 , 363, 1068-1072	33.3	218
171	Quantum dot-based multiplexed fluorescence resonance energy transfer. <i>Journal of the American Chemical Society</i> , 2005 , 127, 18212-21	16.4	209
170	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
169	Flavylium Polymethine Fluorophores for Near- and Shortwave Infrared Imaging. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 13126-13129	16.4	200
168	Magneto-fluorescent core-shell supernanoparticles. <i>Nature Communications</i> , 2014 , 5, 5093	17.4	197
167	Energy harvesting of non-emissive triplet excitons in tetracene by emissive PbS nanocrystals. <i>Nature Materials</i> , 2014 , 13, 1039-43	27	196
166	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
165	Searching for Defect-Tolerant Photovoltaic Materials: Combined Theoretical and Experimental Screening. <i>Chemistry of Materials</i> , 2017 , 29, 4667-4674	9.6	191
164	Homogenized halides and alkali cation segregation in alloyed organic-inorganic perovskites. <i>Science</i> , 2019 , 363, 627-631	33.3	190
163	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	16.4	183
162	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	9.4	180
161	Graphene cathode-based ZnO nanowire hybrid solar cells. <i>Nano Letters</i> , 2013 , 13, 233-9	11.5	179
160	Alternating current driven electroluminescence from ZnSe/ZnS:Mn/ZnS nanocrystals. <i>Nano Letters</i> , 2009 , 9, 2367-71	11.5	177
159	Biexciton quantum yield of single semiconductor nanocrystals from photon statistics. <i>Nano Letters</i> , 2011 , 11, 1136-40	11.5	171
158	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
157	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
156	Continuous injection synthesis of indium arsenide quantum dots emissive in the short-wavelength infrared. <i>Nature Communications</i> , 2016 , 7, 12749	17.4	156

155	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
154	Mechanistic insights into the formation of InP quantum dots. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 760-2	16.4	138
153	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
152	Supercritical Continuous-Microflow Synthesis of Narrow Size Distribution Quantum Dots. <i>Advanced Materials</i> , 2008 , 20, 4830-4834	24	135
151	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
150	Electronic transport in films of colloidal CdSe nanocrystals. <i>Physical Review B</i> , 2002 , 66,	3.3	129
149	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
148	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	16.4	116
147	Direct probe of spectral inhomogeneity reveals synthetic tunability of single-nanocrystal spectral linewidths. <i>Nature Chemistry</i> , 2013 , 5, 602-6	17.6	112
146	Shortwave Infrared in Vivo Imaging with Gold Nanoclusters. <i>Nano Letters</i> , 2017 , 17, 6330-6334	11.5	109
145	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	11.5	109
144	Transient photoluminescence and simultaneous amplified spontaneous emission from multiexciton states in CdSe quantum dots. <i>Physical Review B</i> , 2004 , 70,	3.3	106
143	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
142	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
141	Bias-stress effect in 1,2-ethanedithiol-treated PbS quantum dot field-effect transistors. <i>ACS Nano</i> , 2012 , 6, 3121-7	16.7	97
140	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
139	Brown adipose tissue thermogenic adaptation requires Nrf1-mediated proteasomal activity. <i>Nature Medicine</i> , 2018 , 24, 292-303	50.5	92
138	Micelle-Encapsulated Quantum Dot-Porphyrin Assemblies as in Vivo Two-Photon Oxygen Sensors. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9832-42	16.4	88

137	A Microfabricated Gas/Liquid Segmented Flow Reactor for High-Temperature Synthesis: The Case of CdSe Quantum Dots. <i>Angewandte Chemie</i> , 2005 , 117, 5583-5587	3.6	88
136	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
135	Optical Trapping and Two-Photon Excitation of Colloidal Quantum Dots Using Bowtie Apertures. <i>ACS Photonics</i> , 2016 , 3, 423-427	6.3	84
134	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
133	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
132	Robust excitons inhabit soft supramolecular nanotubes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E3367-75	11.5	80
131	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
130	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
129	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	11.5	71
128	Photovoltaic Performance of PbS Quantum Dots Treated with Metal Salts. <i>ACS Nano</i> , 2016 , 10, 3382-8	16.7	70
127	Spatial charge configuration regulates nanoparticle transport and binding behavior in vivo. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 1414-9	16.4	70
126	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
125	Identifying and Eliminating Emissive Sub-bandgap States in Thin Films of PbS Nanocrystals. <i>Advanced Materials</i> , 2015 , 27, 4481-4486	24	68
124	Quantum dot/J-aggregate blended films for light harvesting and energy transfer. <i>Nano Letters</i> , 2010 , 10, 3995-9	11.5	68
123	Multiexciton fluorescence from semiconductor nanocrystals. <i>Chemical Physics</i> , 2005 , 318, 71-81	2.3	67
122	Room-Temperature Micron-Scale Exciton Migration in a Stabilized Emissive Molecular Aggregate. <i>Nano Letters</i> , 2016 , 16, 6808-6815	11.5	67
121	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	11.5	66
120	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

119	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
118	High Tolerance to Iron Contamination in Lead Halide Perovskite Solar Cells. <i>ACS Nano</i> , 2017 , 11, 7101-7110	9.7	64
117	Deconstructing the photon stream from single nanocrystals: from binning to correlation. <i>Chemical Society Reviews</i> , 2014 , 43, 1287-310	58.5	62
116	Oscillatory Microprocessor for Growth and in Situ Characterization of Semiconductor Nanocrystals. <i>Chemistry of Materials</i> , 2015 , 27, 6131-6138	9.6	61
115	A Low Reabsorbing Luminescent Solar Concentrator Employing π -Conjugated Polymers. <i>Advanced Materials</i> , 2016 , 28, 497-501	24	61
114	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
113	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
112	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
111	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
110	A Nanocrystal-based Ratiometric pH Sensor for Natural pH Ranges. <i>Chemical Science</i> , 2012 , 3, 2980-2985	9.4	56
109	Narrow-band absorption-enhanced quantum dot/J-aggregate conjugates. <i>Journal of the American Chemical Society</i> , 2009 , 131, 9624-5	16.4	55
108	PbS Nanocrystal Emission Is Governed by Multiple Emissive States. <i>Nano Letters</i> , 2016 , 16, 6070-6077	11.5	54
107	Biocompatible near-infrared quantum dots delivered to the skin by microneedle patches record vaccination. <i>Science Translational Medicine</i> , 2019 , 11,	17.5	54
106	Effect of Trace Water on the Growth of Indium Phosphide Quantum Dots. <i>Chemistry of Materials</i> , 2015 , 27, 5058-5063	9.6	51
105	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
104	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, 9080-9085	11.5	48
103	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
102	Charge transport in mixed CdSe and CdTe colloidal nanocrystal films. <i>Physical Review B</i> , 2010 , 82,	3.3	45

101	Wide-field three-photon excitation in biological samples. <i>Light: Science and Applications</i> , 2017 , 6, e16255	6.7	44
100	Single photon counting from individual nanocrystals in the infrared. <i>Nano Letters</i> , 2012 , 12, 2953-8	11.5	44
99	A Nanoparticle Size Series for In Vivo Fluorescence Imaging. <i>Angewandte Chemie</i> , 2010 , 122, 8831-8834	3.6	43
98	Electroluminescence from nanoscale materials via field-driven ionization. <i>Nano Letters</i> , 2011 , 11, 2927-32	11.5	42
97	Coherent exciton dynamics in supramolecular light-harvesting nanotubes revealed by ultrafast quantum process tomography. <i>ACS Nano</i> , 2014 , 8, 5527-34	16.7	41
96	Multi-island single-electron devices from self-assembled colloidal nanocrystal chains. <i>Applied Physics Letters</i> , 2006 , 88, 143507	3.4	41
95	The dominant role of exciton quenching in PbS quantum-dot-based photovoltaic devices. <i>Nano Letters</i> , 2013 , 13, 5907-12	11.5	39
94	Photon-correlation Fourier spectroscopy. <i>Optics Express</i> , 2006 , 14, 6333-41	3.3	38
93	Single quantum dot (QD) imaging of fluid flow near surfaces. <i>Experiments in Fluids</i> , 2005 , 39, 784-786	2.5	38
92	Flavylium Polymethine Fluorophores for Near- and Shortwave Infrared Imaging. <i>Angewandte Chemie</i> , 2017 , 129, 13306-13309	3.6	37
91	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
90	How machine learning can help select capping layers to suppress perovskite degradation. <i>Nature Communications</i> , 2020 , 11, 4172	17.4	36
89	Efficient Semitransparent CsPbI ₃ Quantum Dots Photovoltaics Using a Graphene Electrode. <i>Small Methods</i> , 2019 , 3, 1900449	12.8	35
88	Eine aus der Lösung zugängliche neue Kristallstruktur von Cobalt. <i>Angewandte Chemie</i> , 1999 , 111, 1906-1908	3.8	34
87	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
86	Multistage extraction platform for highly efficient and fully continuous purification of nanoparticles. <i>Nanoscale</i> , 2017 , 9, 7703-7707	7.7	32
85	Size-Dependent Biexciton Spectrum in CsPbBr ₃ Perovskite Nanocrystals. <i>ACS Energy Letters</i> , 2019 , 4, 2639-2645	20.1	30
84	Locating and classifying fluorescent tags behind turbid layers using time-resolved inversion. <i>Nature Communications</i> , 2015 , 6, 6796	17.4	29

83	Measurement of emission lifetime dynamics and biexciton emission quantum yield of individual InAs colloidal nanocrystals. <i>Nano Letters</i> , 2014 , 14, 6787-91	11.5	29
82	Near-Infrared Quantum Dot Emission Enhanced by Stabilized Self-Assembled J-Aggregate Antennas. <i>Nano Letters</i> , 2017 , 17, 7665-7674	11.5	29
81	Lateral heterojunction photodetector consisting of molecular organic and colloidal quantum dot thin films. <i>Applied Physics Letters</i> , 2009 , 94, 043307	3.4	29
80	Terahertz-Driven Luminescence and Colossal Stark Effect in CdSe-CdS Colloidal Quantum Dots. <i>Nano Letters</i> , 2017 , 17, 5375-5380	11.5	28
79	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
78	Investigation of Indium Phosphide Nanocrystal Synthesis Using a High-Temperature and High-Pressure Continuous Flow Microreactor. <i>Angewandte Chemie</i> , 2011 , 123, 653-656	3.6	27
77	A data fusion approach to optimize compositional stability of halide perovskites. <i>Matter</i> , 2021 , 4, 1305-1327	13.2	27
76	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
75	Estimating Motion and size of moving non-line-of-sight objects in cluttered environments 2011 ,		26
74	Extracting spectral dynamics from single chromophores in solution. <i>Physical Review Letters</i> , 2010 , 105, 053005	7.4	25
73	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
72	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
71	Minority Carrier Transport in Lead Sulfide Quantum Dot Photovoltaics. <i>Nano Letters</i> , 2017 , 17, 6221-6227	11.5	24
70	Photochemical Control of Exciton Superradiance in Light-Harvesting Nanotubes. <i>ACS Nano</i> , 2018 , 12, 4556-4564	16.7	23
69	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	13	23
68	A path to practical Solar Pumped Lasers via Radiative Energy Transfer. <i>Scientific Reports</i> , 2015 , 5, 14758	4.9	23
67	Morphology of Passivating Organic Ligands around a Nanocrystal. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 26267-26274	3.8	23
66	Micron-Scale Patterning of High Quantum Yield Quantum Dot LEDs. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800727	6.8	22

65	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
64	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
63	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
62	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
61	Colloidal atomic layer deposition growth of PbS/CdS core/shell quantum dots. <i>Chemical Communications</i> , 2017 , 53, 869-872	5.8	21
60	Luminescent Surfaces with Tailored Angular Emission for Compact Dark-Field Imaging Devices. <i>Nature Photonics</i> , 2020 , 14, 310-315	33.9	21
59	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
58	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
57	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
56	Sample-averaged biexciton quantum yield measured by solution-phase photon correlation. <i>Nano Letters</i> , 2014 , 14, 6792-8	11.5	19
55	Non-linear transduction strategies for chemo/biosensing on small length scales. <i>Journal of Materials Chemistry</i> , 2005 , 15, 2697		19
54	Multiexciton Lifetimes Reveal Triexciton Emission Pathway in CdSe Nanocrystals. <i>Nano Letters</i> , 2018 , 18, 5153-5158	11.5	18
53	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
52	The Unexpected Influence of Precursor Conversion Rate in the Synthesis of III ^V Quantum Dots. <i>Angewandte Chemie</i> , 2015 , 127, 14507-14511	3.6	17
51	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
50	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
49	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
48	Zinc Thiolate Enables Bright Cu-Deficient Cu-In-S/ZnS Quantum Dots. <i>Small</i> , 2019 , 15, e1901462	11	13

47	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
46	High-Speed Vapor Transport Deposition of Perovskite Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 32928-32936	9.5	13
45	Single Nanocrystal Spectroscopy of Shortwave Infrared Emitters. <i>ACS Nano</i> , 2019 , 13, 1042-1049	16.7	13
44	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
43	Stable, small, specific, low-valency quantum dots for single-molecule imaging. <i>Nanoscale</i> , 2018 , 10, 4406-4414	7.7	12
42	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
41	Generalized Kasha Model: T-Dependent Spectroscopy Reveals Short-Range Structures of 2D Excitonic Systems. <i>Chem</i> , 2019 , 5, 3135-3150	16.2	11
40	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
39	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
38	Blue Light Emitting Defective Nanocrystals Composed of Earth-Abundant Elements. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 860-867	16.4	11
37	Multispectral imaging via luminescent down-shifting with colloidal quantum dots. <i>Optical Materials Express</i> , 2013 , 3, 1167	2.6	10
36	Multistage Microfluidic Platform for the Continuous Synthesis of III-V Core/Shell Quantum Dots. <i>Angewandte Chemie</i> , 2018 , 130, 11081-11084	3.6	10
35	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
34	Blue Light Emitting Defective Nanocrystals Composed of Earth-Abundant Elements. <i>Angewandte Chemie</i> , 2020 , 132, 870-877	3.6	8
33	Seedless Continuous Injection Synthesis of Indium Phosphide Quantum Dots as a Route to Large Size and Low Size Dispersion. <i>Chemistry of Materials</i> , 2020 , 32, 6532-6539	9.6	8
32	Interfacial Trap-Assisted Triplet Generation in Lead Halide Perovskite Sensitized Solid-State Upconversion. <i>Advanced Materials</i> , 2021 , 33, e2100854	24	8
31	Increasing the penetration depth of temporal focusing multiphoton microscopy for neurobiological applications. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 264001	3	7
30	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

29	A Ligand System for the Flexible Functionalization of Quantum Dots via Click Chemistry. <i>Angewandte Chemie</i> , 2018 , 130, 4742-4746	3.6	7
28	Extracting the average single-molecule biexciton photoluminescence lifetime from a solution of chromophores. <i>Optics Letters</i> , 2016 , 41, 4823-4826	3	7
27	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
26	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
25	Monodisperse and Water-Soluble Quantum Dots for SWIR Imaging via Carboxylic Acid Copolymer Ligands. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 35845-35855	9.5	5
24	Solid-state infrared-to-visible upconversion for sub-bandgap sensitization of photovoltaics 2018 ,		5
23	Initial findings of shortwave infrared otoscopy in a pediatric population. <i>International Journal of Pediatric Otorhinolaryngology</i> , 2018 , 114, 15-19	1.7	5
22	Terahertz-Driven Stark Spectroscopy of CdSe and CdSe-CdS Core-Shell Quantum Dots. <i>Nano Letters</i> , 2019 , 19, 8125-8131	11.5	4
21	Predicting Low Toxicity and Scalable Solvent Systems for High-Speed Roll-to-Roll Perovskite Manufacturing. <i>Solar Rrl</i> , 2100567	7.1	4
20	Thermal Recovery of Colloidal Quantum Dot Ensembles Following Photoinduced Dimming. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2933-7	6.4	3
19	Quantum Shells Boost the Optical Gain of Lasing Media.. <i>ACS Nano</i> , 2022 ,	16.7	3
18	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
17	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
16	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
15	Conformational Control of Energy Transfer: A Mechanism for Biocompatible Nanocrystal-Based Sensors. <i>Angewandte Chemie</i> , 2013 , 125, 1203-1207	3.6	2
14	Nanocrystal Quantum Dots: Building Blocks for Tunable Optical Amplifiers and Lasers. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 667, 1		2
13	Synthesis and Characterization of Strongly Fluorescent CdTe Nanocrystal Colloids. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 581, 139		2
12	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

11	COUPLING BETWEEN J-AGGREGATES AND INORGANIC EXCITONS 2012 , 181-193		1
10	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
9	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
8	Organometallic Synthesis and Spectroscopic Characterization of Manganese Doped CdSe Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 582, 56		1
7	Designing Highly Luminescent Molecular Aggregates via Bottom-Up Nanoscale Engineering. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 754-763	3.8	1
6	Magnetic-Field-Switchable Laser via Optical Pumping of Rubrene. <i>Advanced Materials</i> , 2021 , e2103870	24	1
5	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
4	Supramolecular Lattice Deformation and Exciton Trapping in Nanotubular J-Aggregates. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 4095-4105	3.8	1
3	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	
2	Photoluminescence from Single Semiconductor Nanostructures 1999 , 261-287		
1	Predicting Low Toxicity and Scalable Solvent Systems for High-Speed Roll-to-Roll Perovskite Manufacturing. <i>Solar Rrl</i> , 2022 , 6, 2270034	7.1	