Osman M Bakr

List of Publications by Year in descending order

294 papers	41,280 citations	2311 98 h-index	2500 196 g-index
297 all docs	297 docs citations	297 times ranked	27581 citing authors

#	Article	IF	Citations
1	Resonanceâ€Mediated Dynamic Modulation of Perovskite Crystallization for Efficient and Stable Solar Cells. Advanced Materials, 2022, 34, e2107111.	11.1	21
2	Perovskite-Nanosheet Sensitizer for Highly Efficient Organic X-ray Imaging Scintillator. ACS Energy Letters, 2022, 7, 10-16.	8.8	72
3	Nearly 100% energy transfer at the interface of metal-organic frameworks for X-ray imaging scintillators. Matter, 2022, 5, 253-265.	5.0	53
4	Self-Assembly and Regrowth of Metal Halide Perovskite Nanocrystals for Optoelectronic Applications. Accounts of Chemical Research, 2022, 55, 262-274.	7.6	49
5	Large-Area Perovskite-Related Copper Halide Film for High-Resolution Flexible X-ray Imaging Scintillation Screens. ACS Energy Letters, 2022, 7, 844-846.	8.8	86
6	All-inorganic halide-perovskite polymer-fiber-photodetector for high-speed optical wireless communication. Optics Express, 2022, 30, 9823.	1.7	19
7	Perovskite Semiconductor Nanocrystals. Energy Material Advances, 2022, 2022, .	4.7	9
8	Cryogenic Focused Ion Beam Enables Atomic-Resolution Imaging of Local Structures in Highly Sensitive Bulk Crystals and Devices. Journal of the American Chemical Society, 2022, 144, 3182-3191.	6.6	28
9	Energy Transfer in Metalâ€“Organic Frameworks for Fluorescence Sensing. ACS Applied Materials & Interfaces, 2022, 14, 9970-9986.	4.0	109
10	Overcoming Degradation Pathways to Achieve Stable Blue Perovskite Light-Emitting Diodes. ACS Energy Letters, 2022, 7, 1348-1354.	8.8	28
11	Engineering Surface Orientations for Efficient and Stable Hybrid Perovskite Single-Crystal Solar Cells. ACS Energy Letters, 2022, 7, 1544-1552.	8.8	24
12	Interface Engineering of Biâ€Fluorescence Molecules for Highâ€Performance Data Encryption and Ultralow UVâ€Light Detection. Advanced Optical Materials, 2022, 10, .	3.6	5
13	Metalâ€“Organic Frameworks in Mixed-Matrix Membranes for High-Speed Visible-Light Communication. Journal of the American Chemical Society, 2022, 144, 6813-6820.	6.6	23
14	Wide-field-of-view Perovskite Quantum-dots Fibers Array for Easing Pointing, Acquisition and Tracking in Underwater Wireless Optical Communication. , 2022, , .		0
15	Plasmonic Nb₂CT_x MXene-MAPbI₃ Heterostructure for Self-Powered Visible-NIR Photodiodes. ACS Nano, 2022, 16, 7904-7914.	7.3	19
16	Photoactivated p-Doping of Organic Interlayer Enables Efficient Perovskite/Silicon Tandem Solar Cells. ACS Energy Letters, 2022, 7, 1987-1993.	8.8	14
17	Soft perovskites stabilized by robust heterojunctions. Joule, 2022, 6, 951-952.	11.7	2
18	Multiple exciton generation in tinâ€“lead halide perovskite nanocrystals for photocurrent quantum efficiency enhancement. Nature Photonics, 2022, 16, 485-490.	15.6	40

#	Article	IF	Citations
19	Ultrafast transient infrared spectroscopy for probing trapping states in hybrid perovskite films. Communications Chemistry, 2022, 5, .	2.0	14
20	Visible-Light Copper Nanocluster Catalysis for the Câ€“N Coupling of Aryl Chlorides at Room Temperature. Journal of the American Chemical Society, 2022, 144, 12052-12061.	6.6	37
21	Lecithin Capping Ligands Enable Ultrastable Perovskite-Phase CsPbI₃ Quantum Dots for Rec. 2020 Bright-Red Light-Emitting Diodes. Journal of the American Chemical Society, 2022, 144, 13302-13310.	6.6	59
22	[Cu₂₃(PhSe)₁₆(Ph₃P)₈(H)₆]Â·BF₄: Atomic-Level Insights into Cuboidal Polyhydrido Copper Nanoclusters and Their Quasi-simple Cubic Self-Assembly. , 2021, 3, 90-99.		41
23	Perovskite Single-Crystal Solar Cells: Going Forward. ACS Energy Letters, 2021, 6, 631-642.	8.8	74
24	Micropump Fluidic Strategy for Fabricating Perovskite Microwire Array-Based Devices Embedded in Semiconductor Platform. Cell Reports Physical Science, 2021, 2, 100304.	2.8	11
25	Metal Halide Perovskites for X-ray Imaging Scintillators and Detectors. ACS Energy Letters, 2021, 6, 739-768.	8.8	403
26	Phosphatidylcholine-mediated regulation of growth kinetics for colloidal synthesis of cesium tin halide nanocrystals. Nanoscale, 2021, 13, 16726-16733.	2.8	7
27	Domainâ€Sizeâ€Dependent Residual Stress Governs the Phaseâ€Transition and Photoluminescence Behavior of Methylammonium Lead Iodide. Advanced Functional Materials, 2021, 31, 2008088.	7.8	8
28	Low-Temperature Molten Salts Synthesis: CsPbBr₃ Nanocrystals with High Photoluminescence Emission Buried in Mesoporous SiO₂. ACS Energy Letters, 2021, 6, 900-907.	8.8	68
29	CsMnBr₃: Lead-Free Nanocrystals with High Photoluminescence Quantum Yield and Picosecond Radiative Lifetime. , 2021, 3, 290-297.		86
30	Engineering Bandâ€Type Alignment in CsPbBr₃ Perovskiteâ€Based Artificial Multiple Quantum Wells. Advanced Materials, 2021, 33, e2005166.	11.1	12
31	[Ag₉(1,2-BDT)₆]^{3â€“}: How Square-Pyramidal Building Blocks Self-Assemble into the Smallest Silver Nanocluster. Inorganic Chemistry, 2021, 60, 4306-4312.	1.9	16
32	[Cu₁₅(PPh₃)₆(PET)₁₃]²⁺: a Copper Nanocluster with Crystallization Enhanced Photoluminescence. Small, 2021, 17, e2006839.	5.2	50
33	Successes and Challenges of Core/Shell Lead Halide Perovskite Nanocrystals. ACS Energy Letters, 2021, 6, 1340-1357.	8.8	100
34	Effect of Zincâ€Doping on the Reduction of the Hotâ€Carrier Cooling Rate in Halide Perovskites. Angewandte Chemie, 2021, 133, 11052-11058.	1.6	2
35	Effect of Zincâ€Doping on the Reduction of the Hotâ€Carrier Cooling Rate in Halide Perovskites. Angewandte Chemie - International Edition, 2021, 60, 10957-10963.	7.2	50
36	Gentle Materials Need Gentle Fabrication: Encapsulation of Perovskites by Gas-Phase Alumina Deposition. Journal of Physical Chemistry Letters, 2021, 12, 2348-2357.	2.1	8

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37	Intriguing Ultrafast Charge Carrier Dynamics in Two-Dimensional Ruddlesdenâ€“Popper Hybrid Perovskites. Journal of Physical Chemistry C, 2021, 125, 9630-9637.	1.5	7
38	Colloidal PbS Quantum Dots for Visible-to-Near-Infrared Optical Internet of Things. IEEE Photonics Journal, 2021, 13, 1-11.	1.0	4
39	Theory-Guided Synthesis of Highly Luminescent Colloidal Cesium Tin Halide Perovskite Nanocrystals. Journal of the American Chemical Society, 2021, 143, 5470-5480.	6.6	49
40	18.4â€‰% Organic Solar Cells Using a High Ionization Energy Selfâ€Assembled Monolayer as Holeâ€Extraction Interlayer. ChemSusChem, 2021, 14, 3569-3578.	3.6	121
41	Shining Light on the Structure of Lead Halide Perovskite Nanocrystals. , 2021, 3, 845-861.		23
42	62â€8: Invited Paper: High Color Gamut QDot â„¢ LCD Displays with Perovskite Quantum Dots: Devices Architecture, Performance and Reliability. Digest of Technical Papers SID International Symposium, 2021, 52, 909-911.	0.1	1
43	Luminescent Copper(I) Halides for Optoelectronic Applications. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100138.	1.2	22
44	Directional Exciton Migration in Benzoimidazole-Based Metalâ€“Organic Frameworks. Journal of Physical Chemistry Letters, 2021, 12, 4917-4927.	2.1	10
45	Manipulation of hot carrier cooling dynamics in two-dimensional Dionâ€“Jacobson hybrid perovskites via Rashba band splitting. Nature Communications, 2021, 12, 3995.	5.8	41
46	Energy Spotlight. ACS Energy Letters, 2021, 6, 2359-2361.	8.8	0
47	Allâ€Inorganic Quantumâ€Dot LEDs Based on a Phaseâ€Stabilized Î±â€CsPbI 3 Perovskite. Angewandte Chemie, 2021, 133, 16300-16306.	1.6	1
48	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	7.3	705
49	Allâ€Inorganic Quantumâ€Dot LEDs Based on a Phaseâ€Stabilized Î±â€CsPbI₃ Perovskite. Angewandte Chemie - International Edition, 2021, 60, 16164-16170.	7.2	210
50	Access to Ultrafast Surface and Interface Carrier Dynamics Simultaneously in Space and Time. Journal of Physical Chemistry C, 2021, 125, 14495-14516.	1.5	6
51	Cascade Electron Transfer Induces Slow Hot Carrier Relaxation in CsPbBr₃ Asymmetric Quantum Wells. ACS Energy Letters, 2021, 6, 2602-2609.	8.8	13
52	[Cu₃₆H₁₀(PET)₂₄(PPh₃)₆Cl₂] Reveals Surface Vacancy Defects in Ligand-Stabilized Metal Nanoclusters. Journal of the American Chemical Society, 2021, 143, 11026-11035.	6.6	46
53	Oriented Halide Perovskite Nanostructures and Thin Films for Optoelectronics. Chemical Reviews, 2021, 121, 12112-12180.	23.0	70
54	Air-Resistant Lead Halide Perovskite Nanocrystals Embedded into Polyimide of Intrinsic Microporosity. Energy Material Advances, 2021, 2021, .	4.7	21

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55	Quantum Dot Selfâ€Assembly Enables Lowâ€Threshold Lasing. Advanced Science, 2021, 8, e2101125.	5.6	28
56	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. Nature Communications, 2021, 12, 4831.	5.8	56
57	Stimuli-responsive switchable halide perovskites: Taking advantage of instability. Joule, 2021, 5, 2027-2046.	11.7	56
58	Efficient and Spectrally Stable Blue Perovskite Lightâ€Emitting Diodes Employing a Cationic Ï€â€Conjugated Polymer. Advanced Materials, 2021, 33, e2103640.	11.1	77
59	Single-Particle Spectroscopy as a Versatile Tool to Explore Lower-Dimensional Structures of Inorganic Perovskites. ACS Energy Letters, 2021, 6, 3695-3708.	8.8	6
60	Advances and Challenges in Tin Halide Perovskite Nanocrystals. , 2021, 3, 1541-1557.		12
61	22.8%-Efficient single-crystal mixed-cation inverted perovskite solar cells with a near-optimal bandgap. Energy and Environmental Science, 2021, 14, 2263-2268.	15.6	149
62	Light Propagation and Radiative Exciton Transport in Two-Dimensional Layered Perovskite Microwires. ACS Photonics, 2021, 8, 276-282.	3.2	7
63	Cyanamide Passivation Enables Robust Elemental Imaging of Metal Halide Perovskites at Atomic Resolution. Journal of Physical Chemistry Letters, 2021, 12, 10402-10409.	2.1	15
64	Luminescence and Stability Enhancement of Inorganic Perovskite Nanocrystals via Selective Surface Ligand Binding. ACS Nano, 2021, 15, 17998-18005.	7.3	32
65	All-inorganic halide-perovskite-polymer luminescent fibers for high-bitrate ultraviolet free-space optical communication. , 2021, , .		0
66	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. Joule, 2021, 5, 3169-3186.	11.7	99
67	Metal Halide Perovskites for Solarâ€toâ€Chemical Fuel Conversion. Advanced Energy Materials, 2020, 10, 1902433.	10.2	115
68	Double peak emission in lead halide perovskites by self-absorption. Journal of Materials Chemistry C, 2020, 8, 2289-2300.	2.7	72
69	Near-unity photoluminescence quantum yield in inorganic perovskite nanocrystals by metal-ion doping. Journal of Chemical Physics, 2020, 152, 020902.	1.2	42
70	Edge stabilization in reduced-dimensional perovskites. Nature Communications, 2020, 11, 170.	5.8	147
71	Single Crystals: The Next Big Wave of Perovskite Optoelectronics. , 2020, 2, 184-214.		89
72	Bright high-colour-purity deep-blue carbon dot light-emitting diodes via efficient edge amination. Nature Photonics, 2020, 14, 171-176.	15.6	303

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73	Visualizing Buried Local Carrier Diffusion in Halide Perovskite Crystals via Two-Photon Microscopy. ACS Energy Letters, 2020, 5, 117-123.	8.8	37
74	All-Perovskite Tandem Solar Cells: A Roadmap to Uniting High Efficiency with High Stability. Accounts of Materials Research, 2020, 1, 63-76.	5.9	57
75	Color-pure red light-emitting diodes based on two-dimensional lead-free perovskites. Science Advances, 2020, 6, .	4.7	135
76	Shape Control of Metal Halide Perovskite Single Crystals: From Bulk to Nanoscale. Chemistry of Materials, 2020, 32, 7602-7617.	3.2	46
77	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. ACS Energy Letters, 2020, 5, 3663-3671.	8.8	253
78	Nanoporous GaN/n-type GaN: A Cathode Structure for ITO-Free Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3295-3303.	8.8	23
79	Self-Assembled Monolayer Enables Hole Transport Layer-Free Organic Solar Cells with 18% Efficiency and Improved Operational Stability. ACS Energy Letters, 2020, 5, 2935-2944.	8.8	425
80	Ultrafast electron imaging of surface charge carrier dynamics at low voltage. Structural Dynamics, 2020, 7, 021001.	0.9	3
81	Correlation of Photoluminescence and Structural Morphologies at the Individual Nanoparticle Level. Journal of Physical Chemistry A, 2020, 124, 4855-4860.	1.1	7
82	Modulation of Broadband Emissions in Two-Dimensional âŸ¨100âŸ©-Oriented Ruddlesdenâ€“Popper Hybrid Perovskites. ACS Energy Letters, 2020, 5, 2149-2155.	8.8	75
83	Structurally Tunable Two-Dimensional Layered Perovskites: From Confinement and Enhanced Charge Transport to Prolonged Hot Carrier Cooling Dynamics. Journal of Physical Chemistry Letters, 2020, 11, 5705-5718.	2.1	53
84	Architectural modification coupled with MAI passivation of MAPbI3â€“MAPbI3 interface for fabrication of highly-responsive broadband bifacial perovskite photodetectors. Applied Materials Today, 2020, 20, 100649.	2.3	3
85	Monolayer Perovskite Bridges Enable Strong Quantum Dot Coupling for Efficient Solar Cells. Joule, 2020, 4, 1542-1556.	11.7	143
86	Unraveling the Elastic Properties of (Quasi)Two-Dimensional Hybrid Perovskites: A Joint Experimental and Theoretical Study. ACS Applied Materials & Interfaces, 2020, 12, 17881-17892.	4.0	21
87	Doping Induces Structural Phase Transitions in All-Inorganic Lead Halide Perovskite Nanocrystals. , 2020, 2, 367-375.		42
88	Energy Spotlight. ACS Energy Letters, 2020, 5, 1328-1329.	8.8	5
89	Interface Matters: Enhanced Photoluminescence and Long-Term Stability of Zero-Dimensional Cesium Lead Bromide Nanocrystals via Gas-Phase Aluminum Oxide Encapsulation. ACS Applied Materials & Interfaces, 2020, 12, 35598-35605.	4.0	14
90	Solvent-Solute Coordination Engineering for Efficient Perovskite Luminescent Solar Concentrators. Joule, 2020, 4, 631-643.	11.7	53

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91	Chlorine Vacancy Passivation in Mixed Halide Perovskite Quantum Dots by Organic Pseudohalides Enables Efficient Rec. 2020 Blue Light-Emitting Diodes. ACS Energy Letters, 2020, 5, 793-798.	8.8	208
92	Real-Space Mapping of Surface-Oxygen Defect States in Photovoltaic Materials Using Low-Voltage Scanning Ultrafast Electron Microscopy. ACS Applied Materials & Interfaces, 2020, 12, 7760-7767.	4.0	12
93	Low-Temperature Crystallization Enables 21.9% Efficient Single-Crystal MAPbI₃ Inverted Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 657-662.	8.8	171
94	Dynamical Interconversion between Excitons and Geminate Charge Pairs in Two-Dimensional Perovskite Layers Described by the Onsagerâ€“Braun Model. Journal of Physical Chemistry Letters, 2020, 11, 1112-1119.	2.1	14
95	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. Nature Energy, 2020, 5, 131-140.	19.8	894
96	Transition Dipole Moments of n = 1, 2, and 3 Perovskite Quantum Wells from the Optical Stark Effect and Many-Body Perturbation Theory. Journal of Physical Chemistry Letters, 2020, 11, 716-723.	2.1	24
97	Fabrication of bifacial sandwiched heterojunction photoconductor â€“ Type and MAI passivated photodiode â€“ Type perovskite photodetectors. Organic Electronics, 2020, 84, 105730.	1.4	15
98	[Cu₈₁(PhS)₄₆(^tBuNH₂)₁₀(H)₃₂]³⁺ Reveals the Coexistence of Large Planar Cores and Hemispherical Shells in High-Nuclearity Copper Nanoclusters. Journal of the American Chemical Society, 2020, 142, 8696-8705.	6.6	81
99	Access to Highly Efficient Energy Transfer in Metalâ€“Organic Frameworks via Mixed Linkers Approach. Journal of the American Chemical Society, 2020, 142, 8580-8584.	6.6	62
100	Halide Perovskites: Metal Halide Perovskites for Solarâ€toâ€Chemical Fuel Conversion (Adv. Energy Mater.) Tj ETQq0 0 0 rgBT /Overlock	10.2	13
101	Boosting Self-Trapped Emissions in Zero-Dimensional Perovskite Heterostructures. Chemistry of Materials, 2020, 32, 5036-5043.	3.2	46
102	Transition from Positive to Negative Photoconductance in Doped Hybrid Perovskite Semiconductors. Advanced Optical Materials, 2019, 7, 1900865.	3.6	47
103	Metal Halide Perovskite and Phosphorus Doped g-C₃N₄ Bulk Heterojunctions for Air-Stable Photodetectors. ACS Energy Letters, 2019, 4, 2315-2322.	8.8	36
104	Layer-Dependent Coherent Acoustic Phonons in Two-Dimensional Ruddlesdenâ€“Popper Perovskite Crystals. Journal of Physical Chemistry Letters, 2019, 10, 5259-5264.	2.1	38
105	[Cu₆₁(S^tBu)₂₆S₆Cl₆H₁₄]⁺: A Coreâ€“Shell Superatom Nanocluster with a Quasi-J₃₆ Cu₁₉ Core and an â€œ18-Crown-6â€•Metal-Sulfide-like Stabilizing Belt. , 2019, 1, 297-302.		76
106	Emergence of multiple fluorophores in individual cesium lead bromide nanocrystals. Nature Communications, 2019, 10, 2930.	5.8	41
107	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. Joule, 2019, 3, 1963-1976.	11.7	222
108	Tuning Hot Carrier Cooling Dynamics by Dielectric Confinement in Two-Dimensional Hybrid Perovskite Crystals. ACS Nano, 2019, 13, 12621-12629.	7.3	96

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109	Delayed Photoluminescence and Modified Blinking Statistics in Alumina-Encapsulated Zero-Dimensional Inorganic Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2019, 10, 6780-6787.	2.1	31
110	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS₂ as a Replacement for PEDOT:PSS. Advanced Materials, 2019, 31, e1902965.	11.1	500
111	High-speed colour-converting photodetector with all-inorganic CsPbBr3 perovskite nanocrystals for ultraviolet light communication. Light: Science and Applications, 2019, 8, 94.	7.7	225
112	Halogen Vacancies Enable Ligandâ€Assisted Selfâ€Assembly of Perovskite Quantum Dots into Nanowires. Angewandte Chemie, 2019, 131, 16223-16227.	1.6	16
113	Halogen Vacancies Enable Ligandâ€Assisted Selfâ€Assembly of Perovskite Quantum Dots into Nanowires. Angewandte Chemie - International Edition, 2019, 58, 16077-16081.	7.2	49
114	General Mild Reaction Creates Highly Luminescent Organic-Ligand-Lacking Halide Perovskite Nanocrystals for Efficient Light-Emitting Diodes. Journal of the American Chemical Society, 2019, 141, 15423-15432.	6.6	121
115	MAPbI₃ Single Crystals Free from Hole-Trapping Centers for Enhanced Photodetectivity. ACS Energy Letters, 2019, 4, 2579-2584.	8.8	40
116	Extraordinary Carrier Diffusion on CdTe Surfaces Uncovered by 4D Electron Microscopy. CheM, 2019, 5, 706-718.	5.8	21
117	Solutionâ€Processed Visibleâ€Blind Ultraviolet Photodetectors with Nanosecond Response Time and High Detectivity. Advanced Optical Materials, 2019, 7, 1900506.	3.6	60
118	Assembly of Atomically Precise Silver Nanoclusters into Nanocluster-Based Frameworks. Journal of the American Chemical Society, 2019, 141, 9585-9592.	6.6	132
119	Pâ€124: Perovskite Quantum Dots Display: Challenges and Opportunities. Digest of Technical Papers SID International Symposium, 2019, 50, 1712-1715.	0.1	7
120	Defect-Triggered Phase Transition in Cesium Lead Halide Perovskite Nanocrystals. , 2019, 1, 185-191.		51
121	High-Efficiency Violet-Emitting All-Inorganic Perovskite Nanocrystals Enabled by Alkaline-Earth Metal Passivation. Chemistry of Materials, 2019, 31, 3974-3983.	3.2	90
122	Compositionally Screened Eutectic Catalytic Coatings on Halide Perovskite Photocathodes for Photoassisted Selective CO₂ Reduction. ACS Energy Letters, 2019, 4, 1279-1286.	8.8	56
123	Compositional, Processing, and Interfacial Engineering of Nanocrystal- and Quantum-Dot-Based Perovskite Solar Cells. Chemistry of Materials, 2019, 31, 6387-6411.	3.2	82
124	Single-Crystal MAPbI₃ Perovskite Solar Cells Exceeding 21% Power Conversion Efficiency. ACS Energy Letters, 2019, 4, 1258-1259.	8.8	424
125	Why are Hot Holes Easier to Extract than Hot Electrons from Methylammonium Lead Iodide Perovskite?. Advanced Energy Materials, 2019, 9, 1900084.	10.2	54
126	Perovskite-Based Artificial Multiple Quantum Wells. Nano Letters, 2019, 19, 3535-3542.	4.5	27

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127	Reducing Defects in Halide Perovskite Nanocrystals for Light-Emitting Applications. Journal of Physical Chemistry Letters, 2019, 10, 2629-2640.	2.1	162
128	Light-Induced Self-Assembly of Cubic CsPbBr₃ Perovskite Nanocrystals into Nanowires. Chemistry of Materials, 2019, 31, 6642-6649.	3.2	119
129	Visualization of Charge Carrier Trapping in Silicon at the Atomic Surface Level Using Four-Dimensional Electron Imaging. Journal of Physical Chemistry Letters, 2019, 10, 1960-1966.	2.1	8
130	Metal Halide Perovskite Nanosheet for X-ray High-Resolution Scintillation Imaging Screens. ACS Nano, 2019, 13, 2520-2525.	7.3	346
131	Investigation of high contrast and reversible luminescence thermochromism of the quantum confined Cs₄PbBr₆ perovskite solid. Nanoscale, 2019, 11, 5754-5759.	2.8	24
132	Insights into the local structure of dopants, doping efficiency, and luminescence properties of lanthanide-doped CsPbCl₃ perovskite nanocrystals. Journal of Materials Chemistry C, 2019, 7, 3037-3048.	2.7	79
133	Unlocking the Effect of Trivalent Metal Doping in All-Inorganic CsPbBr₃ Perovskite. ACS Energy Letters, 2019, 4, 789-795.	8.8	116
134	Energy Spotlight: New Inroads in Metal Halide Perovskite Research. ACS Energy Letters, 2019, 4, 3036-3038.	8.8	3
135	High-Speed Ultraviolet-C Photodetector Based on Frequency Down-Converting CsPbBr3 Perovskite Nanocrystals on Silicon Platform. , 2019, , .		1
136	Reduced ion migration and enhanced photoresponse in cuboid crystals of methylammonium lead iodide perovskite. Journal Physics D: Applied Physics, 2019, 52, 054001.	1.3	14
137	Tellurium-Based Double Perovskites A₂TeX₆ with Tunable Band Gap and Long Carrier Diffusion Length for Optoelectronic Applications. ACS Energy Letters, 2019, 4, 228-234.	8.8	58
138	Blue Superluminescent Diodes with GHz Bandwidth Exciting Perovskite Nanocrystals for High CRI White Lighting and High-Speed VLC. , 2019, , .		1
139	Ligand-Free Nanocrystals of Highly Emissive Cs₄PbBr₆ Perovskite. Journal of Physical Chemistry C, 2018, 122, 6493-6498.	1.5	63
140	Synthesis and Characterization of Branched fcc/hcp Ruthenium Nanostructures and Their Catalytic Activity in Ammonia Borane Hydrolysis. Crystal Growth and Design, 2018, 18, 1509-1516.	1.4	19
141	Imaging Localized Energy States in Silicon-Doped InGaN Nanowires Using 4D Electron Microscopy. ACS Energy Letters, 2018, 3, 476-481.	8.8	15
142	Water-Induced Dimensionality Reduction in Metal-Halide Perovskites. Journal of Physical Chemistry C, 2018, 122, 14128-14134.	1.5	78
143	Tailoring the Crystal Structure of Nanoclusters Unveiled High Photoluminescence via Ion Pairing. Chemistry of Materials, 2018, 30, 2719-2725.	3.2	76
144	The Electrical and Optical Properties of Organometal Halide Perovskites Relevant to Optoelectronic Performance. Advanced Materials, 2018, 30, 1700764.	11.1	141

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145	In situ oxidation and reduction of triangular nickel nanoplates via environmental transmission electron microscopy. Journal of Microscopy, 2018, 269, 161-167.	0.8	15
146	Bidentate Ligand-Passivated CsPbI₃ Perovskite Nanocrystals for Stable Near-Unity Photoluminescence Quantum Yield and Efficient Red Light-Emitting Diodes. Journal of the American Chemical Society, 2018, 140, 562-565.	6.6	745
147	Atomic-Level Doping of Metal Clusters. Accounts of Chemical Research, 2018, 51, 3094-3103.	7.6	294
148	Reversible Band Gap Narrowing of Snâ€Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. Angewandte Chemie, 2018, 130, 15084-15088.	1.6	17
149	Reversible Band Gap Narrowing of Snâ€Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. Angewandte Chemie - International Edition, 2018, 57, 14868-14872.	7.2	56
150	Layer-Dependent Rashba Band Splitting in 2D Hybrid Perovskites. Chemistry of Materials, 2018, 30, 8538-8545.	3.2	92
151	Rotationally Free and Rigid Sublattices of the Single Crystal Perovskite CH₃NH₃PbBr₃ (001): The Case of the Lattice Polar Liquid. Journal of Physical Chemistry C, 2018, 122, 25506-25514.	1.5	8
152	Halogen Migration in Hybrid Perovskites: The Organic Cation Matters. Journal of Physical Chemistry Letters, 2018, 9, 5474-5480.	2.1	119
153	Point Defects and Green Emission in Zero-Dimensional Perovskites. Journal of Physical Chemistry Letters, 2018, 9, 5490-5495.	2.1	143
154	Giant Photoluminescence Enhancement in CsPbCl₃ Perovskite Nanocrystals by Simultaneous Dual-Surface Passivation. ACS Energy Letters, 2018, 3, 2301-2307.	8.8	244
155	Quantification of Ionic Diffusion in Lead Halide Perovskite Single Crystals. ACS Energy Letters, 2018, 3, 1477-1481.	8.8	123
156	Imaging the Reduction of Electron Trap States in Shelled Copper Indium Gallium Selenide Nanocrystals Using Ultrafast Electron Microscopy. Journal of Physical Chemistry C, 2018, 122, 15010-15016.	1.5	4
157	Pâ€203: Lateâ€News Poster: Novel Techniques for Highly Stable Luminescent Perovskite Halide Quantum Dots. Digest of Technical Papers SID International Symposium, 2018, 49, 1681-1684.	0.1	6
158	Efficient Photon Recycling and Radiation Trapping in Cesium Lead Halide Perovskite Waveguides. ACS Energy Letters, 2018, 3, 1492-1498.	8.8	70
159	The Benefit and Challenges of Zero-Dimensional Perovskites. Journal of Physical Chemistry Letters, 2018, 9, 4131-4138.	2.1	118
160	Doping-Enhanced Short-Range Order of Perovskite Nanocrystals for Near-Unity Violet Luminescence Quantum Yield. Journal of the American Chemical Society, 2018, 140, 9942-9951.	6.6	548
161	Inversion symmetry and bulk Rashba effect in methylammonium lead iodide perovskite single crystals. Nature Communications, 2018, 9, 1829.	5.8	189
162	Probing buried recombination pathways in perovskite structures using 3D photoluminescence tomography. Energy and Environmental Science, 2018, 11, 2846-2852.	15.6	42

#	Article	IF	Citations
163	Metal-Doped Lead Halide Perovskites: Synthesis, Properties, and Optoelectronic Applications. Chemistry of Materials, 2018, 30, 6589-6613.	3.2	451
164	All-inorganic perovskite nanocrystal scintillators. Nature, 2018, 561, 88-93.	13.7	1,274
165	Perovskite Single Crystals: Synthesis, Properties and Devices. Materials and Energy, 2018, , 241-283.	2.5	2
166	Doping-Induced Anisotropic Self-Assembly of Silver Icosahedra in [Pt₂Ag₂₃Cl₇(PPh₃)₁₀] Nanoclusters. Journal of the American Chemical Society, 2017, 139, 1053-1056.	6.6	98
167	Double Charged Surface Layers in Lead Halide Perovskite Crystals. Nano Letters, 2017, 17, 2021-2027.	4.5	60
168	Zero-Dimensional Cs₄PbBr₆ Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2017, 8, 961-965.	2.1	299
169	Trapping shape-controlled nanoparticle nucleation and growth stages via continuous-flow chemistry. Chemical Communications, 2017, 53, 2495-2498.	2.2	19
170	The Surface of Hybrid Perovskite Crystals: A Boon or Bane. ACS Energy Letters, 2017, 2, 846-856.	8.8	91
171	Low-Dimensional-Networked Metal Halide Perovskites: The Next Big Thing. ACS Energy Letters, 2017, 2, 889-896.	8.8	367
172	Evidence of Plasmonic Induced Photocatalytic Hydrogen Production on Pd/TiO2 Upon Deposition on Thin Films of Gold. Catalysis Letters, 2017, 147, 811-820.	1.4	23
173	The impact of Au doping on the charge carrier dynamics at the interfaces between cationic porphyrin and silver nanoclusters. Chemical Physics Letters, 2017, 683, 393-397.	1.2	8
174	Timeâ€Dependent Mechanical Response of APbX₃ (A = Cs, CH₃NH₃; X) Tj ETQq0 0 0 rgBT /Overl	11.1	65
175	Pyridine-Induced Dimensionality Change in Hybrid Perovskite Nanocrystals. Chemistry of Materials, 2017, 29, 4393-4400.	3.2	100
176	Tailoring the Energy Landscape in Quasi-2D Halide Perovskites Enables Efficient Green-Light Emission. Nano Letters, 2017, 17, 3701-3709.	4.5	409
177	8â€2: Invited Paper: A New Generation of Luminescent Materials Based on Lowâ€Dimensional Perovskites. Digest of Technical Papers SID International Symposium, 2017, 48, 83-86.	0.1	2
178	Direct versus ligand-exchange synthesis of [PtAg₂₈(BDT)₁₂(TPP)₄]^{4â^'}nanoclusters: effect of a single-atom dopant on the optoelectronic and chemical properties. Nanoscale, 2017, 9, 9529-9536.	2.8	62
179	Shedding light on film crystallization. Nature Materials, 2017, 16, 601-602.	13.3	12
180	Powering up perovskite photoresponse. Science, 2017, 355, 1260-1261.	6.0	27

#	Article	IF	Citations
181	Thermochromic Perovskite Inks for Reversible Smart Window Applications. Chemistry of Materials, 2017, 29, 3367-3370.	3.2	130
182	Bane of Hydrogen-Bond Formation on the Photoinduced Charge-Transfer Process in Donorâ€“Acceptor Systems. Journal of Physical Chemistry C, 2017, 121, 7837-7843.	1.5	1
183	Contribution of Metal Defects in the Assembly Induced Emission of Cu Nanoclusters. Journal of the American Chemical Society, 2017, 139, 4318-4321.	6.6	152
184	Inorganic Lead Halide Perovskite Single Crystals: Phaseâ€Selective Lowâ€Temperature Growth, Carrier Transport Properties, and Selfâ€Powered Photodetection. Advanced Optical Materials, 2017, 5, 1600704.	3.6	362
185	Temperature-Induced Lattice Relaxation of Perovskite Crystal Enhances Optoelectronic Properties and Solar Cell Performance. Journal of Physical Chemistry Letters, 2017, 8, 137-143.	2.1	39
186	Engineering Interfacial Charge Transfer in CsPbBr₃ Perovskite Nanocrystals by Heterovalent Doping. Journal of the American Chemical Society, 2017, 139, 731-737.	6.6	406
187	Synthesis and Optical Properties of a Dithiolate/Phosphine-Protected Au₂₈ Nanocluster. Journal of Physical Chemistry C, 2017, 121, 10681-10685.	1.5	23
188	Room-Temperature Engineering of All-Inorganic Perovskite Nanocrsytals with Different Dimensionalities. Chemistry of Materials, 2017, 29, 8978-8982.	3.2	174
189	Ultralong Radiative States in Hybrid Perovskite Crystals: Compositions for Submillimeter Diffusion Lengths. Journal of Physical Chemistry Letters, 2017, 8, 4386-4390.	2.1	83
190	Inside Perovskites: Quantum Luminescence from Bulk Cs₄PbBr₆ Single Crystals. Chemistry of Materials, 2017, 29, 7108-7113.	3.2	200
191	CsPb₂Br₅ Single Crystals: Synthesis and Characterization. ChemSusChem, 2017, 10, 3746-3749.	3.6	130
192	Molecular behavior of zero-dimensional perovskites. Science Advances, 2017, 3, e1701793.	4.7	187
193	Intrinsic Lead Ion Emissions in Zero-Dimensional Cs₄PbBr₆ Nanocrystals. ACS Energy Letters, 2017, 2, 2805-2811.	8.8	133
194	Direct-Indirect Nature of the Bandgap in Lead-Free Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2017, 8, 3173-3177.	2.1	172
195	The Role of Surface Tension in the Crystallization of Metal Halide Perovskites. ACS Energy Letters, 2017, 2, 1782-1788.	8.8	155
196	Ultralow Self-Doping in Two-dimensional Hybrid Perovskite Single Crystals. Nano Letters, 2017, 17, 4759-4767.	4.5	251
197	Highâ€Purity Hybrid Organolead Halide Perovskite Nanoparticles Obtained by Pulsedâ€Laser Irradiation in Liquid. ChemPhysChem, 2017, 18, 1047-1054.	1.0	23
198	Fast and Sensitive Solutionâ€Processed Visibleâ€Blind Perovskite UV Photodetectors. Advanced Materials, 2016, 28, 7264-7268.	11.1	234

#	Article	IF	Citations
199	Templated Atomâ€Precise Galvanic Synthesis and Structure Elucidation of a [Ag₂₄Au(SR)₁₈]^{â^'} Nanocluster. Angewandte Chemie, 2016, 128, 934-938.	1.6	106
200	Enhanced Optoelectronic Performance of a Passivated Nanowireâ€Based Device: Key Information from Realâ€Space Imaging Using 4D Electron Microscopy. Small, 2016, 12, 2313-2320.	5.2	37
201	Solutionâ€Grown Monocrystalline Hybrid Perovskite Films for Holeâ€Transporterâ€Free Solar Cells. Advanced Materials, 2016, 28, 3383-3390.	11.1	298
202	Templated Atomâ€Precise Galvanic Synthesis and Structure Elucidation of a [Ag₂₄Au(SR)₁₈]^{â^'} Nanocluster. Angewandte Chemie - International Edition, 2016, 55, 922-926.	7.2	306
203	The Inâ€Gap Electronic State Spectrum of Methylammonium Lead Iodide Singleâ€Crystal Perovskites. Advanced Materials, 2016, 28, 3406-3410.	11.1	187
204	Gold Doping of Silver Nanoclusters: A 26â€Fold Enhancement in the Luminescence Quantum Yield. Angewandte Chemie, 2016, 128, 5843-5847.	1.6	62
205	Real-Space Mapping of Surface Trap States in CIGSe Nanocrystals Using 4D Electron Microscopy. Nano Letters, 2016, 16, 4417-4423.	4.5	22
206	Tailoring ruthenium exposure to enhance the performance of fcc platinum@ruthenium coreâ€“shell electrocatalysts in the oxygen evolution reaction. Physical Chemistry Chemical Physics, 2016, 18, 16169-16178.	1.3	47
207	Atomically monodisperse nickel nanoclusters as highly active electrocatalysts for water oxidation. Nanoscale, 2016, 8, 9695-9703.	2.8	80
208	Switching a Nanocluster Core from Hollow to Nonhollow. Chemistry of Materials, 2016, 28, 3292-3297.	3.2	76
209	A facile micropatterning method for a highly flexible PEDOT:PSS on SU-8. Organic Electronics, 2016, 34, 75-78.	1.4	5
210	Formamidinium Lead Halide Perovskite Crystals with Unprecedented Long Carrier Dynamics and Diffusion Length. ACS Energy Letters, 2016, 1, 32-37.	8.8	752
211	Distinct metal-exchange pathways of doped Ag25 nanoclusters. Nanoscale, 2016, 8, 17333-17339.	2.8	82
212	Pure Cs₄PbBr₆: Highly Luminescent Zero-Dimensional Perovskite Solids. ACS Energy Letters, 2016, 1, 840-845.	8.8	481
213	A New Class of Atomically Precise, Hydride-Rich Silver Nanoclusters Co-Protected by Phosphines. Journal of the American Chemical Society, 2016, 138, 13770-13773.	6.6	114
214	Hybrid perovskites: Approaches towards light-emitting devices. , 2016, , .		0
215	Optical constants of CH_3NH_3PbBr_3 perovskite thin films measured by spectroscopic ellipsometry. Optics Express, 2016, 24, 16586.	1.7	108
216	Engineering of CH₃NH₃PbI₃ Perovskite Crystals by Alloying Large Organic Cations for Enhanced Thermal Stability and Transport Properties. Angewandte Chemie, 2016, 128, 10844-10848.	1.6	18

#	Article	IF	Citations
217	Engineering of CH₃NH₃PbI₃ Perovskite Crystals by Alloying Large Organic Cations for Enhanced Thermal Stability and Transport Properties. Angewandte Chemie - International Edition, 2016, 55, 10686-10690.	7.2	152
218	Surface Electronic Structure of Hybrid Organo Lead Bromide Perovskite Single Crystals. Journal of Physical Chemistry C, 2016, 120, 21710-21715.	1.5	58
219	Highly Efficient Perovskiteâ€Quantumâ€Dot Lightâ€Emitting Diodes by Surface Engineering. Advanced Materials, 2016, 28, 8718-8725.	11.1	917
220	Schottky junctions on perovskite single crystals: light-modulated dielectric constant and self-biased photodetection. Journal of Materials Chemistry C, 2016, 4, 8304-8312.	2.7	134
221	Shape-Tunable Charge Carrier Dynamics at the Interfaces between Perovskite Nanocrystals and Molecular Acceptors. Journal of Physical Chemistry Letters, 2016, 7, 3913-3919.	2.1	43
222	Perovskite Photodetectors Operating in Both Narrowband and Broadband Regimes. Advanced Materials, 2016, 28, 8144-8149.	11.1	260
223	[Ag₆₇(SPhMe₂)₃₂(PPh₃)₈]³⁺: Synthesis, Total Structure, and Optical Properties of a Large Box-Shaped Silver Nanocluster. Journal of the American Chemical Society, 2016, 138, 14727-14732.	6.6	167
224	Pure crystal orientation and anisotropic charge transport in large-area hybrid perovskite films. Nature Communications, 2016, 7, 13407.	5.8	170
225	Spiro-OMeTAD single crystals: Remarkably enhanced charge-carrier transport via mesoscale ordering. Science Advances, 2016, 2, e1501491.	4.7	122
226	pH-Induced Surface Modification of Atomically Precise Silver Nanoclusters: An Approach for Tunable Optical and Electronic Properties. Inorganic Chemistry, 2016, 55, 11522-11528.	1.9	10
227	Surface Restructuring of Hybrid Perovskite Crystals. ACS Energy Letters, 2016, 1, 1119-1126.	8.8	140
228	Amineâ€Free Synthesis of Cesium Lead Halide Perovskite Quantum Dots for Efficient Lightâ€Emitting Diodes. Advanced Functional Materials, 2016, 26, 8757-8763.	7.8	344
229	Nanowires: Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy (Small 17/2016). Small, 2016, 12, 2312-2312.	5.2	1
230	Gold Doping of Silver Nanoclusters: A 26â€Fold Enhancement in the Luminescence Quantum Yield. Angewandte Chemie - International Edition, 2016, 55, 5749-5753.	7.2	278
231	Realâ€Space Visualization of Energy Loss and Carrier Diffusion in a Semiconductor Nanowire Array Using 4D Electron Microscopy. Advanced Materials, 2016, 28, 5106-5111.	11.1	27
232	Synthesis and characterization of mixed ligand chiral nanoclusters. Dalton Transactions, 2016, 45, 11297-11300.	1.6	7
233	Perovskite Nanocrystals as a Color Converter for Visible Light Communication. ACS Photonics, 2016, 3, 1150-1156.	3.2	221
234	Making and Breaking of Lead Halide Perovskites. Accounts of Chemical Research, 2016, 49, 330-338.	7.6	571

#	Article	IF	Citations
235	Innentitelbild: Templated Atomâ€Precise Galvanic Synthesis and Structure Elucidation of a [Ag₂₄Au(SR)₁₈]^{â^'} Nanocluster (Angew. Chem. 3/2016). Angewandte Chemie, 2016, 128, 834-834.	1.6	1
236	Robust and air-stable sandwiched organo-lead halide perovskites for photodetector applications. Journal of Materials Chemistry C, 2016, 4, 2545-2552.	2.7	53
237	Enhanced Etching, Surface Damage Recovery, and Submicron Patterning of Hybrid Perovskites using a Chemically Gas-Assisted Focused-Ion Beam for Subwavelength Grating Photonic Applications. Journal of Physical Chemistry Letters, 2016, 7, 137-142.	2.1	80
238	Colloidal Sb₂S₃nanocrystals: synthesis, characterization and fabrication of solid-state semiconductor sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 6809-6814.	5.2	21
239	Heterovalent Dopant Incorporation for Bandgap and Type Engineering of Perovskite Crystals. Journal of Physical Chemistry Letters, 2016, 7, 295-301.	2.1	332
240	Ultrafast static and diffusion-controlled electron transfer at Ag₂₉ nanocluster/molecular acceptor interfaces. Nanoscale, 2016, 8, 5412-5416.	2.8	39
241	The impact of electrostatic interactions on ultrafast charge transfer at Ag₂₉ nanoclustersâ€“fullerene and CdTe quantum dotsâ€“fullerene interfaces. Journal of Materials Chemistry C, 2016, 4, 2894-2900.	2.7	12
242	Quantum Dots: Overcoming the Cutâ€Off Charge Transfer Bandgaps at the PbS Quantum Dot Interface (Adv. Funct. Mater. 48/2015). Advanced Functional Materials, 2015, 25, 7548-7548.	7.8	0
243	The Impact of Grain Alignment of the Electron Transporting Layer on the Performance of Inverted Bulk Heterojunction Solar Cells. Small, 2015, 11, 5272-5279.	5.2	6
244	Overcoming the Cutâ€Off Charge Transfer Bandgaps at the PbS Quantum Dot Interface. Advanced Functional Materials, 2015, 25, 7435-7441.	7.8	18
245	Reversible Size Control of Silver Nanoclusters via Ligand-Exchange. Chemistry of Materials, 2015, 27, 4289-4297.	3.2	106
246	Effect of Precursor Ligands and Oxidation State in the Synthesis of Bimetallic Nano-Alloys. Chemistry of Materials, 2015, 27, 4134-4141.	3.2	38
247	Porphyrinic supramolecular daisy chains incorporating pillar[5]areneâ€“viologen hostâ€“guest interactions. Chemical Communications, 2015, 51, 10455-10458.	2.2	52
248	Planar-integrated single-crystalline perovskite photodetectors. Nature Communications, 2015, 6, 8724.	5.8	617
249	Low trap-state density and long carrier diffusion in organolead trihalide perovskite single crystals. Science, 2015, 347, 519-522.	6.0	4,156
250	Direct Femtosecond Observation of Charge Carrier Recombination in Ternary Semiconductor Nanocrystals: The Effect of Composition and Shelling. Journal of Physical Chemistry C, 2015, 119, 3439-3446.	1.5	38
251	The recombination mechanisms leading to amplified spontaneous emission at the true-green wavelength in CH3NH3PbBr3 perovskites. Applied Physics Letters, 2015, 106, .	1.5	126
252	Two-Photon Absorption in Organometallic Bromide Perovskites. ACS Nano, 2015, 9, 9340-9346.	7.3	254

#	Article	IF	Citations
253	High-quality bulk hybrid perovskite single crystals within minutes by inverse temperature crystallization. Nature Communications, 2015, 6, 7586.	5.8	1,478
254	Ag₂₉(BDT)₁₂(TPP)₄: A Tetravalent Nanocluster. Journal of the American Chemical Society, 2015, 137, 11970-11975.	6.6	369
255	Colloidal Quantum Dot Solar Cells. Chemical Reviews, 2015, 115, 12732-12763.	23.0	987
256	Tuning Properties in Silver Clusters. Journal of Physical Chemistry Letters, 2015, 6, 3023-3035.	2.1	170
257	Facile Synthesis and High Performance of a New Carbazole-Based Hole-Transporting Material for Hybrid Perovskite Solar Cells. ACS Photonics, 2015, 2, 849-855.	3.2	99
258	Retrograde solubility of formamidinium and methylammonium lead halide perovskites enabling rapid single crystal growth. Chemical Communications, 2015, 51, 17658-17661.	2.2	349
259	[Ag₂₅(SR)₁₈]^{â˜}: The â€œGoldenâ€•Silver Nanoparticle. Journal of the American Chemical Society, 2015, 137, 11578-11581.	6.6	506
260	Focused-ion beam patterning of organolead trihalide perovskite for subwavelength grating nanophotonic applications. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	0.6	49
261	CH₃NH₃PbCl₃ Single Crystals: Inverse Temperature Crystallization and Visible-Blind UV-Photodetector. Journal of Physical Chemistry Letters, 2015, 6, 3781-3786.	2.1	636
262	Air-Stable Surface-Passivated Perovskite Quantum Dots for Ultra-Robust, Single- and Two-Photon-Induced Amplified Spontaneous Emission. Journal of Physical Chemistry Letters, 2015, 6, 5027-5033.	2.1	466
263	A Au/Cu 2 Oâ€“TiO 2 system for photo-catalytic hydrogen production. A pn-junction effect or a simple case of in situ reduction?. Journal of Catalysis, 2015, 322, 109-117.	3.1	114
264	A Layerâ€byâ€Layer ZnO Nanoparticleâ€“PbS Quantum Dot Selfâ€Assembly Platform for Ultrafast Interfacial Electron Injection. Small, 2015, 11, 112-118.	5.2	31
265	The Complete Inâ€Gap Electronic Structure of Colloidal Quantum Dot Solids and Its Correlation with Electronic Transport and Photovoltaic Performance. Advanced Materials, 2014, 26, 937-942.	11.1	54
266	Direct Functionalization of Nanodiamonds with Maleimide. Chemistry of Materials, 2014, 26, 2766-2769.	3.2	25
267	Photovoltaics: The Complete Inâ€Gap Electronic Structure of Colloidal Quantum Dot Solids and Its Correlation with Electronic Transport and Photovoltaic Performance (Adv. Mater. 6/2014). Advanced Materials, 2014, 26, 822-822.	11.1	1
268	Neat and Complete: Thiolate-Ligand Exchange on a Silver Molecular Nanoparticle. Journal of the American Chemical Society, 2014, 136, 15865-15868.	6.6	86
269	Routes to tin chalcogenide materials as thin films or nanoparticles: a potentially important class of semiconductor for sustainable solar energy conversion. Inorganic Chemistry Frontiers, 2014, 1, 577-598.	3.0	87
270	Synthesis of Copper Hydroxide Branched Nanocages and Their Transformation to Copper Oxide. Journal of Physical Chemistry C, 2014, 118, 19374-19379.	1.5	33

#	Article	IF	Citations
271	Characterization of Size, Anisotropy, and Density Heterogeneity of Nanoparticles by Sedimentation Velocity. Analytical Chemistry, 2014, 86, 7688-7695.	3.2	74
272	A general mechanism for intracellular toxicity of metal-containing nanoparticles. Nanoscale, 2014, 6, 7052.	2.8	383
273	Quantum Confinement-Tunable Ultrafast Charge Transfer at the PbS Quantum Dot and Phenyl-C₆₁-butyric Acid Methyl Ester Interface. Journal of the American Chemical Society, 2014, 136, 6952-6959.	6.6	97
274	Air-stable n-type colloidal quantum dot solids. Nature Materials, 2014, 13, 822-828.	13.3	529
275	Real-Time Observation of Ultrafast Intraband Relaxation and Exciton Multiplication in PbS Quantum Dots. ACS Photonics, 2014, 1, 285-292.	3.2	54
276	Directly Deposited Quantum Dot Solids Using a Colloidally Stable Nanoparticle Ink. Advanced Materials, 2013, 25, 5742-5749.	11.1	99
277	Automated Synthesis of Photovoltaic-Quality Colloidal Quantum Dots Using Separate Nucleation and Growth Stages. ACS Nano, 2013, 7, 10158-10166.	7.3	97
278	A scalable synthesis of highly stable and water dispersible Ag44(SR)30 nanoclusters. Journal of Materials Chemistry A, 2013, 1, 10148.	5.2	74
279	Rapid continuous flow synthesis of high-quality silver nanocubes and nanospheres. RSC Advances, 2013, 3, 22397.	1.7	25
280	Size-controlled fluorescent nanodiamonds: a facile method of fabrication and color-center counting. Nanoscale, 2013, 5, 11776.	2.8	22
281	Gold nanoparticle growth control - implementing novel wet chemistry method on silicon substrate. , 2013, , .		0
282	Gram-scale fractionation of nanodiamonds by density gradient ultracentrifugation. Nanoscale, 2013, 5, 5017.	2.8	33
283	Coexistence of plasmonic and magnetic properties in Au89Fe11 nanoalloys. Nanoscale, 2013, 5, 5611.	2.8	92
284	Chapter 2. Nanomaterials for solar energy. SPR Nanoscience, 2013, , 23-57.	0.3	1
285	Long-Lived Charge-Separated States in Ligand-Stabilized Silver Clusters. Journal of the American Chemical Society, 2012, 134, 11856-11859.	6.6	64
286	Colloidal Quantum Dot Photovoltaics: The Effect of Polydispersity. Nano Letters, 2012, 12, 1007-1012.	4.5	104
287	Ag44(SR)304â˜: a silverâ€“thiolate superatom complex. Nanoscale, 2012, 4, 4269.	2.8	154
288	Determination of nanoparticle size distribution together with density or molecular weight by 2D analytical ultracentrifugation. Nature Communications, 2011, 2, 335.	5.8	201

#	Article	IF	Citations
289	Solution-processed colloidal quantum dot photovoltaics: A perspective. Energy and Environmental Science, 2011, 4, 4870.	15.6	82
290	Synthesis of novel bis(perfluorophenyl azides) coupling agents: Evaluation of their performance by crosslinking of poly(ethylene oxide). Reactive and Functional Polymers, 2011, 71, 1110-1117.	2.0	3
291	A Study of the Surface Plasmon Resonance of Silver Nanoparticles by the Discrete Dipole Approximation Method: Effect of Shape, Size, Structure, and Assembly. Plasmonics, 2010, 5, 85-97.	1.8	565
292	Silver Nanoparticles with Broad Multiband Linear Optical Absorption. Angewandte Chemie - International Edition, 2009, 48, 5921-5926.	7.2	235
293	High-Yield Synthesis of Multi-Branched Urchin-Like Gold Nanoparticles. Chemistry of Materials, 2006, 18, 3297-3301.	3.2	236
294	Nanoscale and Bulk Perovskite Single-Crystals: Surface Engineering for Efficient LEDs, Photodetectors, and Solar Cells. , 0, , .		0