

# Osman M Bakr

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4037071/publications.pdf>

Version: 2024-02-01

294  
papers

41,280  
citations

2318

98  
h-index

2506

196  
g-index

297  
all docs

297  
docs citations

297  
times ranked

27581  
citing authors

#	ARTICLE	IF	CITATIONS
1	Low trap-state density and long carrier diffusion in organolead trihalide perovskite single crystals. <i>Science</i> , 2015, 347, 519-522.	6.0	4,156
2	High-quality bulk hybrid perovskite single crystals within minutes by inverse temperature crystallization. <i>Nature Communications</i> , 2015, 6, 7586.	5.8	1,478
3	All-inorganic perovskite nanocrystal scintillators. <i>Nature</i> , 2018, 561, 88-93.	13.7	1,274
4	Colloidal Quantum Dot Solar Cells. <i>Chemical Reviews</i> , 2015, 115, 12732-12763.	23.0	987
5	Highly Efficient Perovskite Quantum Light-Emitting Diodes by Surface Engineering. <i>Advanced Materials</i> , 2016, 28, 8718-8725.	11.1	917
6	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. <i>Nature Energy</i> , 2020, 5, 131-140.	19.8	894
7	Formamidinium Lead Halide Perovskite Crystals with Unprecedented Long Carrier Dynamics and Diffusion Length. <i>ACS Energy Letters</i> , 2016, 1, 32-37.	8.8	752
8	Bidentate Ligand-Passivated CsPbI <sub>3</sub> Perovskite Nanocrystals for Stable Near-Unity Photoluminescence Quantum Yield and Efficient Red Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2018, 140, 562-565.	6.6	745
9	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021, 15, 10775-10981.	7.3	705
10	CH <sub>3</sub> NH <sub>3</sub> PbCl <sub>3</sub> Single Crystals: Inverse Temperature Crystallization and Visible-Blind UV-Photodetector. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3781-3786.	2.1	636
11	Planar-integrated single-crystalline perovskite photodetectors. <i>Nature Communications</i> , 2015, 6, 8724.	5.8	617
12	Making and Breaking of Lead Halide Perovskites. <i>Accounts of Chemical Research</i> , 2016, 49, 330-338.	7.6	571
13	A Study of the Surface Plasmon Resonance of Silver Nanoparticles by the Discrete Dipole Approximation Method: Effect of Shape, Size, Structure, and Assembly. <i>Plasmonics</i> , 2010, 5, 85-97.	1.8	565
14	Doping-Enhanced Short-Range Order of Perovskite Nanocrystals for Near-Unity Violet Luminescence Quantum Yield. <i>Journal of the American Chemical Society</i> , 2018, 140, 9942-9951.	6.6	548
15	Air-stable n-type colloidal quantum dot solids. <i>Nature Materials</i> , 2014, 13, 822-828.	13.3	529
16	[Ag <sub>25</sub> (SR) <sub>18</sub> ] <sup>+</sup> : The "Golden" Silver Nanoparticle. <i>Journal of the American Chemical Society</i> , 2015, 137, 11578-11581.	6.6	506
17	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS <sub>2</sub> as a Replacement for PEDOT:PSS. <i>Advanced Materials</i> , 2019, 31, e1902965.	11.1	500
18	Pure Cs <sub>4</sub> PbBr <sub>6</sub> : Highly Luminescent Zero-Dimensional Perovskite Solids. <i>ACS Energy Letters</i> , 2016, 1, 840-845.	8.8	481

#	ARTICLE	IF	CITATIONS
19	Air-Stable Surface-Passivated Perovskite Quantum Dots for Ultra-Robust, Single- and Two-Photon-Induced Amplified Spontaneous Emission. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 5027-5033.	2.1	466
20	Metal-Doped Lead Halide Perovskites: Synthesis, Properties, and Optoelectronic Applications. <i>Chemistry of Materials</i> , 2018, 30, 6589-6613.	3.2	451
21	Self-Assembled Monolayer Enables Hole Transport Layer-Free Organic Solar Cells with 18% Efficiency and Improved Operational Stability. <i>ACS Energy Letters</i> , 2020, 5, 2935-2944.	8.8	425
22	Single-Crystal MAPbI <sub>3</sub> Perovskite Solar Cells Exceeding 21% Power Conversion Efficiency. <i>ACS Energy Letters</i> , 2019, 4, 1258-1259.	8.8	424
23	Tailoring the Energy Landscape in Quasi-2D Halide Perovskites Enables Efficient Green-Light Emission. <i>Nano Letters</i> , 2017, 17, 3701-3709.	4.5	409
24	Engineering Interfacial Charge Transfer in CsPbBr <sub>3</sub> Perovskite Nanocrystals by Heterovalent Doping. <i>Journal of the American Chemical Society</i> , 2017, 139, 731-737.	6.6	406
25	Metal Halide Perovskites for X-ray Imaging Scintillators and Detectors. <i>ACS Energy Letters</i> , 2021, 6, 739-768.	8.8	403
26	A general mechanism for intracellular toxicity of metal-containing nanoparticles. <i>Nanoscale</i> , 2014, 6, 7052.	2.8	383
27	Ag <sub>29</sub> (BDT) <sub>12</sub> (TPP) <sub>4</sub> : A Tetravalent Nanocluster. <i>Journal of the American Chemical Society</i> , 2015, 137, 11970-11975.	6.6	369
28	Low-Dimensional-Networked Metal Halide Perovskites: The Next Big Thing. <i>ACS Energy Letters</i> , 2017, 2, 889-896.	8.8	367
29	Inorganic Lead Halide Perovskite Single Crystals: Phase-Selective Low-Temperature Growth, Carrier Transport Properties, and Self-Powered Photodetection. <i>Advanced Optical Materials</i> , 2017, 5, 1600704.	3.6	362
30	Retrograde solubility of formamidinium and methylammonium lead halide perovskites enabling rapid single crystal growth. <i>Chemical Communications</i> , 2015, 51, 17658-17661.	2.2	349
31	Metal Halide Perovskite Nanosheet for X-ray High-Resolution Scintillation Imaging Screens. <i>ACS Nano</i> , 2019, 13, 2520-2525.	7.3	346
32	Amine-Free Synthesis of Cesium Lead Halide Perovskite Quantum Dots for Efficient Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2016, 26, 8757-8763.	7.8	344
33	Heterovalent Dopant Incorporation for Bandgap and Type Engineering of Perovskite Crystals. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 295-301.	2.1	332
34	Templated Atom-Precise Galvanic Synthesis and Structure Elucidation of a [Ag <sub>24</sub> Au(SR) <sub>18</sub> ] <sup>+</sup> Nanocluster. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 922-926.	7.2	306
35	Bright high-colour-purity deep-blue carbon dot light-emitting diodes via efficient edge amination. <i>Nature Photonics</i> , 2020, 14, 171-176.	15.6	303
36	Zero-Dimensional Cs <sub>4</sub> PbBr <sub>6</sub> Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 961-965.	2.1	299

#	ARTICLE	IF	CITATIONS
37	Solution-Grown Monocrystalline Hybrid Perovskite Films for Hole-Transporter-Free Solar Cells. <i>Advanced Materials</i> , 2016, 28, 3383-3390.	11.1	298
38	Atomic-Level Doping of Metal Clusters. <i>Accounts of Chemical Research</i> , 2018, 51, 3094-3103.	7.6	294
39	Gold Doping of Silver Nanoclusters: A 26-Fold Enhancement in the Luminescence Quantum Yield. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5749-5753.	7.2	278
40	Perovskite Photodetectors Operating in Both Narrowband and Broadband Regimes. <i>Advanced Materials</i> , 2016, 28, 8144-8149.	11.1	260
41	Two-Photon Absorption in Organometallic Bromide Perovskites. <i>ACS Nano</i> , 2015, 9, 9340-9346.	7.3	254
42	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. <i>ACS Energy Letters</i> , 2020, 5, 3663-3671.	8.8	253
43	Ultralow Self-Doping in Two-dimensional Hybrid Perovskite Single Crystals. <i>Nano Letters</i> , 2017, 17, 4759-4767.	4.5	251
44	Giant Photoluminescence Enhancement in CsPbCl <sub>3</sub> Perovskite Nanocrystals by Simultaneous Dual-Surface Passivation. <i>ACS Energy Letters</i> , 2018, 3, 2301-2307.	8.8	244
45	High-Yield Synthesis of Multi-Branched Urchin-Like Gold Nanoparticles. <i>Chemistry of Materials</i> , 2006, 18, 3297-3301.	3.2	236
46	Silver Nanoparticles with Broad Multiband Linear Optical Absorption. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 5921-5926.	7.2	235
47	Fast and Sensitive Solution-Processed Visible-Blind Perovskite UV Photodetectors. <i>Advanced Materials</i> , 2016, 28, 7264-7268.	11.1	234
48	High-speed colour-converting photodetector with all-inorganic CsPbBr <sub>3</sub> perovskite nanocrystals for ultraviolet light communication. <i>Light: Science and Applications</i> , 2019, 8, 94.	7.7	225
49	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. <i>Joule</i> , 2019, 3, 1963-1976.	11.7	222
50	Perovskite Nanocrystals as a Color Converter for Visible Light Communication. <i>ACS Photonics</i> , 2016, 3, 1150-1156.	3.2	221
51	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized $\text{CsPbI}_3$ Perovskite. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16164-16170.	7.2	210
52	Chlorine Vacancy Passivation in Mixed Halide Perovskite Quantum Dots by Organic Pseudohalides Enables Efficient Rec. 2020 Blue Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2020, 5, 793-798.	8.8	208
53	Determination of nanoparticle size distribution together with density or molecular weight by 2D analytical ultracentrifugation. <i>Nature Communications</i> , 2011, 2, 335.	5.8	201
54	Inside Perovskites: Quantum Luminescence from Bulk Cs <sub>4</sub> PbBr <sub>6</sub> Single Crystals. <i>Chemistry of Materials</i> , 2017, 29, 7108-7113.	3.2	200

#	ARTICLE	IF	CITATIONS
55	Inversion symmetry and bulk Rashba effect in methylammonium lead iodide perovskite single crystals. <i>Nature Communications</i> , 2018, 9, 1829.	5.8	189
56	The In <sup>∞</sup> Gap Electronic State Spectrum of Methylammonium Lead Iodide Single-Crystal Perovskites. <i>Advanced Materials</i> , 2016, 28, 3406-3410.	11.1	187
57	Molecular behavior of zero-dimensional perovskites. <i>Science Advances</i> , 2017, 3, e1701793.	4.7	187
58	Room-Temperature Engineering of All-Inorganic Perovskite Nanocrystals with Different Dimensionalities. <i>Chemistry of Materials</i> , 2017, 29, 8978-8982.	3.2	174
59	Direct-Indirect Nature of the Bandgap in Lead-Free Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3173-3177.	2.1	172
60	Low-Temperature Crystallization Enables 21.9% Efficient Single-Crystal MAPbI <sub>3</sub> Inverted Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020, 5, 657-662.	8.8	171
61	Tuning Properties in Silver Clusters. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3023-3035.	2.1	170
62	Pure crystal orientation and anisotropic charge transport in large-area hybrid perovskite films. <i>Nature Communications</i> , 2016, 7, 13407.	5.8	170
63	[Ag <sub>67</sub> (SPhMe <sub>2</sub> ) <sub>32</sub> (PPh <sub>3</sub> ) <sub>8</sub> ] <sup>3+</sup> : Synthesis, Total Structure, and Optical Properties of a Large Box-Shaped Silver Nanocluster. <i>Journal of the American Chemical Society</i> , 2016, 138, 14727-14732.	6.6	167
64	Reducing Defects in Halide Perovskite Nanocrystals for Light-Emitting Applications. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 2629-2640.	2.1	162
65	The Role of Surface Tension in the Crystallization of Metal Halide Perovskites. <i>ACS Energy Letters</i> , 2017, 2, 1782-1788.	8.8	155
66	Ag <sub>44</sub> (SR) <sub>304</sub> : a silver-thiolate superatom complex. <i>Nanoscale</i> , 2012, 4, 4269.	2.8	154
67	Engineering of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Crystals by Alloying Large Organic Cations for Enhanced Thermal Stability and Transport Properties. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10686-10690.	7.2	152
68	Contribution of Metal Defects in the Assembly Induced Emission of Cu Nanoclusters. <i>Journal of the American Chemical Society</i> , 2017, 139, 4318-4321.	6.6	152
69	22.8%-Efficient single-crystal mixed-cation inverted perovskite solar cells with a near-optimal bandgap. <i>Energy and Environmental Science</i> , 2021, 14, 2263-2268.	15.6	149
70	Edge stabilization in reduced-dimensional perovskites. <i>Nature Communications</i> , 2020, 11, 170.	5.8	147
71	Point Defects and Green Emission in Zero-Dimensional Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5490-5495.	2.1	143
72	Monolayer Perovskite Bridges Enable Strong Quantum Dot Coupling for Efficient Solar Cells. <i>Joule</i> , 2020, 4, 1542-1556.	11.7	143

#	ARTICLE	IF	CITATIONS
73	The Electrical and Optical Properties of Organometal Halide Perovskites Relevant to Optoelectronic Performance. <i>Advanced Materials</i> , 2018, 30, 1700764.	11.1	141
74	Surface Restructuring of Hybrid Perovskite Crystals. <i>ACS Energy Letters</i> , 2016, 1, 1119-1126.	8.8	140
75	Color-pure red light-emitting diodes based on two-dimensional lead-free perovskites. <i>Science Advances</i> , 2020, 6, .	4.7	135
76	Schottky junctions on perovskite single crystals: light-modulated dielectric constant and self-biased photodetection. <i>Journal of Materials Chemistry C</i> , 2016, 4, 8304-8312.	2.7	134
77	Intrinsic Lead Ion Emissions in Zero-Dimensional Cs <sub>4</sub> PbBr <sub>6</sub> Nanocrystals. <i>ACS Energy Letters</i> , 2017, 2, 2805-2811.	8.8	133
78	Assembly of Atomically Precise Silver Nanoclusters into Nanocluster-Based Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 9585-9592.	6.6	132
79	Thermochromic Perovskite Inks for Reversible Smart Window Applications. <i>Chemistry of Materials</i> , 2017, 29, 3367-3370.	3.2	130
80	CsPb <sub>2</sub> Br <sub>5</sub> Single Crystals: Synthesis and Characterization. <i>ChemSusChem</i> , 2017, 10, 3746-3749.	3.6	130
81	The recombination mechanisms leading to amplified spontaneous emission at the true-green wavelength in CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> perovskites. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	126
82	Quantification of Ionic Diffusion in Lead Halide Perovskite Single Crystals. <i>ACS Energy Letters</i> , 2018, 3, 1477-1481.	8.8	123
83	Spiro-OMeTAD single crystals: Remarkably enhanced charge-carrier transport via mesoscale ordering. <i>Science Advances</i> , 2016, 2, e1501491.	4.7	122
84	General Mild Reaction Creates Highly Luminescent Organic-Ligand-Lacking Halide Perovskite Nanocrystals for Efficient Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2019, 141, 15423-15432.	6.6	121
85	18.4% Organic Solar Cells Using a High Ionization Energy Self-Assembled Monolayer as Hole-Extraction Interlayer. <i>ChemSusChem</i> , 2021, 14, 3569-3578.	3.6	121
86	Halogen Migration in Hybrid Perovskites: The Organic Cation Matters. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5474-5480.	2.1	119
87	Light-Induced Self-Assembly of Cubic CsPbBr <sub>3</sub> Perovskite Nanocrystals into Nanowires. <i>Chemistry of Materials</i> , 2019, 31, 6642-6649.	3.2	119
88	The Benefit and Challenges of Zero-Dimensional Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4131-4138.	2.1	118
89	Unlocking the Effect of Trivalent Metal Doping in All-Inorganic CsPbBr <sub>3</sub> Perovskite. <i>ACS Energy Letters</i> , 2019, 4, 789-795.	8.8	116
90	Metal Halide Perovskites for Solar-to-Chemical Fuel Conversion. <i>Advanced Energy Materials</i> , 2020, 10, 1902433.	10.2	115

#	ARTICLE	IF	CITATIONS
91	A Au/Cu <sub>2</sub> O@TiO <sub>2</sub> 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
92	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
93	Energy Transfer in Metal-Organic Frameworks for Fluorescence Sensing. ACS Applied Materials & Interfaces, 2022, 14, 9970-9986.	4.0	109
94	Optical constants of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> perovskite thin films measured by spectroscopic ellipsometry. Optics Express, 2016, 24, 16586.	1.7	108
95	Reversible Size Control of Silver Nanoclusters via Ligand-Exchange. Chemistry of Materials, 2015, 27, 4289-4297.	3.2	106
96	Templated Atomically Precise Galvanic Synthesis and Structure Elucidation of a [Ag <sub>24</sub> Au(SR) <sub>18</sub> ] <sup>+</sup> Nanocluster. Angewandte Chemie, 2016, 128, 934-938.	1.6	106
97	Colloidal Quantum Dot Photovoltaics: The Effect of Polydispersity. Nano Letters, 2012, 12, 1007-1012.	4.5	104
98	Pyridine-Induced Dimensionality Change in Hybrid Perovskite Nanocrystals. Chemistry of Materials, 2017, 29, 4393-4400.	3.2	100
99	Successes and Challenges of Core/Shell Lead Halide Perovskite Nanocrystals. ACS Energy Letters, 2021, 6, 1340-1357.	8.8	100
100	Directly Deposited Quantum Dot Solids Using a Colloidally Stable Nanoparticle Ink. Advanced Materials, 2013, 25, 5742-5749.	11.1	99
101	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
102	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. Joule, 2021, 5, 3169-3186.	11.7	99
103	Doping-Induced Anisotropic Self-Assembly of Silver Icosahedra in [Pt <sub>2</sub> Ag <sub>23</sub> Cl <sub>7</sub> (PPh <sub>3</sub> ) <sub>3</sub> ] <sub>10</sub> Nanoclusters. Journal of the American Chemical Society, 2017, 139, 1053-1056.	6.6	98
104	Automated Synthesis of Photovoltaic-Quality Colloidal Quantum Dots Using Separate Nucleation and Growth Stages. ACS Nano, 2013, 7, 10158-10166.	7.3	97
105	Quantum Confinement-Tunable Ultrafast Charge Transfer at the PbS Quantum Dot and Phenyl-C <sub>61</sub> -butyric Acid Methyl Ester Interface. Journal of the American Chemical Society, 2014, 136, 6952-6959.	6.6	97
106	Tuning Hot Carrier Cooling Dynamics by Dielectric Confinement in Two-Dimensional Hybrid Perovskite Crystals. ACS Nano, 2019, 13, 12621-12629.	7.3	96
107	Coexistence of plasmonic and magnetic properties in Au <sub>89</sub> Fe <sub>11</sub> nanoalloys. Nanoscale, 2013, 5, 5611.	2.8	92
108	Layer-Dependent Rashba Band Splitting in 2D Hybrid Perovskites. Chemistry of Materials, 2018, 30, 8538-8545.	3.2	92

#	ARTICLE	IF	CITATIONS
109	The Surface of Hybrid Perovskite Crystals: A Boon or Bane. ACS Energy Letters, 2017, 2, 846-856.	8.8	91
110	High-Efficiency Violet-Emitting All-Inorganic Perovskite Nanocrystals Enabled by Alkaline-Earth Metal Passivation. Chemistry of Materials, 2019, 31, 3974-3983.	3.2	90
111	Single Crystals: The Next Big Wave of Perovskite Optoelectronics. , 2020, 2, 184-214.		89
112	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
113	Neat and Complete: Thiolate-Ligand Exchange on a Silver Molecular Nanoparticle. Journal of the American Chemical Society, 2014, 136, 15865-15868.	6.6	86
114	CsMnBr <sub>3</sub> : Lead-Free Nanocrystals with High Photoluminescence Quantum Yield and Picosecond Radiative Lifetime. , 2021, 3, 290-297.		86
115	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
116	Ultralong Radiative States in Hybrid Perovskite Crystals: Compositions for Submillimeter Diffusion Lengths. Journal of Physical Chemistry Letters, 2017, 8, 4386-4390.	2.1	83
117	Solution-processed colloidal quantum dot photovoltaics: A perspective. Energy and Environmental Science, 2011, 4, 4870.	15.6	82
118	Distinct metal-exchange pathways of doped Ag <sub>25</sub> nanoclusters. Nanoscale, 2016, 8, 17333-17339.	2.8	82
119	Compositional, Processing, and Interfacial Engineering of Nanocrystal- and Quantum-Dot-Based Perovskite Solar Cells. Chemistry of Materials, 2019, 31, 6387-6411.	3.2	82
120	[Cu <sub>81</sub> (PhS) <sub>46</sub> ( <sup>t</sup> BuNH <sub>2</sub> ) <sub>10</sub> (H) <sub>32</sub> ] <sup>3+</sup> 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
121	Atomically monodisperse nickel nanoclusters as highly active electrocatalysts for water oxidation. Nanoscale, 2016, 8, 9695-9703.	2.8	80
122	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
123	Insights into the local structure of dopants, doping efficiency, and luminescence properties of lanthanide-doped CsPbCl <sub>3</sub> perovskite nanocrystals. Journal of Materials Chemistry C, 2019, 7, 3037-3048.	2.7	79
124	Water-Induced Dimensionality Reduction in Metal-Halide Perovskites. Journal of Physical Chemistry C, 2018, 122, 14128-14134.	1.5	78
125	Efficient and Spectrally Stable Blue Perovskite Light-Emitting Diodes Employing a Cationic $\pi$ -Conjugated Polymer. Advanced Materials, 2021, 33, e2103640.	11.1	77
126	Switching a Nanocluster Core from Hollow to Nonhollow. Chemistry of Materials, 2016, 28, 3292-3297.	3.2	76



#	ARTICLE	IF	CITATIONS
127	Tailoring the Crystal Structure of Nanoclusters Unveiled High Photoluminescence via Ion Pairing. <i>Chemistry of Materials</i> , 2018, 30, 2719-2725.	3.2	76
128	[Cu <sub>61</sub> (S <sup>t</sup> Bu) <sub>26</sub> S <sub>6</sub> Cl <sub>6</sub> H <sub>14</sub> ] <sup>+</sup> : A Core-Shell Superatom Nanocluster with a Quasi- <i>J</i> <sub>36</sub> Cu <sub>19</sub> Core and an 18-Crown-6-Metal-Sulfide-like Stabilizing Belt. , 2019, 1, 297-302.		76
129	Modulation of Broadband Emissions in Two-Dimensional 100°-Oriented Ruddlesden-Popper Hybrid Perovskites. <i>ACS Energy Letters</i> , 2020, 5, 2149-2155.	8.8	75
130	A scalable synthesis of highly stable and water dispersible Ag <sub>44</sub> (SR) <sub>30</sub> nanoclusters. <i>Journal of Materials Chemistry A</i> , 2013, 1, 10148.	5.2	74
131	Characterization of Size, Anisotropy, and Density Heterogeneity of Nanoparticles by Sedimentation Velocity. <i>Analytical Chemistry</i> , 2014, 86, 7688-7695.	3.2	74
132	Perovskite Single-Crystal Solar Cells: Going Forward. <i>ACS Energy Letters</i> , 2021, 6, 631-642.	8.8	74
133	Double peak emission in lead halide perovskites by self-absorption. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2289-2300.	2.7	72
134	Perovskite-Nanosheet Sensitizer for Highly Efficient Organic X-ray Imaging Scintillator. <i>ACS Energy Letters</i> , 2022, 7, 10-16.	8.8	72
135	Efficient Photon Recycling and Radiation Trapping in Cesium Lead Halide Perovskite Waveguides. <i>ACS Energy Letters</i> , 2018, 3, 1492-1498.	8.8	70
136	Oriented Halide Perovskite Nanostructures and Thin Films for Optoelectronics. <i>Chemical Reviews</i> , 2021, 121, 12112-12180.	23.0	70
137	Low-Temperature Molten Salts Synthesis: CsPbBr <sub>3</sub> Nanocrystals with High Photoluminescence Emission Buried in Mesoporous SiO <sub>2</sub> . <i>ACS Energy Letters</i> , 2021, 6, 900-907.	8.8	68
138	Long-Lived Charge-Separated States in Ligand-Stabilized Silver Clusters. <i>Journal of the American Chemical Society</i> , 2012, 134, 11856-11859.	6.6	64
139	Time-Dependent Mechanical Response of APbX <sub>3</sub> (A = Cs, CH <sub>3</sub> NH <sub>3</sub> ; X) Tj ETOq1 1 0.784314 11.1 63		63
140	Ligand-Free Nanocrystals of Highly Emissive Cs <sub>4</sub> PbBr <sub>6</sub> Perovskite. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6493-6498.	1.5	63
141	Gold Doping of Silver Nanoclusters: A 26-Fold Enhancement in the Luminescence Quantum Yield. <i>Angewandte Chemie</i> , 2016, 128, 5843-5847.	1.6	62
142	Direct versus ligand-exchange synthesis of [PtAg <sub>28</sub> (BDT) <sub>12</sub> (TPP) <sub>4</sub> ] <sup>4+</sup> nanoclusters: effect of a single-atom dopant on the optoelectronic and chemical properties. <i>Nanoscale</i> , 2017, 9, 9529-9536.	2.8	62
143	Access to Highly Efficient Energy Transfer in Metal-Organic Frameworks via Mixed Linkers Approach. <i>Journal of the American Chemical Society</i> , 2020, 142, 8580-8584.	6.6	62
144	Double Charged Surface Layers in Lead Halide Perovskite Crystals. <i>Nano Letters</i> , 2017, 17, 2021-2027.	4.5	60

#	ARTICLE	IF	CITATIONS
145	Solution-Processed Visible-Blind Ultraviolet Photodetectors with Nanosecond Response Time and High Detectivity. <i>Advanced Optical Materials</i> , 2019, 7, 1900506.	3.6	60
146	Lecithin Capping Ligands Enable Ultrastable Perovskite-Phase CsPbI <sub>3</sub> Quantum Dots for Rec. 2020 Bright-Red Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2022, 144, 13302-13310.	6.6	59
147	Surface Electronic Structure of Hybrid Organo Lead Bromide Perovskite Single Crystals. <i>Journal of Physical Chemistry C</i> , 2016, 120, 21710-21715.	1.5	58
148	Tellurium-Based Double Perovskites A <sub>2</sub> TeX <sub>6</sub> with Tunable Band Gap and Long Carrier Diffusion Length for Optoelectronic Applications. <i>ACS Energy Letters</i> , 2019, 4, 228-234.	8.8	58
149	All-Perovskite Tandem Solar Cells: A Roadmap to Uniting High Efficiency with High Stability. <i>Accounts of Materials Research</i> , 2020, 1, 63-76.	5.9	57
150	Reversible Band Gap Narrowing of Sn-Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14868-14872.	7.2	56
151	Compositionally Screened Eutectic Catalytic Coatings on Halide Perovskite Photocathodes for Photoassisted Selective CO <sub>2</sub> Reduction. <i>ACS Energy Letters</i> , 2019, 4, 1279-1286.	8.8	56
152	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. <i>Nature Communications</i> , 2021, 12, 4831.	5.8	56
153	Stimuli-responsive switchable halide perovskites: Taking advantage of instability. <i>Joule</i> , 2021, 5, 2027-2046.	11.7	56
154	The Complete In-Gap Electronic Structure of Colloidal Quantum Dot Solids and Its Correlation with Electronic Transport and Photovoltaic Performance. <i>Advanced Materials</i> , 2014, 26, 937-942.	11.1	54
155	Real-Time Observation of Ultrafast Intraband Relaxation and Exciton Multiplication in PbS Quantum Dots. <i>ACS Photonics</i> , 2014, 1, 285-292.	3.2	54
156	Why are Hot Holes Easier to Extract than Hot Electrons from Methylammonium Lead Iodide Perovskite?. <i>Advanced Energy Materials</i> , 2019, 9, 1900084.	10.2	54
157	Robust and air-stable sandwiched organo-lead halide perovskites for photodetector applications. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2545-2552.	2.7	53
158	Structurally Tunable Two-Dimensional Layered Perovskites: From Confinement and Enhanced Charge Transport to Prolonged Hot Carrier Cooling Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 5705-5718.	2.1	53
159	Solvent-Solute Coordination Engineering for Efficient Perovskite Luminescent Solar Concentrators. <i>Joule</i> , 2020, 4, 631-643.	11.7	53
160	Nearly 100% energy transfer at the interface of metal-organic frameworks for X-ray imaging scintillators. <i>Matter</i> , 2022, 5, 253-265.	5.0	53
161	Porphyritic supramolecular daisy chains incorporating pillar[5]arene-“viologen host-guest interactions. <i>Chemical Communications</i> , 2015, 51, 10455-10458.	2.2	52
162	Defect-Triggered Phase Transition in Cesium Lead Halide Perovskite Nanocrystals. , 2019, 1, 185-191.		51

#	ARTICLE	IF	CITATIONS
163	[Cu <sub>15</sub> (PPh <sub>3</sub> ) <sub>6</sub> (PET) <sub>13</sub> ] <sup>2+</sup> : a Copper Nanocluster with Crystallization Enhanced Photoluminescence. <i>Small</i> , 2021, 17, e2006839.	5.2	50
164	Effect of Zinc Doping on the Reduction of the Hot Carrier Cooling Rate in Halide Perovskites. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10957-10963.	7.2	50
165	Focused-ion beam patterning of organolead trihalide perovskite for subwavelength grating nanophotonic applications. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, .	0.6	49
166	Halogen Vacancies Enable Ligand-Assisted Self-Assembly of Perovskite Quantum Dots into Nanowires. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16077-16081.	7.2	49
167	Theory-Guided Synthesis of Highly Luminescent Colloidal Cesium Tin Halide Perovskite Nanocrystals. <i>Journal of the American Chemical Society</i> , 2021, 143, 5470-5480.	6.6	49
168	Self-Assembly and Regrowth of Metal Halide Perovskite Nanocrystals for Optoelectronic Applications. <i>Accounts of Chemical Research</i> , 2022, 55, 262-274.	7.6	49
169	Tailoring ruthenium exposure to enhance the performance of fcc platinum@ruthenium core-shell electrocatalysts in the oxygen evolution reaction. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 16169-16178.	1.3	47
170	Transition from Positive to Negative Photoconductance in Doped Hybrid Perovskite Semiconductors. <i>Advanced Optical Materials</i> , 2019, 7, 1900865.	3.6	47
171	Shape Control of Metal Halide Perovskite Single Crystals: From Bulk to Nanoscale. <i>Chemistry of Materials</i> , 2020, 32, 7602-7617.	3.2	46
172	[Cu <sub>36</sub> H <sub>10</sub> (PET) <sub>24</sub> (PPh <sub>3</sub> ) <sub>6</sub> Cl <sub>2</sub> ] Reveals Surface Vacancy Defects in Ligand-Stabilized Metal Nanoclusters. <i>Journal of the American Chemical Society</i> , 2021, 143, 11026-11035.	6.6	46
173	Boosting Self-Trapped Emissions in Zero-Dimensional Perovskite Heterostructures. <i>Chemistry of Materials</i> , 2020, 32, 5036-5043.	3.2	46
174	Shape-Tunable Charge Carrier Dynamics at the Interfaces between Perovskite Nanocrystals and Molecular Acceptors. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3913-3919.	2.1	43
175	Probing buried recombination pathways in perovskite structures using 3D photoluminescence tomography. <i>Energy and Environmental Science</i> , 2018, 11, 2846-2852.	15.6	42
176	Near-unity photoluminescence quantum yield in inorganic perovskite nanocrystals by metal-ion doping. <i>Journal of Chemical Physics</i> , 2020, 152, 020902.	1.2	42
177	Doping Induces Structural Phase Transitions in All-Inorganic Lead Halide Perovskite Nanocrystals. , 2020, 2, 367-375.		42
178	Emergence of multiple fluorophores in individual cesium lead bromide nanocrystals. <i>Nature Communications</i> , 2019, 10, 2930.	5.8	41
179	[Cu <sub>23</sub> (PhSe) <sub>16</sub> (Ph <sub>3</sub> P) <sub>8</sub> (H) <sub>6</sub> ] <sup>+</sup> BF <sub>4</sub> <sup>-</sup> : Atomic-Level Insights into Cuboidal Polyhydrido Copper Nanoclusters and Their Quasi-simple Cubic Self-Assembly. , 2021, 3, 90-99.		41
180	Manipulation of hot carrier cooling dynamics in two-dimensional Dion-Jacobson hybrid perovskites via Rashba band splitting. <i>Nature Communications</i> , 2021, 12, 3995.	5.8	41

#	ARTICLE	IF	CITATIONS
181	MAPbI <sub>3</sub> Single Crystals Free from Hole-Trapping Centers for Enhanced Photodetectivity. ACS Energy Letters, 2019, 4, 2579-2584.	8.8	40
182	Multiple exciton generation in tin-lead halide perovskite nanocrystals for photocurrent quantum efficiency enhancement. Nature Photonics, 2022, 16, 485-490.	15.6	40
183	Ultrafast static and diffusion-controlled electron transfer at Ag <sub>29</sub> nanocluster/molecular acceptor interfaces. Nanoscale, 2016, 8, 5412-5416.	2.8	39
184	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
185	Effect of Precursor Ligands and Oxidation State in the Synthesis of Bimetallic Nano-Alloys. Chemistry of Materials, 2015, 27, 4134-4141.	3.2	38
186	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
187	Layer-Dependent Coherent Acoustic Phonons in Two-Dimensional Ruddlesden-Popper Perovskite Crystals. Journal of Physical Chemistry Letters, 2019, 10, 5259-5264.	2.1	38
188	Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy. Small, 2016, 12, 2313-2320.	5.2	37
189	Visualizing Buried Local Carrier Diffusion in Halide Perovskite Crystals via Two-Photon Microscopy. ACS Energy Letters, 2020, 5, 117-123.	8.8	37
190	Visible-Light Copper Nanocluster Catalysis for the C-N Coupling of Aryl Chlorides at Room Temperature. Journal of the American Chemical Society, 2022, 144, 12052-12061.	6.6	37
191	Metal Halide Perovskite and Phosphorus Doped g-C <sub>3</sub> N <sub>4</sub> Bulk Heterojunctions for Air-Stable Photodetectors. ACS Energy Letters, 2019, 4, 2315-2322.	8.8	36
192	Gram-scale fractionation of nanodiamonds by density gradient ultracentrifugation. Nanoscale, 2013, 5, 5017.	2.8	33
193	Synthesis of Copper Hydroxide Branched Nanocages and Their Transformation to Copper Oxide. Journal of Physical Chemistry C, 2014, 118, 19374-19379.	1.5	33
194	Luminescence and Stability Enhancement of Inorganic Perovskite Nanocrystals via Selective Surface Ligand Binding. ACS Nano, 2021, 15, 17998-18005.	7.3	32
195	A Layer-by-Layer ZnO Nanoparticle-PbS Quantum Dot Self-Assembly Platform for Ultrafast Interfacial Electron Injection. Small, 2015, 11, 112-118.	5.2	31
196	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
197	Quantum Dot Self-Assembly Enables Low-Threshold Lasing. Advanced Science, 2021, 8, e2101125.	5.6	28
198	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

#	ARTICLE	IF	CITATIONS
199	Overcoming Degradation Pathways to Achieve Stable Blue Perovskite Light-Emitting Diodes. ACS Energy Letters, 2022, 7, 1348-1354.	8.8	28
200	Real-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
201	Powering up perovskite photoresponse. Science, 2017, 355, 1260-1261.	6.0	27
202	Perovskite-Based Artificial Multiple Quantum Wells. Nano Letters, 2019, 19, 3535-3542.	4.5	27
203	Rapid continuous flow synthesis of high-quality silver nanocubes and nanospheres. RSC Advances, 2013, 3, 22397.	1.7	25
204	Direct Functionalization of Nanodiamonds with Maleimide. Chemistry of Materials, 2014, 26, 2766-2769.	3.2	25
205	Investigation of high contrast and reversible luminescence thermochromism of the quantum confined Cs <sub>4</sub> PbBr <sub>6</sub> perovskite solid. Nanoscale, 2019, 11, 5754-5759.	2.8	24
206	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
207	Engineering Surface Orientations for Efficient and Stable Hybrid Perovskite Single-Crystal Solar Cells. ACS Energy Letters, 2022, 7, 1544-1552.	8.8	24
208	Evidence of Plasmonic Induced Photocatalytic Hydrogen Production on Pd/TiO <sub>2</sub> Upon Deposition on Thin Films of Gold. Catalysis Letters, 2017, 147, 811-820.	1.4	23
209	Synthesis and Optical Properties of a Dithiolate/Phosphine-Protected Au <sub>28</sub> Nanocluster. Journal of Physical Chemistry C, 2017, 121, 10681-10685.	1.5	23
210	High-Purity Hybrid Organolead Halide Perovskite Nanoparticles Obtained by Pulsed-Laser Irradiation in Liquid. ChemPhysChem, 2017, 18, 1047-1054.	1.0	23
211	Nanoporous GaN/n-type GaN: A Cathode Structure for ITO-Free Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3295-3303.	8.8	23
212	Shining Light on the Structure of Lead Halide Perovskite Nanocrystals. , 2021, 3, 845-861.		23
213	Metal-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
214	Size-controlled fluorescent nanodiamonds: a facile method of fabrication and color-center counting. Nanoscale, 2013, 5, 11776.	2.8	22
215	Real-Space Mapping of Surface Trap States in CIGSe Nanocrystals Using 4D Electron Microscopy. Nano Letters, 2016, 16, 4417-4423.	4.5	22
216	Luminescent Copper(I) Halides for Optoelectronic Applications. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100138.	1.2	22

#	ARTICLE	IF	CITATIONS
217	Colloidal Sb <sub>2</sub> S <sub>3</sub> nanocrystals: synthesis, characterization and fabrication of solid-state semiconductor sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6809-6814.	5.2	21
218	Extraordinary Carrier Diffusion on CdTe Surfaces Uncovered by 4D Electron Microscopy. <i>CheM</i> , 2019, 5, 706-718.	5.8	21
219	Unraveling the Elastic Properties of (Quasi)Two-Dimensional Hybrid Perovskites: A Joint Experimental and Theoretical Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 17881-17892.	4.0	21
220	Air-Resistant Lead Halide Perovskite Nanocrystals Embedded into Polyimide of Intrinsic Microporosity. <i>Energy Material Advances</i> , 2021, 2021, .	4.7	21
221	Resonance-Mediated Dynamic Modulation of Perovskite Crystallization for Efficient and Stable Solar Cells. <i>Advanced Materials</i> , 2022, 34, e2107111.	11.1	21
222	Trapping shape-controlled nanoparticle nucleation and growth stages via continuous-flow chemistry. <i>Chemical Communications</i> , 2017, 53, 2495-2498.	2.2	19
223	Synthesis and Characterization of Branched <i>fcc</i> <i>hcp</i> Ruthenium Nanostructures and Their Catalytic Activity in Ammonia Borane Hydrolysis. <i>Crystal Growth and Design</i> , 2018, 18, 1509-1516.	1.4	19
224	All-inorganic halide-perovskite polymer-fiber-photodetector for high-speed optical wireless communication. <i>Optics Express</i> , 2022, 30, 9823.	1.7	19
225	Plasmonic Nb <sub>2</sub> C <sub>T</sub> MXene-MAPbI <sub>3</sub> Heterostructure for Self-Powered Visible-NIR Photodiodes. <i>ACS Nano</i> , 2022, 16, 7904-7914.	7.3	19
226	Overcoming the Cut-Off Charge Transfer Bandgaps at the PbS Quantum Dot Interface. <i>Advanced Functional Materials</i> , 2015, 25, 7435-7441.	7.8	18
227	Engineering of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Crystals by Alloying Large Organic Cations for Enhanced Thermal Stability and Transport Properties. <i>Angewandte Chemie</i> , 2016, 128, 10844-10848.	1.6	18
228	Reversible Band Gap Narrowing of Sn-Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. <i>Angewandte Chemie</i> , 2018, 130, 15084-15088.	1.6	17
229	Halogen Vacancies Enable Ligand-Assisted Self-Assembly of Perovskite Quantum Dots into Nanowires. <i>Angewandte Chemie</i> , 2019, 131, 16223-16227.	1.6	16
230	[Ag <sub>9</sub> (1,2-BDT) <sub>6</sub> ] <sup>3+</sup> : How Square-Pyramidal Building Blocks Self-Assemble into the Smallest Silver Nanocluster. <i>Inorganic Chemistry</i> , 2021, 60, 4306-4312.	1.9	16
231	Imaging Localized Energy States in Silicon-Doped InGaN Nanowires Using 4D Electron Microscopy. <i>ACS Energy Letters</i> , 2018, 3, 476-481.	8.8	15
232	<i>In situ</i> oxidation and reduction of triangular nickel nanoplates via environmental transmission electron microscopy. <i>Journal of Microscopy</i> , 2018, 269, 161-167.	0.8	15
233	Fabrication of bifacial sandwiched heterojunction photoconductor "Type and MAI passivated photodiode "Type perovskite photodetectors. <i>Organic Electronics</i> , 2020, 84, 105730.	1.4	15
234	Cyanamide Passivation Enables Robust Elemental Imaging of Metal Halide Perovskites at Atomic Resolution. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 10402-10409.	2.1	15

#	ARTICLE	IF	CITATIONS
235	Reduced ion migration and enhanced photoresponse in cuboid crystals of methylammonium lead iodide perovskite. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 054001.	1.3	14
236	Interface Matters: Enhanced Photoluminescence and Long-Term Stability of Zero-Dimensional Cesium Lead Bromide Nanocrystals <i>via</i> Gas-Phase Aluminum Oxide Encapsulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 35598-35605.	4.0	14
237	Dynamical Interconversion between Excitons and Geminate Charge Pairs in Two-Dimensional Perovskite Layers Described by the Onsager–Braun Model. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1112-1119.	2.1	14
238	Photoactivated p-Doping of Organic Interlayer Enables Efficient Perovskite/Silicon Tandem Solar Cells. <i>ACS Energy Letters</i> , 2022, 7, 1987-1993.	8.8	14
239	Ultrafast transient infrared spectroscopy for probing trapping states in hybrid perovskite films. <i>Communications Chemistry</i> , 2022, 5, .	2.0	14
240	Halide Perovskites: Metal Halide Perovskites for Solar–Chemical Fuel Conversion ( <i>Adv. Energy Mater.</i> ) Tj ETQq0,0,0 rgBT/Overlock	10.2	13
241	Cascade Electron Transfer Induces Slow Hot Carrier Relaxation in CsPbBr <sub>3</sub> Asymmetric Quantum Wells. <i>ACS Energy Letters</i> , 2021, 6, 2602-2609.	8.8	13
242	The impact of electrostatic interactions on ultrafast charge transfer at Ag <sub>29</sub> nanoclusters–fullerene and CdTe quantum dots–fullerene interfaces. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2894-2900.	2.7	12
243	Shedding light on film crystallization. <i>Nature Materials</i> , 2017, 16, 601-602.	13.3	12
244	Real-Space Mapping of Surface-Oxygen Defect States in Photovoltaic Materials Using Low-Voltage Scanning Ultrafast Electron Microscopy. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 7760-7767.	4.0	12
245	Engineering Band-Type Alignment in CsPbBr <sub>3</sub> Perovskite-Based Artificial Multiple Quantum Wells. <i>Advanced Materials</i> , 2021, 33, e2005166.	11.1	12
246	Advances and Challenges in Tin Halide Perovskite Nanocrystals. , 2021, 3, 1541-1557.		12
247	Micropump Fluidic Strategy for Fabricating Perovskite Microwire Array-Based Devices Embedded in Semiconductor Platform. <i>Cell Reports Physical Science</i> , 2021, 2, 100304.	2.8	11
248	pH-Induced Surface Modification of Atomically Precise Silver Nanoclusters: An Approach for Tunable Optical and Electronic Properties. <i>Inorganic Chemistry</i> , 2016, 55, 11522-11528.	1.9	10
249	Directional Exciton Migration in Benzoimidazole-Based Metal–Organic Frameworks. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4917-4927.	2.1	10
250	Perovskite Semiconductor Nanocrystals. <i>Energy Material Advances</i> , 2022, 2022, .	4.7	9
251	The impact of Au doping on the charge carrier dynamics at the interfaces between cationic porphyrin and silver nanoclusters. <i>Chemical Physics Letters</i> , 2017, 683, 393-397.	1.2	8
252	Rotationally Free and Rigid Sublattices of the Single Crystal Perovskite CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> (001): The Case of the Lattice Polar Liquid. <i>Journal of Physical Chemistry C</i> , 2018, 122, 25506-25514.	1.5	8

#	ARTICLE	IF	CITATIONS
253	Visualization of Charge Carrier Trapping in Silicon at the Atomic Surface Level Using Four-Dimensional Electron Imaging. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1960-1966.	2.1	8
254	Domain-Size-Dependent Residual Stress Governs the Phase-Transition and Photoluminescence Behavior of Methylammonium Lead Iodide. <i>Advanced Functional Materials</i> , 2021, 31, 2008088.	7.8	8
255	Gentle Materials Need Gentle Fabrication: Encapsulation of Perovskites by Gas-Phase Alumina Deposition. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2348-2357.	2.1	8
256	Synthesis and characterization of mixed ligand chiral nanoclusters. <i>Dalton Transactions</i> , 2016, 45, 11297-11300.	1.6	7
257	P&#x2014;24: Perovskite Quantum Dots Display: Challenges and Opportunities. <i>Digest of Technical Papers SID International Symposium</i> , 2019, 50, 1712-1715.	0.1	7
258	Correlation of Photoluminescence and Structural Morphologies at the Individual Nanoparticle Level. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4855-4860.	1.1	7
259	Phosphatidylcholine-mediated regulation of growth kinetics for colloidal synthesis of cesium tin halide nanocrystals. <i>Nanoscale</i> , 2021, 13, 16726-16733.	2.8	7
260	Intriguing Ultrafast Charge Carrier Dynamics in Two-Dimensional Ruddlesden-Popper Hybrid Perovskites. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9630-9637.	1.5	7
261	Light Propagation and Radiative Exciton Transport in Two-Dimensional Layered Perovskite Microwires. <i>ACS Photonics</i> , 2021, 8, 276-282.	3.2	7
262	The Impact of Grain Alignment of the Electron Transporting Layer on the Performance of Inverted Bulk Heterojunction Solar Cells. <i>Small</i> , 2015, 11, 5272-5279.	5.2	6
263	P&#x2013;203: <i>Late-News Poster</i> Novel Techniques for Highly Stable Luminescent Perovskite Halide Quantum Dots. <i>Digest of Technical Papers SID International Symposium</i> , 2018, 49, 1681-1684.	0.1	6
264	Access to Ultrafast Surface and Interface Carrier Dynamics Simultaneously in Space and Time. <i>Journal of Physical Chemistry C</i> , 2021, 125, 14495-14516.	1.5	6
265	Single-Particle Spectroscopy as a Versatile Tool to Explore Lower-Dimensional Structures of Inorganic Perovskites. <i>ACS Energy Letters</i> , 2021, 6, 3695-3708.	8.8	6
266	A facile micropatterning method for a highly flexible PEDOT:PSS on SU-8. <i>Organic Electronics</i> , 2016, 34, 75-78.	1.4	5
267	Energy Spotlight. <i>ACS Energy Letters</i> , 2020, 5, 1328-1329.	8.8	5
268	Interface Engineering of Bi-Fluorescence Molecules for High-Performance Data Encryption and Ultralow UV-Light Detection. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	5
269	Imaging the Reduction of Electron Trap States in Shelled Copper Indium Gallium Selenide Nanocrystals Using Ultrafast Electron Microscopy. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15010-15016.	1.5	4
270	Colloidal PbS Quantum Dots for Visible-to-Near-Infrared Optical Internet of Things. <i>IEEE Photonics Journal</i> , 2021, 13, 1-11.	1.0	4



#	ARTICLE	IF	CITATIONS
271	Synthesis of novel bis(perfluorophenyl azides) coupling agents: Evaluation of their performance by crosslinking of poly(ethylene oxide). <i>Reactive and Functional Polymers</i> , 2011, 71, 1110-1117.	2.0	3
272	Energy Spotlight: New Inroads in Metal Halide Perovskite Research. <i>ACS Energy Letters</i> , 2019, 4, 3036-3038.	8.8	3
273	Ultrafast electron imaging of surface charge carrier dynamics at low voltage. <i>Structural Dynamics</i> , 2020, 7, 021001.	0.9	3
274	Architectural modification coupled with MAI passivation of MAPbI <sub>3</sub> MAPbI <sub>3</sub> interface for fabrication of highly-responsive broadband bifacial perovskite photodetectors. <i>Applied Materials Today</i> , 2020, 20, 100649.	2.3	3
275	Invited Paper: A New Generation of Luminescent Materials Based on Low-Dimensional Perovskites. <i>Digest of Technical Papers SID International Symposium</i> , 2017, 48, 83-86.	0.1	2
276	Effect of Zinc-Doping on the Reduction of the Hot-Carrier Cooling Rate in Halide Perovskites. <i>Angewandte Chemie</i> , 2021, 133, 11052-11058.	1.6	2
277	Perovskite Single Crystals: Synthesis, Properties and Devices. <i>Materials and Energy</i> , 2018, , 241-283.	2.5	2
278	Soft perovskites stabilized by robust heterojunctions. <i>Joule</i> , 2022, 6, 951-952.	11.7	2
279	Photovoltaics: The Complete In-Gap Electronic Structure of Colloidal Quantum Dot Solids and Its Correlation with Electronic Transport and Photovoltaic Performance ( <i>Adv. Mater.</i> 6/2014). <i>Advanced Materials</i> , 2014, 26, 822-822.	11.1	1
280	Nanowires: Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy ( <i>Small</i> 17/2016). <i>Small</i> , 2016, 12, 2312-2312.	5.2	1
281	Innenteilbild: Templated Atom-Precise Galvanic Synthesis and Structure Elucidation of a [Ag <sub>24</sub> Au(SR) <sub>18</sub> ] <sup>+</sup> Nanocluster ( <i>Angew. Chem.</i> 3/2016). <i>Angewandte Chemie</i> , 2016, 128, 834-834.	1.6	1
282	Bane of Hydrogen-Bond Formation on the Photoinduced Charge-Transfer Process in Donor-Acceptor Systems. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7837-7843.	1.5	1
283	High-Speed Ultraviolet-C Photodetector Based on Frequency Down-Converting CsPbBr <sub>3</sub> Perovskite Nanocrystals on Silicon Platform. , 2019, , .		1
284	Invited Paper: High Color Gamut QDot $\mu$ LCD Displays with Perovskite Quantum Dots: Devices Architecture, Performance and Reliability. <i>Digest of Technical Papers SID International Symposium</i> , 2021, 52, 909-911.	0.1	1
285	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized $\text{I}^{\pm}$ CsPbI <sub>3</sub> Perovskite. <i>Angewandte Chemie</i> , 2021, 133, 16300-16306.	1.6	1
286	Chapter 2. Nanomaterials for solar energy. <i>SPR Nanoscience</i> , 2013, , 23-57.	0.3	1
287	Blue Superluminescent Diodes with GHz Bandwidth Exciting Perovskite Nanocrystals for High CRI White Lighting and High-Speed VLC. , 2019, , .		1
288	Gold nanoparticle growth control - implementing novel wet chemistry method on silicon substrate. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
289	Quantum Dots: Overcoming the Cut-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
290	Hybrid perovskites: Approaches towards light-emitting devices. , 2016, , .		0
291	Energy Spotlight. ACS Energy Letters, 2021, 6, 2359-2361.	8.8	0
292	Nanoscale and Bulk Perovskite Single-Crystals: Surface Engineering for Efficient LEDs, Photodetectors, and Solar Cells. , 0, , .		0
293	All-inorganic halide-perovskite-polymer luminescent fibers for high-bitrate ultraviolet free-space optical communication. , 2021, , .		0
294	Wide-field-of-view Perovskite Quantum-dots Fibers Array for Easing Pointing, Acquisition and Tracking in Underwater Wireless Optical Communication. , 2022, , .		0