Richard D Schaller

List of Publications by Year
in descending order

206 papers	15,805 citations	20759 60 h-index	18075 120 g-index
208 all docs	208 docs citations	208 times ranked	16403 citing authors

#	Article	IF	Citations
1	M-Point Lasing in Hexagonal and Honeycomb Plasmonic Lattices. ACS Photonics, 2022, 9, 52-58.	3.2	12
2	Expanding the Cage of 2D Bromide Perovskites by Large A-Site Cations. Chemistry of Materials, 2022, 34, 1132-1142.	3.2	22
3	Layered structures of assembled imine-linked macrocycles and two-dimensional covalent organic frameworks give rise to prolonged exciton lifetimes. Journal of Materials Chemistry C, 2022, 10, 3015-3026.	2.7	7
4	Quantum Shells Boost the Optical Gain of Lasing Media. ACS Nano, 2022, 16, 3017-3026.	7.3	18
5	Triple Emission of 5â€²-(para-R-Phenylene)vinylene-2-(2â€²-hydroxyphenyl)benzoxazole (PVHBO). Part II: Emission from Anions. Journal of Physical Chemistry A, 2022, , .	1.1	2
6	Triple Emission of 5â€²-(para-R-Phenylene)vinylene-2-(2â€²-hydroxyphenyl)benzoxazole (PVHBO). Part I: Dual Emission from the Neutral Species. Journal of Physical Chemistry A, 2022, 126, 1033-1061.	1.1	7
7	Ligand Control of Structural Diversity in Luminescent Hybrid Copper(I) Iodides. Chemistry of Materials, 2022, 34, 3206-3216.	3.2	23
8	Ultrafast Collective Excited-State Dynamics of a Virus-Supported Fluorophore Antenna. Journal of Physical Chemistry Letters, 2022, 13, 3237-3243.	2.1	2
9	Compositionally Tuning Electron Transfer from Photoexcited Core/Shell Quantum Dots via Cation Exchange. Journal of Physical Chemistry Letters, 2022, 13, 3209-3216.	2.1	8
10	Interlayer magnetophononic coupling in MnBi2Te4. Nature Communications, 2022, 13, 1929.	5.8	22
11	Gain roll-off in cadmium selenide colloidal quantum wells under intense optical excitation. Scientific Reports, 2022, 12, 8016.	1.6	7
12	2,3-Diphenylthieno[3,4-b]pyrazines as Hole-Transporting Materials for Stable, High-Performance Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 2118-2127.	8.8	27
13	Selfâ€Trapped and Free Exciton Dynamics in Vacuumâ€Deposited Cesium Copper Iodide Thin Films. Advanced Optical Materials, 2022, 10, .	3.6	12
14	Enhancing and Extinguishing the Different Emission Features of 2D (EA_{1â^’}_xFA_x)₄Pb₃Br₁₀ Perovskite Films. Advanced Optical Materials, 2022, 10, .	8.6	2
15	Anisotropic Transient Disordering of Colloidal, Two-Dimensional CdSe Nanoplatelets upon Optical Excitation. Nano Letters, 2021, 21, 1288-1294.	4.5	8
16	Colloidal quantum dot lasers. Nature Reviews Materials, 2021, 6, 382-401.	23.3	196
17	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. Nature Communications, 2021, 12, 981.	5.8	67
18	Very Robust Spray-Synthesized CsPbI₃ Quantum Emitters with Ultrahigh Room-Temperature Cavity-Free Brightness and Self-Healing Ability. ACS Nano, 2021, 15, 11358-11368.	7.3	15

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19	Signatures of Coherent Phonon Transport in Ultralow Thermal Conductivity Two-Dimensional Ruddlesdenâ€“Popper Phase Perovskites. ACS Nano, 2021, 15, 4165-4172.	7.3	21
20	Distance Dependence of FÃ¶rster Resonance Energy Transfer Rates in 2D Perovskite Quantum Wells via Control of Organic Spacer Length. Journal of the American Chemical Society, 2021, 143, 4244-4252.	6.6	54
21	Identification of Brillouin Zones by In-Plane Lasing from Light-Cone Surface Lattice Resonances. ACS Nano, 2021, 15, 5567-5573.	7.3	15
22	Dynamic lattice distortions driven by surface trapping in semiconductor nanocrystals. Nature Communications, 2021, 12, 1860.	5.8	19
23	Suppressed Oxidation and Photodarkening of Hybrid Tin Iodide Perovskite Achieved with Reductive Organic Small Molecule. ACS Applied Energy Materials, 2021, 4, 4704-4710.	2.5	10
24	Tunable Broad Light Emission from 3D â€œHollowâ€•Bromide Perovskites through Defect Engineering. Journal of the American Chemical Society, 2021, 143, 7069-7080.	6.6	37
25	Ultrafast Spectroscopy of Plasmonic Titanium Nitride Nanoparticle Lattices. ACS Photonics, 2021, 8, 1556-1561.	3.2	17
26	Visualization of Plasmonic Couplings Using Ultrafast Electron Microscopy. Nano Letters, 2021, 21, 5842-5849.	4.5	18
27	Photoluminescent Re₆Q₈I₂ (Q = S, Se) Semiconducting Cluster Compounds. Chemistry of Materials, 2021, 33, 5780-5789.	3.2	5
28	Coherent control of asymmetric spintronic terahertz emission from two-dimensional hybrid metal halides. Nature Communications, 2021, 12, 5744.	5.8	24
29	Surface Normal Lasing from CdSe Nanoplatelets Coupled to Aluminum Plasmonic Nanoparticle Lattices. Journal of Physical Chemistry C, 2021, 125, 19874-19879.	1.5	12
30	Strong Coupling Between Plasmons and Molecular Excitons in Metalâ€“Organic Frameworks. Nano Letters, 2021, 21, 7775-7780.	4.5	21
31	Photothermal behaviour of titanium nitride nanoparticles evaluated by transient X-ray diffraction. Nanoscale, 2021, 13, 2658-2664.	2.8	15
32	Charge Transfer and Spin Dynamics in a Zinc Porphyrin Donor Covalently Linked to One or Two Naphthalenediimide Acceptors. Journal of Physical Chemistry A, 2021, 125, 825-834.	1.1	6
33	Synthetic Ligand Selection Affects Stoichiometry, Carrier Dynamics, and Trapping in CuInSe₂ Nanocrystals. ACS Nano, 2021, 15, 19588-19599.	7.3	4
34	Revealing the Three-Dimensional Orientation and Interplay between Plasmons and Interband Transitions for Single Gold Bipyramids by Photoluminescence Excitation Pattern Imaging. Journal of Physical Chemistry C, 2021, 125, 26978-26985.	1.5	3
35	Sub-1.4eV bandgap inorganic perovskite solar cells with long-term stability. Nature Communications, 2020, 11, 151.	5.8	92
36	Observation of the fastest chemical processes in the radiolysis of water. Science, 2020, 367, 179-182.	6.0	149

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37	Broadband, Highâ€Speed, and Largeâ€Amplitude Dynamic Optical Switching with Yttriumâ€Doped Cadmium Oxide. Advanced Functional Materials, 2020, 30, 1908377.	7.8	38
38	Large Exciton Diffusion Coefficients in Two-Dimensional Covalent Organic Frameworks with Different Domain Sizes Revealed by Ultrafast Exciton Dynamics. Journal of the American Chemical Society, 2020, 142, 14957-14965.	6.6	68
39	Using Photoexcited Core/Shell Quantum Dots To Spin Polarize Appended Radical Qubits. Journal of the American Chemical Society, 2020, 142, 13590-13597.	6.6	19
40	Broadband Ultrafast Dynamics of Refractory Metals: TiN and ZrN. Advanced Optical Materials, 2020, 8, 2000652.	3.6	45
41	Area and thickness dependence of Auger recombination in nanoplatelets. Journal of Chemical Physics, 2020, 153, 054104.	1.2	25
42	Nickel(II) Metal Complexes as Optically Addressable Qubit Candidates. Journal of the American Chemical Society, 2020, 142, 14826-14830.	6.6	46
43	Brightly Luminescent CsPbBr₃ Nanocrystals through Ultracentrifugation. Journal of Physical Chemistry Letters, 2020, 11, 7133-7140.	2.1	13
44	Low-threshold laser medium utilizing semiconductor nanoshell quantum dots. Nanoscale, 2020, 12, 17426-17436.	2.8	9
45	Modification of terahertz emission spectrum using microfabricated spintronic emitters. Journal of Applied Physics, 2020, 128, 103902.	1.1	9
46	Intersubband Relaxation in CdSe Colloidal Quantum Wells. ACS Nano, 2020, 14, 12082-12090.	7.3	7
47	Simultaneous Ultrafast Transmission and Reflection of Nanometer-Thick Ti₃C₂T_x MXene Films in the Visible and Near-Infrared: Implications for Energy Storage, Electromagnetic Shielding, and Laser Systems. ACS Applied Nano Materials, 2020, 3, 9604-9609.	2.4	16
48	Transient Lattice Response upon Photoexcitation in CuInSe₂ Nanocrystals with Organic or Inorganic Surface Passivation. ACS Nano, 2020, 14, 13548-13556.	7.3	10
49	Negative Pressure Engineering with Large Cage Cations in 2D Halide Perovskites Causes Lattice Softening. Journal of the American Chemical Society, 2020, 142, 11486-11496.	6.6	84
50	Effects of Intra- and Interchain Interactions on Exciton Dynamics of PTB7 Revealed by Model Oligomers. Molecules, 2020, 25, 2441.	1.7	4
51	Systematic study of shockley-read-hall and radiative recombination in GaN on Al₂O₃, freestanding GaN, and GaN on Si. JPhys Photonics, 2020, 2, 035003.	2.2	11
52	Resonant Inelastic X-Ray Scattering Reveals Hidden Local Transitions of the Aqueous OH Radical. Physical Review Letters, 2020, 124, 236001.	2.9	28
53	Three-Dimensional Lead Iodide Perovskitoid Hybrids with High X-ray Photoresponse. Journal of the American Chemical Society, 2020, 142, 6625-6637.	6.6	82
54	Bright Silicon Nanocrystals from a Liquid Precursor: Quasi-Direct Recombination with High Quantum Yield. ACS Nano, 2020, 14, 3858-3867.	7.3	43

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55	Photophysical implications of ring fusion, linker length, and twisting angle in a series of perylenediimideâ€“thienoacene dimers. Chemical Science, 2020, 11, 7133-7143.	3.7	6
56	In Situ Grazingâ€Incidence Wideâ€Angle Scattering Reveals Mechanisms for Phase Distribution and Disorientation in 2D Halide Perovskite Films. Advanced Materials, 2020, 32, e2002812.	11.1	86
57	Quantum Dot-Plasmon Lasing with Controlled Polarization Patterns. ACS Nano, 2020, 14, 3426-3433.	7.3	66
58	Long-lived charge separation in two-dimensional ligand-perovskite heterostructures. Journal of Chemical Physics, 2020, 152, 044711.	1.2	28
59	Engineering Directionality in Quantum Dot Shell Lasing Using Plasmonic Lattices. Nano Letters, 2020, 20, 1468-1474.	4.5	48
60	Direct Observation of Bandgap Oscillations Induced by Optical Phonons in Hybrid Lead Iodide Perovskites. Advanced Functional Materials, 2020, 30, 1907982.	7.8	15
61	Water-Stable 1D Hybrid Tin(II) Iodide Emits Broad Light with 36% Photoluminescence Quantum Efficiency. Journal of the American Chemical Society, 2020, 142, 9028-9038.	6.6	57
62	Heat-driven acoustic phonons in lamellar nanoplatelet assemblies. Nanoscale, 2020, 12, 9661-9668.	2.8	5
63	Phase control of coherent acoustic phonons in gold bipyramids for optical memory and manipulating plasmonâ€“exciton coupling. Applied Physics Letters, 2020, 116, 153102.	1.5	1
64	Organic Cation Alloying on Intralayer A and Interlayer Aâ€™ sites in 2D Hybrid Dionâ€“Jacobson Lead Bromide Perovskites (Aâ€™)(A)Pb₂Br₇. Journal of the American Chemical Society, 2020, 142, 8342-8351.	6.6	64
65	Singlet fission in core-linked terrylenediimide dimers. Journal of Chemical Physics, 2020, 153, 244306.	1.2	4
66	Extraordinary Permittivity Modulation in Zinc Oxide for Ultrafast Dynamic Nanophotonics. , 2020, , .		0
67	Hierarchical Hybridization in Plasmonic Honeycomb Lattices. Nano Letters, 2019, 19, 6435-6441.	4.5	47
68	Engineering Symmetryâ€Breaking Nanocrescent Arrays for Nanolasing. Advanced Functional Materials, 2019, 29, 1904157.	7.8	34
69	Two-Dimensional Dionâ€“Jacobson Hybrid Lead Iodide Perovskites with Aromatic Diammonium Cations. Journal of the American Chemical Society, 2019, 141, 12880-12890.	6.6	241
70	Intraband Cooling in Allâ€Inorganic and Hybrid Organicâ€“Inorganic Perovskite Nanocrystals. Advanced Functional Materials, 2019, 29, 1901725.	7.8	42
71	Spectroscopic Comparison of Thermal Transport at Organicâ€“Inorganic and Organic-Hybrid Interfaces Using CsPbBr₃ and FAPbBr₃ (FA = Formamidinium) Perovskite Nanocrystals. Nano Letters, 2019, 19, 8155-8160.	4.5	4
72	Carrier dynamics of intermediate sub-bandgap transitions in ZnTeO. Journal of Applied Physics, 2019, 126, 135701.	1.1	2

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73	Aqueous Carbon Quantum Dot-Embedded PC60-PC₆₁BM Nanospheres for Ecological Fluorescent Printing: Contrasting Fluorescence Resonance Energy-Transfer Signals between Watermelon-like and Random Morphologies. Journal of Physical Chemistry Letters, 2019, 10, 6525-6535.	2.1	17
74	Polarized near-infrared intersubband absorptions in CdSe colloidal quantum wells. Nature Communications, 2019, 10, 4511.	5.8	34
75	Phonon-induced plasmon-exciton coupling changes probed via oscillation-associated spectra. Applied Physics Letters, 2019, 115, .	1.5	3
76	Photoinduced, reversible phase transitions in all-inorganic perovskite nanocrystals. Nature Communications, 2019, 10, 504.	5.8	121
77	Infrared-pump electronic-probe of methylammonium lead iodide reveals electronically decoupled organic and inorganic sublattices. Nature Communications, 2019, 10, 482.	5.8	25
78	Disphenoidal Zero-Dimensional Lead, Tin, and Germanium Halides: Highly Emissive Singlet and Triplet Self-Trapped Excitons and X-ray Scintillation. Journal of the American Chemical Society, 2019, 141, 9764-9768.	6.6	336
79	Determination of the In-Plane Exciton Radius in 2D CdSe Nanoplatelets via Magneto-optical Spectroscopy. ACS Nano, 2019, 13, 8589-8596.	7.3	35
80	Ultrafast Dynamics of Lattice Plasmon Lasers. Journal of Physical Chemistry Letters, 2019, 10, 3301-3306.	2.1	22
81	Optical and Physical Probing of Thermal Processes in Semiconductor and Plasmonic Nanocrystals. Annual Review of Physical Chemistry, 2019, 70, 353-377.	4.8	13
82	Shape-Selective Optical Transformations of CdSe Nanoplatelets Driven by Halide Ion Ligand Exchange. Chemistry of Materials, 2019, 31, 3556-3563.	3.2	31
83	Expeditious, scalable solution growth of metal oxide films by combustion blade coating for flexible electronics. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9230-9238.	3.3	35
84	Small Cyclic Diammonium Cation Templated (110)-Oriented 2D Halide (X = I, Br, Cl) Perovskites with White-Light Emission. Chemistry of Materials, 2019, 31, 3582-3590.	3.2	101
85	Thermal Excitation Control over Photon Emission Rate of CdSe Nanocrystals. Nano Letters, 2019, 19, 2322-2328.	4.5	2
86	Reducing the Optical Gain Threshold in Two-Dimensional CdSe Nanoplatelets by the Giant Oscillator Strength Transition Effect. Journal of Physical Chemistry Letters, 2019, 10, 1624-1632.	2.1	38
87	Synthesis of Type I PbSe/CdSe Dot-on-Plate Heterostructures with Near-Infrared Emission. Journal of the American Chemical Society, 2019, 141, 5092-5096.	6.6	25
88	Spatially defined molecular emitters coupled to plasmonic nanoparticle arrays. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5925-5930.	3.3	24
89	Microenvironment control of porphyrin binding, organization, and function in peptide nanofiber assemblies. Nanoscale, 2019, 11, 5412-5421.	2.8	6
90	Heating and cooling of ligand-coated colloidal nanocrystals in solid films and solvent matrices. Nanoscale, 2019, 11, 8204-8209.	2.8	6

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91	Polarization-Dependent Lasing Behavior from Low-Symmetry Nanocavity Arrays. ACS Nano, 2019, 13, 7435-7441.	7.3	45
92	Quintet-triplet mixing determines the fate of the multiexciton state produced by singlet fission in a terrylenediimide dimer at room temperature. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8178-8183.	3.3	73
93	Charge Transfer Dynamics of Phase-Segregated Halide Perovskites: CH₃NH₃PbCl₃ and CH₃NH₃PbI₃ or (C₄H₉NH₃)₂(CH₃NH₃)_{nâ^'1}Pbs Mixtures. ACS Applied Materials & Interfaces, 2019, 11, 9583-9593.	4.0	14
94	Emissive Single-Crystalline Boroxine-Linked Colloidal Covalent Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 19728-19735.	6.6	79
95	Photo-accelerated fast charging of lithium-ion batteries. Nature Communications, 2019, 10, 4946.	5.8	68
96	Light-Driven Redox Activation of CO₂- and H₂-Activating Complexes in a Self-Assembled Triad. Journal of Physical Chemistry B, 2019, 123, 10980-10989.	1.2	2
97	Control of Shell Morphology in pâ€“n Heterostructured Waterâ€Processable Semiconductor Colloids: Toward Extremely Efficient Charge Separation. Small, 2019, 15, e1803563.	5.2	9
98	Terahertz emission from magnetic thin film and patterned heterostructures. , 2019, , .		7
99	Plasmon nanolasing with aluminum nanoparticle arrays [Invited]. Journal of the Optical Society of America B: Optical Physics, 2019, 36, E104.	0.9	28
100	Elevated Temperature Photophysical Properties and Morphological Stability of CdSe and CdSe/CdS Nanoplatelets. Journal of Physical Chemistry Letters, 2018, 9, 286-293.	2.1	27
101	High Internal Quantum Efficiency Ultraviolet Emission from Phase-Transition Cubic GaN Integrated on Nanopatterned Si(100). ACS Photonics, 2018, 5, 955-963.	3.2	22
102	Unique Optical Properties of Methylammonium Lead Iodide Nanocrystals Below the Bulk Tetragonal-Orthorhombic Phase Transition. Nano Letters, 2018, 18, 846-852.	4.5	38
103	Low-Loss Near-Infrared Hyperbolic Metamaterials with Epitaxial ITO-In₂O₃ Multilayers. ACS Photonics, 2018, 5, 2000-2007.	3.2	14
104	Inter-phase charge and energy transfer in Ruddlesdenâ€“Popper 2D perovskites: critical role of the spacing cations. Journal of Materials Chemistry A, 2018, 6, 6244-6250.	5.2	94
105	Phonon-Driven Oscillatory Plasmonic Excitonic Nanomaterials. Nano Letters, 2018, 18, 442-448.	4.5	14
106	Bandâ€like Charge Photogeneration at a Crystalline Organic Donor/Acceptor Interface. Advanced Energy Materials, 2018, 8, 1701494.	10.2	23
107	Transport of Spin-Entangled Triplet Excitons Generated by Singlet Fission. Journal of Physical Chemistry Letters, 2018, 9, 6731-6738.	2.1	33
108	Heat Transfer at Hybrid Interfaces: Interfacial Ligand-to-Nanocrystal Heating Monitored with Infrared Pump, Electronic Probe Spectroscopy. Nano Letters, 2018, 18, 7863-7869.	4.5	18

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109	Semiconductor Nanoplatelet Excimers. Nano Letters, 2018, 18, 6948-6953.	4.5	46
110	Origin of Broad Emission Spectra in InP Quantum Dots: Contributions from Structural and Electronic Disorder. Journal of the American Chemical Society, 2018, 140, 15791-15803.	6.6	123
111	Direct Synthesis of Six-Monolayer (1.9 nm) Thick Zinc-Blende CdSe Nanoplatelets Emitting at 585 nm. Chemistry of Materials, 2018, 30, 6957-6960.	3.2	77
112	Optical Signatures of Transiently Disordered Semiconductor Nanocrystals. ACS Nano, 2018, 12, 10008-10015.	7.3	9
113	Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. Physical Review Letters, 2018, 121, 127401.	2.9	51
114	Structural Diversity in White-Light-Emitting Hybrid Lead Bromide Perovskites. Journal of the American Chemical Society, 2018, 140, 13078-13088.	6.6	351
115	Lowâ€Temperature Absorption, Photoluminescence, and Lifetime of CsPbX₃ (X = Cl, Br, I) Nanocrystals. Advanced Functional Materials, 2018, 28, 1800945.	7.8	186
116	Control of Terahertz Emission by Ultrafast Spin-Charge Current Conversion at Rashba Interfaces. Physical Review Letters, 2018, 120, 207207.	2.9	114
117	Cross-plane coherent acoustic phonons in two-dimensional organic-inorganic hybrid perovskites. Nature Communications, 2018, 9, 2019.	5.8	71
118	Material Dimensionality Effects on Electron Transfer Rates Between CsPbBr₃ and CdSe Nanoparticles. Nano Letters, 2018, 18, 4771-4776.	4.5	49
119	Isothermal pressure-derived metastable states in 2D hybrid perovskites showing enduring bandgap narrowing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8076-8081.	3.3	137
120	Anisotropic Photoluminescence from Isotropic Optical Transition Dipoles in Semiconductor Nanoplatelets. Nano Letters, 2018, 18, 4647-4652.	4.5	38
121	Auger Heating and Thermal Dissipation in Zero-Dimensional CdSe Nanocrystals Examined Using Femtosecond Stimulated Raman Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 4481-4487.	2.1	14
122	Seeded growth of single-crystal two-dimensional covalent organic frameworks. Science, 2018, 361, 52-57.	6.0	474
123	Slow thermal equilibration in methylammonium lead iodide revealed by transient mid-infrared spectroscopy. Nature Communications, 2018, 9, 2792.	5.8	25
124	Violet-to-Blue Gain and Lasing from Colloidal CdS Nanoplatelets: Low-Threshold Stimulated Emission Despite Low Photoluminescence Quantum Yield. ACS Photonics, 2017, 4, 576-583.	3.2	74
125	Transition metal-substituted lead halide perovskite absorbers. Journal of Materials Chemistry A, 2017, 5, 3578-3588.	5.2	62
126	Seeing the invisible plasma with transient phonons in cuprous oxide. Physical Chemistry Chemical Physics, 2017, 19, 1151-1157.	1.3	1

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127	Pressureâ€Induced Bandgap Optimization in Leadâ€Based Perovskites with Prolonged Carrier Lifetime and Ambient Retainability. Advanced Functional Materials, 2017, 27, 1604208.	7.8	167
128	Transient Negative Optical Nonlinearity of Indium Oxide Nanorod Arrays in the Full-Visible Range. ACS Photonics, 2017, 4, 1494-1500.	3.2	11
129	Oxidation State Discrimination in the Atomic Layer Deposition of Vanadium Oxides. Chemistry of Materials, 2017, 29, 6238-6244.	3.2	16
130	Cell-Free Synthetic Biology Chassis for Nanocatalytic Photon-to-Hydrogen Conversion. ACS Nano, 2017, 11, 6739-6745.	7.3	21
131	Mechanism of Ferric Oxalate Photolysis. ACS Earth and Space Chemistry, 2017, 1, 270-276.	1.2	59
132	Highâ€Temperature Photoluminescence of CsPbX₃ (X = Cl, Br, I) Nanocrystals. Advanced Functional Materials, 2017, 27, 1606750.	7.8	242
133	Conformal Coating of a Phase Change Material on Ordered Plasmonic Nanorod Arrays for Broadband All-Optical Switching. ACS Nano, 2017, 11, 693-701.	7.3	55
134	Two Regimes of Bandgap Red Shift and Partial Ambient Retention in Pressure-Treated Two-Dimensional Perovskites. ACS Energy Letters, 2017, 2, 2518-2524.	8.8	89
135	Enhanced Size Selection in Two-Photon Excitation for CsPbBr₃ Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2017, 8, 5119-5124.	2.1	43
136	Polar Fluctuations in Metal Halide Perovskites Uncovered by Acoustic Phonon Anomalies. ACS Energy Letters, 2017, 2, 2463-2469.	8.8	47
137	Charge Carriers Modulate the Bonding of Semiconductor Nanoparticle Dopants As Revealed by Time-Resolved X-ray Spectroscopy. ACS Nano, 2017, 11, 10070-10076.	7.3	17
138	Ultrafast Silicon Photonics with Visible to Mid-Infrared Pumping of Silicon Nanocrystals. Nano Letters, 2017, 17, 6409-6414.	4.5	10
139	Transient Melting and Recrystallization of Semiconductor Nanocrystals Under Multiple Electronâ€“Hole Pair Excitation. Nano Letters, 2017, 17, 5314-5320.	4.5	23
140	Efficient Carrier Multiplication in Colloidal Silicon Nanorods. Nano Letters, 2017, 17, 5580-5586.	4.5	32
141	Size-Dependent Biexciton Quantum Yields and Carrier Dynamics of Quasi-Two-Dimensional Core/Shell Nanoplatelets. ACS Nano, 2017, 11, 9119-9127.	7.3	66
142	Tailorable Exciton Transport in Doped Peptideâ€“Amphiphile Assemblies. ACS Nano, 2017, 11, 9112-9118.	7.3	19
143	Band-edge engineering for controlled multi-modal nanolasing in plasmonic superlattices. Nature Nanotechnology, 2017, 12, 889-894.	15.6	167
144	Slow Organicâ€toâ€Inorganic Subâ€Lattice Thermalization in Methylammonium Lead Halide Perovskites Observed by Ultrafast Photoluminescence. Advanced Energy Materials, 2016, 6, 1600422.	10.2	32

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145	Large optical nonlinearity of ITO nanorods for sub-picosecond all-optical modulation of the full-visible spectrum. Nature Communications, 2016, 7, 12892.	5.8	88
146	Size-Dependent Coherent-Phonon Plasmon Modulation and Deformation Characterization in Gold Bipyramids and Nanojavelins. ACS Photonics, 2016, 3, 758-763.	3.2	24
147	Facile, Economic and Size-Tunable Synthesis of Metal Arsenide Nanocrystals. Chemistry of Materials, 2016, 28, 6797-6802.	3.2	40
148	Surface-Area-Dependent Electron Transfer Between Isoenergetic 2D Quantum Wells and a Molecular Acceptor. Journal of the American Chemical Society, 2016, 138, 11109-11112.	6.6	35
149	Gigahertz Acoustic Vibrations of Elastically Anisotropic Indiumâ€“Tin-Oxide Nanorod Arrays. Nano Letters, 2016, 16, 5639-5646.	4.5	10
150	Scaling the Artificial Polariton Bandgap at Infrared Frequencies Using Indium Tin Oxide Nanorod Arrays. Advanced Optical Materials, 2016, 4, 2077-2084.	3.6	7
151	Simultaneous band-gap narrowing and carrier-lifetime prolongation of organicâ€“inorganic trihalide perovskites. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8910-8915.	3.3	269
152	Electronâ€“Rotor Interaction in Organicâ€“Inorganic Lead Iodide Perovskites Discovered by Isotope Effects. Journal of Physical Chemistry Letters, 2016, 7, 2879-2887.	2.1	79
153	Large Transient Optical Modulation of Epsilon-Near-Zero Colloidal Nanocrystals. ACS Nano, 2016, 10, 10099-10105.	7.3	44
154	Ultrafast switching of tunable infrared plasmons in indium tin oxide nanorod arrays with large absolute amplitude. Nature Photonics, 2016, 10, 267-273.	15.6	247
155	Giant optical enhancement of strain gradient in ferroelectric BiFeO3 thin films and its physical origin. Scientific Reports, 2015, 5, 16650.	1.6	33
156	Subâ€Picosecond Singlet Exciton Fission in Cyanoâ€Substituted Diaryltetracenes. Angewandte Chemie - International Edition, 2015, 54, 8679-8683.	7.2	65
157	Linking Group Influences Charge Separation and Recombination in Allâ€Conjugated Block Copolymer Photovoltaics. Advanced Functional Materials, 2015, 25, 5578-5585.	7.8	38
158	Reverse Non-Equilibrium Molecular Dynamics Demonstrate That Surface Passivation Controls Thermal Transport at Semiconductorâ€“Solvent Interfaces. ACS Nano, 2015, 9, 6278-6287.	7.3	21
159	Synthesis and Ligand Exchange of Thiol-Capped Silicon Nanocrystals. Langmuir, 2015, 31, 6886-6893.	1.6	53
160	Singlet Exciton Fission in Thin Films of tert-Butyl-Substituted Terrylenes. Journal of Physical Chemistry A, 2015, 119, 4151-4161.	1.1	85
161	Picosecond energy transfer and multiexciton transfer outpaces Auger recombination in binaryÂCdSe nanoplatelet solids. Nature Materials, 2015, 14, 484-489.	13.3	211
162	Fast, Ratiometric FRET from Quantum Dot Conjugated Stabilized Single Chain Variable Fragments for Quantitative Botulinum Neurotoxin Sensing. Nano Letters, 2015, 15, 7161-7167.	4.5	40

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