

# Richard D Schaller

## List of Publications by Citations

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195  
papers

11,811  
citations

52  
h-index

105  
g-index

208  
ext. papers

13,750  
ext. citations

11.8  
avg, IF

6.71  
L-index

#	Paper	IF	Citations
195	High efficiency carrier multiplication in PbSe nanocrystals: implications for solar energy conversion. <i>Physical Review Letters</i> , <b>2004</b> , 92, 186601	7.4	1474
194	Seven excitons at a cost of one: redefining the limits for conversion efficiency of photons into charge carriers. <i>Nano Letters</i> , <b>2006</b> , 6, 424-9	11.5	425
193	High-efficiency carrier multiplication through direct photogeneration of multi-excitons via virtual single-exciton states. <i>Nature Physics</i> , <b>2005</b> , 1, 189-194	16.2	420
192	Utilizing the lability of lead selenide to produce heterostructured nanocrystals with bright, stable infrared emission. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 4879-85	16.4	395
191	Suppressed auger recombination in "giant" nanocrystals boosts optical gain performance. <i>Nano Letters</i> , <b>2009</b> , 9, 3482-8	11.5	394
190	Tuning the excitonic and plasmonic properties of copper chalcogenide nanocrystals. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 1583-90	16.4	390
189	Seeded growth of single-crystal two-dimensional covalent organic frameworks. <i>Science</i> , <b>2018</b> , 361, 52-57	33.3	310
188	Low-threshold stimulated emission using colloidal quantum wells. <i>Nano Letters</i> , <b>2014</b> , 14, 2772-7	11.5	280
187	Tunable Near-Infrared Optical Gain and Amplified Spontaneous Emission Using PbSe Nanocrystals. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 13765-13768	3.4	262
186	Universal size-dependent trend in auger recombination in direct-gap and indirect-gap semiconductor nanocrystals. <i>Physical Review Letters</i> , <b>2009</b> , 102, 177404	7.4	253
185	Carrier multiplication in InAs nanocrystal quantum dots with an onset defined by the energy conservation limit. <i>Nano Letters</i> , <b>2007</b> , 7, 3469-76	11.5	252
184	Effect of electronic structure on carrier multiplication efficiency: Comparative study of PbSe and CdSe nanocrystals. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 253102	3.4	232
183	Breaking the phonon bottleneck in semiconductor nanocrystals via multiphonon emission induced by intrinsic nonadiabatic interactions. <i>Physical Review Letters</i> , <b>2005</b> , 95, 196401	7.4	224
182	Structural Diversity in White-Light-Emitting Hybrid Lead Bromide Perovskites. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 13078-13088	16.4	214
181	Simultaneous band-gap narrowing and carrier-lifetime prolongation of organic-inorganic trihalide perovskites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 8910-5	11.5	199
180	Delocalization and dielectric screening of charge transfer states in organic photovoltaic cells. <i>Nature Communications</i> , <b>2014</b> , 5, 3245	17.4	196
179	Disphenoidal Zero-Dimensional Lead, Tin, and Germanium Halides: Highly Emissive Singlet and Triplet Self-Trapped Excitons and X-ray Scintillation. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 9764-9768	16.4	186

178	Red, Yellow, Green, and Blue Amplified Spontaneous Emission and Lasing Using Colloidal CdSe Nanoplatelets. <i>ACS Nano</i> , <b>2015</b> , 9, 9475-85	16.7	184
177	Picosecond energy transfer and multiexciton transfer outpaces Auger recombination in binary CdSe nanoplatelet solids. <i>Nature Materials</i> , <b>2015</b> , 14, 484-9	27	181
176	Scaling of multiexciton lifetimes in semiconductor nanocrystals. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	176
175	High-Temperature Photoluminescence of CsPbX <sub>3</sub> (X = Cl, Br, I) Nanocrystals. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1606750	15.6	173
174	Ultrafast switching of tunable infrared plasmons in indium tin oxide nanorod arrays with large absolute amplitude. <i>Nature Photonics</i> , <b>2016</b> , 10, 267-273	33.9	173
173	High-efficiency carrier multiplication and ultrafast charge separation in semiconductor nanocrystals studied via time-resolved photoluminescence. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 25332-8	3.4	168
172	Two-Dimensional Dion-Jacobson Hybrid Lead Iodide Perovskites with Aromatic Diammonium Cations. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 12880-12890	16.4	135
171	Inorganically functionalized PbS-CdS colloidal nanocrystals: integration into amorphous chalcogenide glass and luminescent properties. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 2457-60	16.4	130
170	Band-edge engineering for controlled multi-modal nanolasing in plasmonic superlattices. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 889-894	28.7	125
169	Low-Temperature Absorption, Photoluminescence, and Lifetime of CsPbX <sub>3</sub> (X = Cl, Br, I) Nanocrystals. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1800945	15.6	116
168	Pressure-Induced Bandgap Optimization in Lead-Based Perovskites with Prolonged Carrier Lifetime and Ambient Retainability. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604208	15.6	115
167	PbSe nanocrystal/conducting polymer solar cells with an infrared response to 2 micron. <i>Journal of Materials Research</i> , <b>2007</b> , 22, 2204-2210	2.5	101
166	Isothermal pressure-derived metastable states in 2D hybrid perovskites showing enduring bandgap narrowing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 8076-8081	11.5	92
165	Carrier cooling in colloidal quantum wells. <i>Nano Letters</i> , <b>2012</b> , 12, 6158-63	11.5	87
164	Origin of Broad Emission Spectra in InP Quantum Dots: Contributions from Structural and Electronic Disorder. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 15791-15803	16.4	81
163	Observation of the fastest chemical processes in the radiolysis of water. <i>Science</i> , <b>2020</b> , 367, 179-182	33.3	74
162	Singlet exciton fission in thin films of tert-butyl-substituted terrylenes. <i>Journal of Physical Chemistry A</i> , <b>2015</b> , 119, 4151-61	2.8	73
161	Multiexciton Solar Cells of CuInSe <sub>2</sub> Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 304-9	6.4	73

160	Control of Terahertz Emission by Ultrafast Spin-Charge Current Conversion at Rashba Interfaces. <i>Physical Review Letters</i> , <b>2018</b> , 120, 207207	7.4	72
159	Inter-phase charge and energy transfer in Ruddlesden-Popper 2D perovskites: critical role of the spacing cations. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 6244-6250	13	70
158	Electron-Rotor Interaction in Organic-Inorganic Lead Iodide Perovskites Discovered by Isotope Effects. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 2879-87	6.4	69
157	Photoinduced, reversible phase transitions in all-inorganic perovskite nanocrystals. <i>Nature Communications</i> , <b>2019</b> , 10, 504	17.4	67
156	High-pressure structural stability and elasticity of supercrystals self-assembled from nanocrystals. <i>Nano Letters</i> , <b>2011</b> , 11, 579-88	11.5	65
155	Non-Poissonian exciton populations in semiconductor nanocrystals via carrier multiplication. <i>Physical Review Letters</i> , <b>2006</b> , 96, 097402	7.4	64
154	Two Regimes of Bandgap Red Shift and Partial Ambient Retention in Pressure-Treated Two-Dimensional Perovskites. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 2518-2524	20.1	63
153	High-performance bioassisted nanophotocatalyst for hydrogen production. <i>Nano Letters</i> , <b>2013</b> , 13, 3365-3371	11.5	62
152	Small Cyclic Diammonium Cation Templated (110)-Oriented 2D Halide (X = I, Br, Cl) Perovskites with White-Light Emission. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3582-3590	9.6	60
151	Direct Synthesis of Six-Monolayer (1.9 nm) Thick Zinc-Blende CdSe Nanoplatelets Emitting at 585 nm. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6957-6960	9.6	60
150	Violet-to-Blue Gain and Lasing from Colloidal CdS Nanoplatelets: Low-Threshold Stimulated Emission Despite Low Photoluminescence Quantum Yield. <i>ACS Photonics</i> , <b>2017</b> , 4, 576-583	6.3	58
149	Sub-1.4eV bandgap inorganic perovskite solar cells with long-term stability. <i>Nature Communications</i> , <b>2020</b> , 11, 151	17.4	55
148	Large optical nonlinearity of ITO nanorods for sub-picosecond all-optical modulation of the full-visible spectrum. <i>Nature Communications</i> , <b>2016</b> , 7, 12892	17.4	54
147	Quintet-triplet mixing determines the fate of the multiexciton state produced by singlet fission in a terrylenediimide dimer at room temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 8178-8183	11.5	53
146	Sub-Picosecond Singlet Exciton Fission in Cyano-Substituted Diaryltetracenes. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 8679-83	16.4	53
145	Cross-plane coherent acoustic phonons in two-dimensional organic-inorganic hybrid perovskites. <i>Nature Communications</i> , <b>2018</b> , 9, 2019	17.4	53
144	Colloidal quantum dot lasers. <i>Nature Reviews Materials</i> , <b>2021</b> , 6, 382-401	73.3	52
143	In Situ Grazing-Incidence Wide-Angle Scattering Reveals Mechanisms for Phase Distribution and Disorientation in 2D Halide Perovskite Films. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002812	24	51

142	Thermal stability of colloidal InP nanocrystals: small inorganic ligands boost high-temperature photoluminescence. <i>ACS Nano</i> , <b>2014</b> , 8, 977-85	16.7	50
141	Transition metal-substituted lead halide perovskite absorbers. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 3578-3588	13	48
140	Photoinduced electron transfer pathways in hydrogen-evolving reduced graphene oxide-boosted hybrid nano-bio catalyst. <i>ACS Nano</i> , <b>2014</b> , 8, 7995-8002	16.7	46
139	Synthesis and Ligand Exchange of Thiol-Capped Silicon Nanocrystals. <i>Langmuir</i> , <b>2015</b> , 31, 6886-93	4	45
138	Size-Dependent Biexciton Quantum Yields and Carrier Dynamics of Quasi-Two-Dimensional Core/Shell Nanoplatelets. <i>ACS Nano</i> , <b>2017</b> , 11, 9119-9127	16.7	45
137	Three-Dimensional Lead Iodide Perovskitoid Hybrids with High X-ray Photoresponse. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 6625-6637	16.4	42
136	Negative Pressure Engineering with Large Cage Cations in 2D Halide Perovskites Causes Lattice Softening. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 11486-11496	16.4	41
135	Mechanism of Ferric Oxalate Photolysis. <i>ACS Earth and Space Chemistry</i> , <b>2017</b> , 1, 270-276	3.2	40
134	Multiexciton dynamics in infrared-emitting colloidal nanostructures probed by a superconducting nanowire single-photon detector. <i>ACS Nano</i> , <b>2012</b> , 6, 9532-40	16.7	40
133	Conformal Coating of a Phase Change Material on Ordered Plasmonic Nanorod Arrays for Broadband All-Optical Switching. <i>ACS Nano</i> , <b>2017</b> , 11, 693-701	16.7	39
132	Large Transient Optical Modulation of Epsilon-Near-Zero Colloidal Nanocrystals. <i>ACS Nano</i> , <b>2016</b> , 10, 10099-10105	16.7	39
131	Observation of size-dependent thermalization in CdSe nanocrystals using time-resolved photoluminescence spectroscopy. <i>Physical Review Letters</i> , <b>2011</b> , 107, 177403	7.4	37
130	Revealing the exciton fine structure of PbSe nanocrystal quantum dots using optical spectroscopy in high magnetic fields. <i>Physical Review Letters</i> , <b>2010</b> , 105, 067403	7.4	37
129	Emissive Single-Crystalline Boroxine-Linked Colloidal Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 19728-19735	16.4	37
128	Semiconductor Nanoplatelet Excimers. <i>Nano Letters</i> , <b>2018</b> , 18, 6948-6953	11.5	37
127	Material Dimensionality Effects on Electron Transfer Rates Between CsPbBr and CdSe Nanoparticles. <i>Nano Letters</i> , <b>2018</b> , 18, 4771-4776	11.5	36
126	Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. <i>Physical Review Letters</i> , <b>2018</b> , 121, 127401	7.4	35
125	Enhanced Size Selection in Two-Photon Excitation for CsPbBr Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 5119-5124	6.4	34

124	Fast, Ratiometric FRET from Quantum Dot Conjugated Stabilized Single Chain Variable Fragments for Quantitative Botulinum Neurotoxin Sensing. <i>Nano Letters</i> , <b>2015</b> , 15, 7161-7	11.5	34
123	Exciton Level Structure and Dynamics in Tubular Porphyrin Aggregates. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 24854-24865	3.8	34
122	Linking Group Influences Charge Separation and Recombination in All-Conjugated Block Copolymer Photovoltaics. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 5578-5585	15.6	34
121	Unique Optical Properties of Methylammonium Lead Iodide Nanocrystals Below the Bulk Tetragonal-Orthorhombic Phase Transition. <i>Nano Letters</i> , <b>2018</b> , 18, 846-852	11.5	32
120	Surface-Area-Dependent Electron Transfer Between Isoenergetic 2D Quantum Wells and a Molecular Acceptor. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 11109-12	16.4	32
119	Exciton Fate in Semiconductor Nanocrystals at Elevated Temperatures: Hole Trapping Outcompetes Exciton Deactivation. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 17337-17343	3.8	32
118	Photo-accelerated fast charging of lithium-ion batteries. <i>Nature Communications</i> , <b>2019</b> , 10, 4946	17.4	32
117	Water-Stable 1D Hybrid Tin(II) Iodide Emits Broad Light with 36% Photoluminescence Quantum Efficiency. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 9028-9038	16.4	31
116	Efficient Carrier Multiplication in Colloidal CuInSe <sub>2</sub> Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 3169-74	6.4	31
115	Polar Fluctuations in Metal Halide Perovskites Uncovered by Acoustic Phonon Anomalies. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 2463-2469	20.1	30
114	Slow Organic-to-Inorganic Sub-Lattice Thermalization in Methylammonium Lead Halide Perovskites Observed by Ultrafast Photoluminescence. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600422	21.8	29
113	Ultrafast Photoluminescence in Quantum-Confined Silicon Nanocrystals Arises from an Amorphous Surface Layer. <i>ACS Photonics</i> , <b>2014</b> , 1, 960-967	6.3	28
112	Organic Cation Alloying on Intralayer A and Interlayer A' sites in 2D Hybrid Dion-Jacobson Lead Bromide Perovskites (A')(A)PbBr. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 8342-8351	16.4	28
111	Anisotropic Photoluminescence from Isotropic Optical Transition Dipoles in Semiconductor Nanoplatelets. <i>Nano Letters</i> , <b>2018</b> , 18, 4647-4652	11.5	27
110	Intraband Cooling in All-Inorganic and Hybrid Organic-Inorganic Perovskite Nanocrystals. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901725	15.6	27
109	Giant optical enhancement of strain gradient in ferroelectric BiFeO <sub>3</sub> thin films and its physical origin. <i>Scientific Reports</i> , <b>2015</b> , 5, 16650	4.9	27
108	Reducing the Optical Gain Threshold in Two-Dimensional CdSe Nanoplatelets by the Giant Oscillator Strength Transition Effect. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 1624-1632	6.4	26
107	Bright Silicon Nanocrystals from a Liquid Precursor: Quasi-Direct Recombination with High Quantum Yield. <i>ACS Nano</i> , <b>2020</b> , 14, 3858-3867	16.7	26

106	Quantum Dot-Plasmon Lasing with Controlled Polarization Patterns. <i>ACS Nano</i> , <b>2020</b> , 14, 3426-3433	16.7	26
105	Hierarchical Hybridization in Plasmonic Honeycomb Lattices. <i>Nano Letters</i> , <b>2019</b> , 19, 6435-6441	11.5	26
104	Expeditious, scalable solution growth of metal oxide films by combustion blade coating for flexible electronics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 9230-9238	11.5	25
103	Facile, Economic and Size-Tunable Synthesis of Metal Arsenide Nanocrystals. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 6797-6802	9.6	25
102	Efficient Carrier Multiplication in Colloidal Silicon Nanorods. <i>Nano Letters</i> , <b>2017</b> , 17, 5580-5586	11.5	25
101	Charge carrier dynamics of vapor-deposited small-molecule/fullerene organic solar cells. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 8790-3	16.4	25
100	Large Exciton Diffusion Coefficients in Two-Dimensional Covalent Organic Frameworks with Different Domain Sizes Revealed by Ultrafast Exciton Dynamics. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 14957-14965	16.4	25
99	Nickel(II) Metal Complexes as Optically Addressable Qubit Candidates. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 14826-14830	16.4	24
98	Polarized near-infrared intersubband absorptions in CdSe colloidal quantum wells. <i>Nature Communications</i> , <b>2019</b> , 10, 4511	17.4	23
97	Shape-Selective Optical Transformations of CdSe Nanoplatelets Driven by Halide Ion Ligand Exchange. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3556-3563	9.6	23
96	Elevated Temperature Photophysical Properties and Morphological Stability of CdSe and CdSe/CdS Nanoplatelets. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 286-293	6.4	23
95	Direct measurement of lattice dynamics and optical phonon excitation in semiconductor nanocrystals using femtosecond stimulated Raman spectroscopy. <i>Physical Review Letters</i> , <b>2013</b> , 111, 107401	7.4	23
94	Determination of the In-Plane Exciton Radius in 2D CdSe Nanoplatelets Magneto-optical Spectroscopy. <i>ACS Nano</i> , <b>2019</b> , 13, 8589-8596	16.7	22
93	Polarization-Dependent Lasing Behavior from Low-Symmetry Nanocavity Arrays. <i>ACS Nano</i> , <b>2019</b> , 13, 7435-7441	16.7	22
92	Transport of Spin-Entangled Triplet Excitons Generated by Singlet Fission. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 6731-6738	6.4	22
91	Engineering Directionality in Quantum Dot Shell Lasing Using Plasmonic Lattices. <i>Nano Letters</i> , <b>2020</b> , 20, 1468-1474	11.5	21
90	Slow thermal equilibration in methylammonium lead iodide revealed by transient mid-infrared spectroscopy. <i>Nature Communications</i> , <b>2018</b> , 9, 2792	17.4	21
89	Transient Melting and Recrystallization of Semiconductor Nanocrystals Under Multiple Electron-Hole Pair Excitation. <i>Nano Letters</i> , <b>2017</b> , 17, 5314-5320	11.5	20



88	Cell-Free Synthetic Biology Chassis for Nanocatalytic Photon-to-Hydrogen Conversion. <i>ACS Nano</i> , <b>2017</b> , 11, 6739-6745	16.7	19
87	Distance Dependence of Förster Resonance Energy Transfer Rates in 2D Perovskite Quantum Wells via Control of Organic Spacer Length. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 4244-4252	16.4	19
86	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. <i>Nature Communications</i> , <b>2021</b> , 12, 981	17.4	19
85	Band-like Charge Photogeneration at a Crystalline Organic Donor/Acceptor Interface. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1701494	21.8	19
84	Synthesis of Type I PbSe/CdSe Dot-on-Plate Heterostructures with Near-Infrared Emission. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 5092-5096	16.4	18
83	Resonant Inelastic X-Ray Scattering Reveals Hidden Local Transitions of the Aqueous OH Radical. <i>Physical Review Letters</i> , <b>2020</b> , 124, 236001	7.4	18
82	Carrier dynamics in highly quantum-confined, colloidal indium antimonide nanocrystals. <i>ACS Nano</i> , <b>2014</b> , 8, 8513-9	16.7	18
81	Silicon nanocrystals at elevated temperatures: retention of photoluminescence and diamond silicon to Silicon carbide phase transition. <i>ACS Nano</i> , <b>2014</b> , 8, 9219-23	16.7	18
80	Reverse Non-Equilibrium Molecular Dynamics Demonstrate That Surface Passivation Controls Thermal Transport at Semiconductor-Solvent Interfaces. <i>ACS Nano</i> , <b>2015</b> , 9, 6278-87	16.7	18
79	Broadband, High-Speed, and Large-Amplitude Dynamic Optical Switching with Yttrium-Doped Cadmium Oxide. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1908377	15.6	18
78	Broadband Ultrafast Dynamics of Refractory Metals: TiN and ZrN. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2000652	8.1	18
77	High Internal Quantum Efficiency Ultraviolet Emission from Phase-Transition Cubic GaN Integrated on Nanopatterned Si(100). <i>ACS Photonics</i> , <b>2018</b> , 5, 955-963	6.3	17
76	Engineering Symmetry-Breaking Nanocrescent Arrays for Nanolasing. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1904157	15.6	17
75	Size-Dependent Coherent-Phonon Plasmon Modulation and Deformation Characterization in Gold Bipyramids and Nanojavelins. <i>ACS Photonics</i> , <b>2016</b> , 3, 758-763	6.3	17
74	Ultrafast Dynamics of Lattice Plasmon Lasers. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 3301-3306	6.4	16
73	Long-lived charge separation in two-dimensional ligand-perovskite heterostructures. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 044711	3.9	16
72	Charge Carriers Modulate the Bonding of Semiconductor Nanoparticle Dopants As Revealed by Time-Resolved X-ray Spectroscopy. <i>ACS Nano</i> , <b>2017</b> , 11, 10070-10076	16.7	16
71	Plasmon nanolasing with aluminum nanoparticle arrays [Invited]. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2019</b> , 36, E104	1.7	16



70	Infrared-pump electronic-probe of methylammonium lead iodide reveals electronically decoupled organic and inorganic sublattices. <i>Nature Communications</i> , <b>2019</b> , 10, 482	17.4	13
69	Tunable Broad Light Emission from 3D "Hollow" Bromide Perovskites through Defect Engineering. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 7069-7080	16.4	13
68	Heat Transfer at Hybrid Interfaces: Interfacial Ligand-to-Nanocrystal Heating Monitored with Infrared Pump, Electronic Probe Spectroscopy. <i>Nano Letters</i> , <b>2018</b> , 18, 7863-7869	11.5	13
67	Tailorable Exciton Transport in Doped Peptide-Amphiphile Assemblies. <i>ACS Nano</i> , <b>2017</b> , 11, 9112-9118	16.7	12
66	Using Photoexcited Core/Shell Quantum Dots To Spin Polarize Appended Radical Qubits. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 13590-13597	16.4	11
65	Transient Negative Optical Nonlinearity of Indium Oxide Nanorod Arrays in the Full-Visible Range. <i>ACS Photonics</i> , <b>2017</b> , 4, 1494-1500	6.3	10
64	Oxidation State Discrimination in the Atomic Layer Deposition of Vanadium Oxides. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 6238-6244	9.6	10
63	Optical and Physical Probing of Thermal Processes in Semiconductor and Plasmonic Nanocrystals. <i>Annual Review of Physical Chemistry</i> , <b>2019</b> , 70, 353-377	15.7	10
62	Spatially defined molecular emitters coupled to plasmonic nanoparticle arrays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 5925-5930	11.5	10
61	Low-Loss Near-Infrared Hyperbolic Metamaterials with Epitaxial ITO-In <sub>2</sub> O <sub>3</sub> Multilayers. <i>ACS Photonics</i> , <b>2018</b> , 5, 2000-2007	6.3	10
60	Ultrafast Silicon Photonics with Visible to Mid-Infrared Pumping of Silicon Nanocrystals. <i>Nano Letters</i> , <b>2017</b> , 17, 6409-6414	11.5	10
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45	Scaling the Artificial Polariton Bandgap at Infrared Frequencies Using Indium Tin Oxide Nanorod Arrays. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 2077-2084	8.1	5
44	Expanding the Cage of 2D Bromide Perovskites by Large A-Site Cations. <i>Chemistry of Materials</i> , <b>2022</b> , 34, 1132-1142	9.6	5
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38	Systematic study of shockley-read-hall and radiative recombination in GaN on Al <sub>2</sub> O <sub>3</sub> , freestanding GaN, and GaN on Si. <i>JPhys Photonics</i> , <b>2020</b> , 2, 035003	2.5	4
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35	Low-threshold laser medium utilizing semiconductor nanoshell quantum dots. <i>Nanoscale</i> , <b>2020</b> , 12, 17426-17436	7.7	4

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27	Spectroscopic Comparison of Thermal Transport at Organic-Inorganic and Organic-Hybrid Interfaces Using CsPbBr <sub>3</sub> and FAPbBr (FA = Formamidinium) Perovskite Nanocrystals. <i>Nano Letters</i> , <b>2019</b> , 19, 8155-8160	11.5	3
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25	Singlet fission in core-linked perylene-3,4,9,10-tetracarboxylic diimide dimers. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 244306	3.9	3
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18	Visualization of Plasmonic Couplings Using Ultrafast Electron Microscopy. <i>Nano Letters</i> , <b>2021</b> , 21, 5842-5849	18.9	2
17	Photoluminescent Re <sub>6</sub> Q <sub>8</sub> I <sub>2</sub> (Q = S, Se) Semiconducting Cluster Compounds. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 5780-5789	9.6	2

16	Light-Driven Redox Activation of CO- and H-Activating Complexes in a Self-Assembled Triad. <i>Journal of Physical Chemistry B</i> , <b>2019</b> , 123, 10980-10989	3.4	2
15	Surface Normal Lasing from CdSe Nanoplatelets Coupled to Aluminum Plasmonic Nanoparticle Lattices. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 19874-19879	3.8	2
14	Gain roll-off in cadmium selenide colloidal quantum wells under intense optical excitation.. <i>Scientific Reports</i> , <b>2022</b> , 12, 8016	4.9	2
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