

# Richard D Schaller

## 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.

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	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
194	Quantum Shells Boost the Optical Gain of Lasing Media.. <i>ACS Nano</i> , <b>2022</b> ,	16.7	3
193	Triple Emission of 5'-(-R-Phenylene)vinylene-2-(2'-hydroxyphenyl)benzoxazole (). Part II: Emission from Anions.. <i>Journal of Physical Chemistry A</i> , <b>2022</b> ,	2.8	1
192	Triple Emission of 5'-(-R-Phenylene)vinylene-2-(2'-hydroxyphenyl)benzoxazole (PVHBO). Part I: Dual Emission from the Neutral Species.. <i>Journal of Physical Chemistry A</i> , <b>2022</b> ,	2.8	1
191	Ultrafast Collective Excited-State Dynamics of a Virus-Supported Fluorophore Antenna.. <i>Journal of Physical Chemistry Letters</i> , <b>2022</b> , 3237-3243	6.4	1
190	Compositionally Tuning Electron Transfer from Photoexcited Core/Shell Quantum Dots via Cation Exchange.. <i>Journal of Physical Chemistry Letters</i> , <b>2022</b> , 3209-3216	6.4	1
189	Interlayer magnetophononic coupling in MnBiTe.. <i>Nature Communications</i> , <b>2022</b> , 13, 1929	17.4	4
188	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
187	Very Robust Spray-Synthesized CsPbI Quantum Emitters with Ultrahigh Room-Temperature Cavity-Free Brightness and Self-Healing Ability. <i>ACS Nano</i> , <b>2021</b> ,	16.7	6
186	Signatures of Coherent Phonon Transport in Ultralow Thermal Conductivity Two-Dimensional Ruddlesden-Popper Phase Perovskites. <i>ACS Nano</i> , <b>2021</b> , 15, 4165-4172	16.7	7
185	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
184	Identification of Brillouin Zones by In-Plane Lasing from Light-Cone Surface Lattice Resonances. <i>ACS Nano</i> , <b>2021</b> , 15, 5567-5573	16.7	4
183	Dynamic lattice distortions driven by surface trapping in semiconductor nanocrystals. <i>Nature Communications</i> , <b>2021</b> , 12, 1860	17.4	10
182	Suppressed Oxidation and Photodarkening of Hybrid Tin Iodide Perovskite Achieved with Reductive Organic Small Molecule. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 4704-4710	6.1	2
181	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
180	Ultrafast Spectroscopy of Plasmonic Titanium Nitride Nanoparticle Lattices. <i>ACS Photonics</i> , <b>2021</b> , 8, 1556-1561	6.3	5
179	Visualization of Plasmonic Couplings Using Ultrafast Electron Microscopy. <i>Nano Letters</i> , <b>2021</b> , 21, 5842-5849	16.4	2

178	Photoluminescent Re6Q8I2 (Q = S, Se) Semiconducting Cluster Compounds. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 5780-5789	9.6	2
177	Anisotropic Transient Disorder of Colloidal, Two-Dimensional CdSe Nanoplatelets upon Optical Excitation. <i>Nano Letters</i> , <b>2021</b> , 21, 1288-1294	11.5	4
176	Colloidal quantum dot lasers. <i>Nature Reviews Materials</i> , <b>2021</b> , 6, 382-401	73.3	52
175	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. <i>Nature Communications</i> , <b>2021</b> , 12, 981	17.4	19
174	Coherent control of asymmetric spintronic terahertz emission from two-dimensional hybrid metal halides. <i>Nature Communications</i> , <b>2021</b> , 12, 5744	17.4	5
173	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
172	Strong Coupling Between Plasmons and Molecular Excitons in Metal-Organic Frameworks. <i>Nano Letters</i> , <b>2021</b> , 21, 7775-7780	11.5	3
171	Photothermal behaviour of titanium nitride nanoparticles evaluated by transient X-ray diffraction. <i>Nanoscale</i> , <b>2021</b> , 13, 2658-2664	7.7	3
170	Charge Transfer and Spin Dynamics in a Zinc Porphyrin Donor Covalently Linked to One or Two Naphthalenediimide Acceptors. <i>Journal of Physical Chemistry A</i> , <b>2021</b> , 125, 825-834	2.8	1
169	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
168	Effects of Intra- and Interchain Interactions on Exciton Dynamics of PTB7 Revealed by Model Oligomers. <i>Molecules</i> , <b>2020</b> , 25,	4.8	3
167	Systematic study of shockley-read-hall and radiative recombination in GaN on Al2O3, freestanding GaN, and GaN on Si. <i>JPhys Photonics</i> , <b>2020</b> , 2, 035003	2.5	4
166	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
165	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
164	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
163	Photophysical implications of ring fusion, linker length, and twisting angle in a series of perylenediimide-thienoacene dimers. <i>Chemical Science</i> , <b>2020</b> , 11, 7133-7143	9.4	3
162	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
161	Quantum Dot-Plasmon Lasing with Controlled Polarization Patterns. <i>ACS Nano</i> , <b>2020</b> , 14, 3426-3433	16.7	26

160	Long-lived charge separation in two-dimensional ligand-perovskite heterostructures. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 044711	3.9	16
159	Engineering Directionality in Quantum Dot Shell Lasing Using Plasmonic Lattices. <i>Nano Letters</i> , <b>2020</b> , 20, 1468-1474	11.5	21
158	Direct Observation of Bandgap Oscillations Induced by Optical Phonons in Hybrid Lead Iodide Perovskites. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1907982	15.6	8
157	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
156	Singlet fission in core-linked terrylene diimide dimers. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 244306	3.9	3
155	Sub-1.4eV bandgap inorganic perovskite solar cells with long-term stability. <i>Nature Communications</i> , <b>2020</b> , 11, 151	17.4	55
154	Observation of the fastest chemical processes in the radiolysis of water. <i>Science</i> , <b>2020</b> , 367, 179-182	33.3	74
153	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
152	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
151	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
150	Broadband Ultrafast Dynamics of Refractory Metals: TiN and ZrN. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2000652	8.1	18
149	Area and thickness dependence of Auger recombination in nanoplatelets. <i>Journal of Chemical Physics</i> , <b>2020</b> , 153, 054104	3.9	5
148	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
147	Brightly Luminescent CsPbBr Nanocrystals through Ultracentrifugation. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 7133-7140	6.4	10
146	Low-threshold laser medium utilizing semiconductor nanoshell quantum dots. <i>Nanoscale</i> , <b>2020</b> , 12, 17426-17436	7.7	16
145	Modification of terahertz emission spectrum using microfabricated spintronic emitters. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 103902	2.5	3
144	Intersubband Relaxation in CdSe Colloidal Quantum Wells. <i>ACS Nano</i> , <b>2020</b> , 14, 12082-12090	16.7	3
143	Simultaneous Ultrafast Transmission and Reflection of Nanometer-Thick Ti3C2Tx MXene Films in the Visible and Near-Infrared: Implications for Energy Storage, Electromagnetic Shielding, and Laser Systems. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 9604-9609	5.6	6

142	Transient Lattice Response upon Photoexcitation in CuInSe Nanocrystals with Organic or Inorganic Surface Passivation. <i>ACS Nano</i> , <b>2020</b> , 14, 13548-13556	16.7	8
141	Heat-driven acoustic phonons in lamellar nanoplatelet assemblies. <i>Nanoscale</i> , <b>2020</b> , 12, 9661-9668	7.7	3
140	Phase control of coherent acoustic phonons in gold bipyramids for optical memory and manipulating plasmon-exciton coupling. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 153102	3.4	
139	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
138	Polarized near-infrared intersubband absorptions in CdSe colloidal quantum wells. <i>Nature Communications</i> , <b>2019</b> , 10, 4511	17.4	23
137	Phonon-induced plasmon-exciton coupling changes probed via oscillation-associated spectra. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 111903	3.4	1
136	Photoinduced, reversible phase transitions in all-inorganic perovskite nanocrystals. <i>Nature Communications</i> , <b>2019</b> , 10, 504	17.4	67
135	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
134	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
133	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
132	Ultrafast Dynamics of Lattice Plasmon Lasers. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 3301-3306	6.4	16
131	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
130	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
129	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
128	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
127	Thermal Excitation Control over Photon Emission Rate of CdSe Nanocrystals. <i>Nano Letters</i> , <b>2019</b> , 19, 2322-2328	11.5	1
126	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
125	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

124	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
123	Microenvironment control of porphyrin binding, organization, and function in peptide nanofiber assemblies. <i>Nanoscale</i> , <b>2019</b> , 11, 5412-5421	7.7	4
122	Heating and cooling of ligand-coated colloidal nanocrystals in solid films and solvent matrices. <i>Nanoscale</i> , <b>2019</b> , 11, 8204-8209	7.7	4
121	Polarization-Dependent Lasing Behavior from Low-Symmetry Nanocavity Arrays. <i>ACS Nano</i> , <b>2019</b> , 13, 7435-7441	16.7	22
120	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
119	Hierarchical Hybridization in Plasmonic Honeycomb Lattices. <i>Nano Letters</i> , <b>2019</b> , 19, 6435-6441	11.5	26
118	Engineering Symmetry-Breaking Nanocrescent Arrays for Nanolasing. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1904157	15.6	17
117	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
116	Intraband Cooling in All-Inorganic and Hybrid Organic-Inorganic Perovskite Nanocrystals. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901725	15.6	27
115	Spectroscopic Comparison of Thermal Transport at Organic-Inorganic and Organic-Hybrid Interfaces Using CsPbBr and FAPbBr (FA = Formamidinium) Perovskite Nanocrystals. <i>Nano Letters</i> , <b>2019</b> , 19, 8155-8160	11.5	3
114	Carrier dynamics of intermediate sub-bandgap transitions in ZnTeO. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 135701	2.5	0
113	Aqueous Carbon Quantum Dot-Embedded PC60-PCBM Nanospheres for Ecological Fluorescent Printing: Contrasting Fluorescence Resonance Energy-Transfer Signals between Watermelon-like and Random Morphologies. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 6525-6535	6.4	9
112	Terahertz emission from magnetic thin film and patterned heterostructures <b>2019</b> ,		4
111	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
110	Charge Transfer Dynamics of Phase-Segregated Halide Perovskites: CHNHPbCl and CHNHPbI or (CHNH)(CHNH) Pb I Mixtures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 9583-9593	9.5	9
109	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
108	Photo-accelerated fast charging of lithium-ion batteries. <i>Nature Communications</i> , <b>2019</b> , 10, 4946	17.4	32
107	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

106	Control of Shell Morphology in p-n Heterostructured Water-Processable Semiconductor Colloids: Toward Extremely Efficient Charge Separation. <i>Small</i> , <b>2019</b> , 15, e1803563	11	4
105	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
104	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
103	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
102	Low-Loss Near-Infrared Hyperbolic Metamaterials with Epitaxial ITO-In2O3 Multilayers. <i>ACS Photonics</i> , <b>2018</b> , 5, 2000-2007	6.3	10
101	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
100	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
99	Anisotropic Photoluminescence from Isotropic Optical Transition Dipoles in Semiconductor Nanoplatelets. <i>Nano Letters</i> , <b>2018</b> , 18, 4647-4652	11.5	27
98	Auger Heating and Thermal Dissipation in Zero-Dimensional CdSe Nanocrystals Examined Using Femtosecond Stimulated Raman Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 4481-4487	6.4	9
97	Seeded growth of single-crystal two-dimensional covalent organic frameworks. <i>Science</i> , <b>2018</b> , 361, 52-57	33.3	310
96	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
95	Phonon-Driven Oscillatory Plasmonic Excitonic Nanomaterials. <i>Nano Letters</i> , <b>2018</b> , 18, 442-448	11.5	8
94	Band-like Charge Photogeneration at a Crystalline Organic Donor/Acceptor Interface. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1701494	21.8	19
93	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
92	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
91	Semiconductor Nanoplatelet Excimers. <i>Nano Letters</i> , <b>2018</b> , 18, 6948-6953	11.5	37
90	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
89	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



88	Optical Signatures of Transiently Disordered Semiconductor Nanocrystals. <i>ACS Nano</i> , <b>2018</b> , 12, 10008-10015	7.4	35
87	Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. <i>Physical Review Letters</i> , <b>2018</b> , 121, 127401	7.4	35
86	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
85	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
84	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
83	Cross-plane coherent acoustic phonons in two-dimensional organic-inorganic hybrid perovskites. <i>Nature Communications</i> , <b>2018</b> , 9, 2019	17.4	53
82	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
81	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
80	Transition metal-substituted lead halide perovskite absorbers. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 3578-3588	13	48
79	Seeing the invisible plasma with transient phonons in cuprous oxide. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 1151-1157	3.6	1
78	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
77	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
76	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
75	Cell-Free Synthetic Biology Chassis for Nanocatalytic Photon-to-Hydrogen Conversion. <i>ACS Nano</i> , <b>2017</b> , 11, 6739-6745	16.7	19
74	Mechanism of Ferric Oxalate Photolysis. <i>ACS Earth and Space Chemistry</i> , <b>2017</b> , 1, 270-276	3.2	40
73	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
72	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
71	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



70	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
69	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
68	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
67	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
66	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
65	Efficient Carrier Multiplication in Colloidal Silicon Nanorods. <i>Nano Letters</i> , <b>2017</b> , 17, 5580-5586	11.5	25
64	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
63	Tailorable Exciton Transport in Doped Peptide-Amphiphile Assemblies. <i>ACS Nano</i> , <b>2017</b> , 11, 9112-9118	16.7	12
62	Band-edge engineering for controlled multi-modal nanolasing in plasmonic superlattices. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 889-894	28.7	125
61	Facile, Economic and Size-Tunable Synthesis of Metal Arsenide Nanocrystals. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 6797-6802	9.6	25
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