

# Osman M Bakr

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/4037071/osman-m-bakr-publications-by-year.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

282  
papers

29,487  
citations

85  
h-index

168  
g-index

297  
ext. papers

35,226  
ext. citations

13.4  
avg, IF

7.46  
L-index

#	Paper	IF	Citations
282	Self-Assembly and Regrowth of Metal Halide Perovskite Nanocrystals for Optoelectronic Applications.. <i>Accounts of Chemical Research</i> , <b>2022</b> ,	24.3	13
281	Large-Area Perovskite-Related Copper Halide Film for High-Resolution Flexible X-ray Imaging Scintillation Screens. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 844-846	20.1	18
280	All-inorganic halide-perovskite polymer-fiber-photodetector for high-speed optical wireless communication.. <i>Optics Express</i> , <b>2022</b> , 30, 9823-9840	3.3	2
279	Perovskite Semiconductor Nanocrystals. <i>Energy Material Advances</i> , <b>2022</b> , 2022, 1-2	1	2
278	Cryogenic Focused Ion Beam Enables Atomic-Resolution Imaging of Local Structures in Highly Sensitive Bulk Crystals and Devices.. <i>Journal of the American Chemical Society</i> , <b>2022</b> ,	16.4	3
277	Energy Transfer in Metal-Organic Frameworks for Fluorescence Sensing.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2022</b> ,	9.5	15
276	Overcoming Degradation Pathways to Achieve Stable Blue Perovskite Light-Emitting Diodes. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 1348-1354	20.1	5
275	Engineering Surface Orientations for Efficient and Stable Hybrid Perovskite Single-Crystal Solar Cells. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 1544-1552	20.1	6
274	Soft perovskites stabilized by robust heterojunctions. <i>Joule</i> , <b>2022</b> , 6, 951-952	27.8	0
273	Resonance-mediated dynamic modulation of perovskite crystallization for efficient and stable solar cells. <i>Advanced Materials</i> , <b>2021</b> , e2107111	24	10
272	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. <i>Joule</i> , <b>2021</b> ,	27.8	15
271	Nearly 100% energy transfer at the interface of metal-organic frameworks for X-ray imaging scintillators. <i>Matter</i> , <b>2021</b> ,	12.7	15
270	Cyanamide Passivation Enables Robust Elemental Imaging of Metal Halide Perovskites at Atomic Resolution. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 10402-10409	6.4	6
269	Luminescence and Stability Enhancement of Inorganic Perovskite Nanocrystals via Selective Surface Ligand Binding. <i>ACS Nano</i> , <b>2021</b> ,	16.7	10
268	Light Propagation and Radiative Exciton Transport in Two-Dimensional Layered Perovskite Microwires. <i>ACS Photonics</i> , <b>2021</b> , 8, 276-282	6.3	7
267	Engineering Band-Type Alignment in CsPbBr Perovskite-Based Artificial Multiple Quantum Wells. <i>Advanced Materials</i> , <b>2021</b> , 33, e2005166	24	1
266	[Ag(1,2-BDT)]: How Square-Pyramidal Building Blocks Self-Assemble into the Smallest Silver Nanocluster. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 4306-4312	5.1	3

265	[Cu (PPh ) (PET) ] : a Copper Nanocluster with Crystallization Enhanced Photoluminescence. <i>Small</i> , <b>2021</b> , 17, e2006839	11	10
264	Successes and Challenges of Core/Shell Lead Halide Perovskite Nanocrystals. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 1340-1357	20.1	30
263	Effect of Zinc-Doping on the Reduction of the Hot-Carrier Cooling Rate in Halide Perovskites. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 11052-11058	3.6	
262	Effect of Zinc-Doping on the Reduction of the Hot-Carrier Cooling Rate in Halide Perovskites. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 10957-10963	16.4	14
261	Gentle Materials Need Gentle Fabrication: Encapsulation of Perovskites by Gas-Phase Alumina Deposition. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 2348-2357	6.4	4
260	Intriguing Ultrafast Charge Carrier Dynamics in Two-Dimensional Ruddlesden-Popper Hybrid Perovskites. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 9630-9637	3.8	3
259	Colloidal PbS Quantum Dots for Visible-to-Near-Infrared Optical Internet of Things. <i>IEEE Photonics Journal</i> , <b>2021</b> , 13, 1-11	1.8	2
258	Theory-Guided Synthesis of Highly Luminescent Colloidal Cesium Tin Halide Perovskite Nanocrystals. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 5470-5480	16.4	17
257	18.4 % Organic Solar Cells Using a High Ionization Energy Self-Assembled Monolayer as Hole-Extraction Interlayer. <i>ChemSusChem</i> , <b>2021</b> , 14, 3569-3578	8.3	54
256	Shining Light on the Structure of Lead Halide Perovskite Nanocrystals <b>2021</b> , 3, 845-861		8
255	62-8: Invited Paper: High Color Gamut QDot-LCD Displays with Perovskite Quantum Dots: Devices Architecture, Performance and Reliability. <i>Digest of Technical Papers SID International Symposium</i> , <b>2021</b> , 52, 909-911	0.5	0
254	Directional Exciton Migration in Benzoimidazole-Based Metal-Organic Frameworks. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 4917-4927	6.4	4
253	Manipulation of hot carrier cooling dynamics in two-dimensional Dion-Jacobson hybrid perovskites via Rashba band splitting. <i>Nature Communications</i> , <b>2021</b> , 12, 3995	17.4	11
252	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized $\text{CsPbI}_3$ Perovskite. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 16300-16306	3.6	1
251	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , <b>2021</b> , 15, 10775-10981	16.7	222
250	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized $\text{CsPbI}_3$ Perovskite. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 16164-16170	16.4	59
249	Access to Ultrafast Surface and Interface Carrier Dynamics Simultaneously in Space and Time. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 14495-14516	3.8	0
248	Cascade Electron Transfer Induces Slow Hot Carrier Relaxation in $\text{CsPbBr}_3$ Asymmetric Quantum Wells. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 2602-2609	20.1	4

247	[CuH(PET)(PPh)Cl] Reveals Surface Vacancy Defects in Ligand-Stabilized Metal Nanoclusters. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 11026-11035	16.4	7
246	Oriented Halide Perovskite Nanostructures and Thin Films for Optoelectronics. <i>Chemical Reviews</i> , <b>2021</b> , 121, 12112-12180	68.1	25
245	[Cu <sub>23</sub> (PhSe) <sub>16</sub> (Ph <sub>3</sub> P) <sub>8</sub> (H) <sub>6</sub> ][BF <sub>4</sub> : Atomic-Level Insights into Cuboidal Polyhydrido Copper Nanoclusters and Their Quasi-simple Cubic Self-Assembly <b>2021</b> , 3, 90-99		12
244	Perovskite Single-Crystal Solar Cells: Going Forward. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 631-642	20.1	37
243	Micropump Fluidic Strategy for Fabricating Perovskite Microwire Array-Based Devices Embedded in Semiconductor Platform. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100304	6.1	3
242	Metal Halide Perovskites for X-ray Imaging Scintillators and Detectors. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 739-768	26.1	127
241	Phosphatidylcholine-mediated regulation of growth kinetics for colloidal synthesis of cesium tin halide nanocrystals. <i>Nanoscale</i> , <b>2021</b> , 13, 16726-16733	7.7	1
240	Domain-Size-Dependent Residual Stress Governs the Phase-Transition and Photoluminescence Behavior of Methylammonium Lead Iodide. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008088	15.6	3
239	Low-Temperature Molten Salts Synthesis: CsPbBr Nanocrystals with High Photoluminescence Emission Buried in Mesoporous SiO <sub>2</sub> . <i>ACS Energy Letters</i> , <b>2021</b> , 6, 900-907	20.1	29
238	CsMnBr <sub>3</sub> : Lead-Free Nanocrystals with High Photoluminescence Quantum Yield and Picosecond Radiative Lifetime <b>2021</b> , 3, 290-297		37
237	Air-Resistant Lead Halide Perovskite Nanocrystals Embedded into Polyimide of Intrinsic Microporosity. <i>Energy Material Advances</i> , <b>2021</b> , 2021, 1-9	1	4
236	Quantum Dot Self-Assembly Enables Low-Threshold Lasing. <i>Advanced Science</i> , <b>2021</b> , 8, e2101125	13.6	12
235	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. <i>Nature Communications</i> , <b>2021</b> , 12, 4831	17.4	16
234	Stimuli-responsive switchable halide perovskites: Taking advantage of instability. <i>Joule</i> , <b>2021</b> , 5, 2027-2046	24.8	13
233	Efficient and Spectrally Stable Blue Perovskite Light-Emitting Diodes Employing a Cationic Conjugated Polymer. <i>Advanced Materials</i> , <b>2021</b> , 33, e2103640	24	18
232	22.8%-Efficient single-crystal mixed-cation inverted perovskite solar cells with a near-optimal bandgap. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 2263-2268	35.4	64
231	Ultrafast electron imaging of surface charge carrier dynamics at low voltage. <i>Structural Dynamics</i> , <b>2020</b> , 7, 021001	3.2	2
230	Correlation of Photoluminescence and Structural Morphologies at the Individual Nanoparticle Level. <i>Journal of Physical Chemistry A</i> , <b>2020</b> , 124, 4855-4860	2.8	4

229	Modulation of Broadband Emissions in Two-Dimensional <100>-Oriented Ruddlesden-Popper Hybrid Perovskites. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2149-2155	20.1	33
228	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> , <b>2020</b> , 11, 5705-5718	6.4	27
227	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> , <b>2020</b> , 20, 100649	6.6	2
226	Monolayer Perovskite Bridges Enable Strong Quantum Dot Coupling for Efficient Solar Cells. <i>Joule</i> , <b>2020</b> , 4, 1542-1556	27.8	85
225	Unraveling the Elastic Properties of (Quasi)Two-Dimensional Hybrid Perovskites: A Joint Experimental and Theoretical Study. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 17881-17892	9.5	10
224	Doping Induces Structural Phase Transitions in All-Inorganic Lead Halide Perovskite Nanocrystals <b>2020</b> , 2, 367-375		27
223	Energy Spotlight. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 1328-1329	20.1	4
222	Interface Matters: Enhanced Photoluminescence and Long-Term Stability of Zero-Dimensional Cesium Lead Bromide Nanocrystals Gas-Phase Aluminum Oxide Encapsulation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 35598-35605	9.5	7
221	Solvent-Solute Coordination Engineering for Efficient Perovskite Luminescent Solar Concentrators. <i>Joule</i> , <b>2020</b> , 4, 631-643	27.8	28
220	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> , <b>2020</b> , 5, 793-798	20.1	100
219	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> , <b>2020</b> , 12, 7760-7767	9.5	9
218	Low-Temperature Crystallization Enables 21.9% Efficient Single-Crystal MAPbI <sub>3</sub> Inverted Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 657-662	20.1	96
217	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> , <b>2020</b> , 11, 1112-1119	6.4	8
216	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. <i>Nature Energy</i> , <b>2020</b> , 5, 131-140	62.3	552
215	Transition Dipole Moments of = 1, 2, and 3 Perovskite Quantum Wells from the Optical Stark Effect and Many-Body Perturbation Theory. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 716-723	6.4	14
214	Fabrication of bifacial sandwiched heterojunction photoconductor $\pi$ -type and MAI passivated photodiode $\pi$ -type perovskite photodetectors. <i>Organic Electronics</i> , <b>2020</b> , 84, 105730	3.5	8
213	[Cu(PhS)(BuNH)(H)] Reveals the Coexistence of Large Planar Cores and Hemispherical Shells in High-Nuclearity Copper Nanoclusters. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 8696-8705	16.4	37
212	Boosting Self-Trapped Emissions in Zero-Dimensional Perovskite Heterostructures. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 5036-5043	9.6	24

211	Metal Halide Perovskites for Solar-to-Chemical Fuel Conversion. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902433	21.8	75
210	Double peak emission in lead halide perovskites by self-absorption. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 2289-2300	7.1	51
209	Near-unity photoluminescence quantum yield in inorganic perovskite nanocrystals by metal-ion doping. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 020902	3.9	26
208	Edge stabilization in reduced-dimensional perovskites. <i>Nature Communications</i> , <b>2020</b> , 11, 170	17.4	79
207	Single Crystals: The Next Big Wave of Perovskite Optoelectronics <b>2020</b> , 2, 184-214		56
206	Bright high-colour-purity deep-blue carbon dot light-emitting diodes via efficient edge amination. <i>Nature Photonics</i> , <b>2020</b> , 14, 171-176	33.9	144
205	Visualizing Buried Local Carrier Diffusion in Halide Perovskite Crystals via Two-Photon Microscopy. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 117-123	20.1	20
204	All-Perovskite Tandem Solar Cells: A Roadmap to Uniting High Efficiency with High Stability. <i>Accounts of Materials Research</i> , <b>2020</b> , 1, 63-76	7.5	28
203	Color-pure red light-emitting diodes based on two-dimensional lead-free perovskites. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	52
202	Shape Control of Metal Halide Perovskite Single Crystals: From Bulk to Nanoscale. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 7602-7617	9.6	30
201	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 3663-3671	20.1	175
200	Nanoporous GaN/n-type GaN: A Cathode Structure for ITO-Free Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 3295-3303	20.1	6
199	Self-Assembled Monolayer Enables Hole Transport Layer-Free Organic Solar Cells with 18% Efficiency and Improved Operational Stability. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2935-2944	20.1	244
198	Access to Highly Efficient Energy Transfer in Metal-Organic Frameworks via Mixed Linkers Approach. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 8580-8584	16.4	34
197	Halide Perovskites: Metal Halide Perovskites for Solar-to-Chemical Fuel Conversion (Adv. Energy Mater. 13/2020). <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2070059	21.8	7
196	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> , <b>2019</b> , 141, 15423-15432	16.4	79
195	MAPbI <sub>3</sub> Single Crystals Free from Hole-Trapping Centers for Enhanced Photodetectivity. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2579-2584	20.1	28
194	Extraordinary Carrier Diffusion on CdTe Surfaces Uncovered by 4D Electron Microscopy. <i>CheM</i> , <b>2019</b> , 5, 706-718	16.2	14

193	Solution-Processed Visible-Blind Ultraviolet Photodetectors with Nanosecond Response Time and High Detectivity. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1900506	8.1	40
192	Assembly of Atomically Precise Silver Nanoclusters into Nanocluster-Based Frameworks. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 9585-9592	16.4	81
191	P-124: Perovskite Quantum Dots Display: Challenges and Opportunities. <i>Digest of Technical Papers SID International Symposium</i> , <b>2019</b> , 50, 1712-1715	0.5	6
190	Defect-Triggered Phase Transition in Cesium Lead Halide Perovskite Nanocrystals <b>2019</b> , 1, 185-191		37
189	High-Efficiency Violet-Emitting All-Inorganic Perovskite Nanocrystals Enabled by Alkaline-Earth Metal Passivation. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3974-3983	9.6	64
188	Compositionally Screened Eutectic Catalytic Coatings on Halide Perovskite Photocathodes for Photoassisted Selective CO <sub>2</sub> Reduction. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1279-1286	20.1	32
187	Compositional, Processing, and Interfacial Engineering of Nanocrystal- and Quantum-Dot-Based Perovskite Solar Cells. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 6387-6411	9.6	66
186	Single-Crystal MAPbI <sub>3</sub> Perovskite Solar Cells Exceeding 21% Power Conversion Efficiency. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1258-1259	20.1	291
185	Why are Hot Holes Easier to Extract than Hot Electrons from Methylammonium Lead Iodide Perovskite?. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1900084	21.8	30
184	Perovskite-Based Artificial Multiple Quantum Wells. <i>Nano Letters</i> , <b>2019</b> , 19, 3535-3542	11.5	17
183	Reducing Defects in Halide Perovskite Nanocrystals for Light-Emitting Applications. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 2629-2640	6.4	122
182	Light-Induced Self-Assembly of Cubic CsPbBr <sub>3</sub> Perovskite Nanocrystals into Nanowires. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 6642-6649	9.6	73
181	Visualization of Charge Carrier Trapping in Silicon at the Atomic Surface Level Using Four-Dimensional Electron Imaging. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 1960-1966	6.4	5
180	Metal Halide Perovskite Nanosheet for X-ray High-Resolution Scintillation Imaging Screens. <i>ACS Nano</i> , <b>2019</b> , 13, 2520-2525	16.7	218
179	Investigation of high contrast and reversible luminescence thermochromism of the quantum confined CsPbBr perovskite solid. <i>Nanoscale</i> , <b>2019</b> , 11, 5754-5759	7.7	18
178	Insights into the local structure of dopants, doping efficiency, and luminescence properties of lanthanide-doped CsPbCl <sub>3</sub> perovskite nanocrystals. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 3037-3048	7.1	51
177	Unlocking the Effect of Trivalent Metal Doping in All-Inorganic CsPbBr <sub>3</sub> Perovskite. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 789-795	20.1	77
176	Transition from Positive to Negative Photoconductance in Doped Hybrid Perovskite Semiconductors. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1900865	8.1	27



175	Metal Halide Perovskite and Phosphorus Doped g-C3N4 Bulk Heterojunctions for Air-Stable Photodetectors. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2315-2322	20.1	23
174	Layer-Dependent Coherent Acoustic Phonons in Two-Dimensional Ruddlesden-Popper Perovskite Crystals. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 5259-5264	6.4	23
173	[Cu61(StBu)26S6Cl6H14]+: A Core-Shell Superatom Nanocluster with a Quasi-J36 Cu19 Core and an 18-Crown-6-Metal-Sulfide-like Stabilizing Belt <b>2019</b> , 1, 297-302		37
172	Emergence of multiple fluorophores in individual cesium lead bromide nanocrystals. <i>Nature Communications</i> , <b>2019</b> , 10, 2930	17.4	31
171	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. <i>Joule</i> , <b>2019</b> , 3, 1963-1976	27.8	154
170	Tuning Hot Carrier Cooling Dynamics by Dielectric Confinement in Two-Dimensional Hybrid Perovskite Crystals. <i>ACS Nano</i> , <b>2019</b> , 13, 12621-12629	16.7	55
169	Delayed Photoluminescence and Modified Blinking Statistics in Alumina-Encapsulated Zero-Dimensional Inorganic Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 6780-6787	6.4	21
168	17% Efficient Organic Solar Cells Based on Liquid Exfoliated WS <sub>2</sub> as a Replacement for PEDOT:PSS. <i>Advanced Materials</i> , <b>2019</b> , 31, e1902965	24	384
167	High-speed colour-converting photodetector with all-inorganic CsPbBr <sub>3</sub> perovskite nanocrystals for ultraviolet light communication. <i>Light: Science and Applications</i> , <b>2019</b> , 8, 94	16.7	125
166	Halogen Vacancies Enable Ligand-Assisted Self-Assembly of Perovskite Quantum Dots into Nanowires. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 16223-16227	3.6	13
165	Halogen Vacancies Enable Ligand-Assisted Self-Assembly of Perovskite Quantum Dots into Nanowires. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 16077-16081	16.4	32
164	Blue Superluminescent Diodes with GHz Bandwidth Exciting Perovskite Nanocrystals for High CRI White Lighting and High-Speed VLC <b>2019</b> ,		1
163	Energy Spotlight: New Inroads in Metal Halide Perovskite Research. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 3036-3038	20.1	3
162	High-Speed Ultraviolet-C Photodetector Based on Frequency Down-Converting CsPbBr <sub>3</sub> Perovskite Nanocrystals on Silicon Platform <b>2019</b> ,		1
161	Reduced ion migration and enhanced photoresponse in cuboid crystals of methylammonium lead iodide perovskite. <i>Journal Physics D: Applied Physics</i> , <b>2019</b> , 52, 054001	3	11
160	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> , <b>2019</b> , 4, 228-234	20.1	34
159	Ligand-Free Nanocrystals of Highly Emissive Cs <sub>4</sub> PbBr <sub>6</sub> Perovskite. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 6493-6498	3.8	52
158	Synthesis and Characterization of Branched fcc/hcp Ruthenium Nanostructures and Their Catalytic Activity in Ammonia Borane Hydrolysis. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 1509-1516	3.5	15



157	Imaging Localized Energy States in Silicon-Doped InGaN Nanowires Using 4D Electron Microscopy. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 476-481	20.1	11
156	Water-Induced Dimensionality Reduction in Metal-Halide Perovskites. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 14128-14134	3.8	56
155	Tailoring the Crystal Structure of Nanoclusters Unveiled High Photoluminescence via Ion Pairing. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 2719-2725	9.6	60
154	The Electrical and Optical Properties of Organometal Halide Perovskites Relevant to Optoelectronic Performance. <i>Advanced Materials</i> , <b>2018</b> , 30, 1700764	24	101
153	In situ oxidation and reduction of triangular nickel nanoplates via environmental transmission electron microscopy. <i>Journal of Microscopy</i> , <b>2018</b> , 269, 161-167	1.9	10
152	Doping-Enhanced Short-Range Order of Perovskite Nanocrystals for Near-Unity Violet Luminescence Quantum Yield. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 9942-9951	16.4	380
151	Inversion symmetry and bulk Rashba effect in methylammonium lead iodide perovskite single crystals. <i>Nature Communications</i> , <b>2018</b> , 9, 1829	17.4	123
150	Probing buried recombination pathways in perovskite structures using 3D photoluminescence tomography. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2846-2852	35.4	32
149	Metal-Doped Lead Halide Perovskites: Synthesis, Properties, and Optoelectronic Applications. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 6589-6613	9.6	324
148	All-inorganic perovskite nanocrystal scintillators. <i>Nature</i> , <b>2018</b> , 561, 88-93	50.4	773
147	Perovskite Single Crystals: Synthesis, Properties and Devices. <i>Materials and Energy</i> , <b>2018</b> , 241-283		2
146	Bidentate Ligand-Passivated CsPbI Perovskite Nanocrystals for Stable Near-Unity Photoluminescence Quantum Yield and Efficient Red Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 562-565	16.4	537
145	Atomic-Level Doping of Metal Clusters. <i>Accounts of Chemical Research</i> , <b>2018</b> , 51, 3094-3103	24.3	185
144	Reversible Band Gap Narrowing of Sn-Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 15084-15088	3.6	13
143	Reversible Band Gap Narrowing of Sn-Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 14868-14872	16.4	35
142	Layer-Dependent Rashba Band Splitting in 2D Hybrid Perovskites. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 8538-8545	9.6	66
141	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> , <b>2018</b> , 122, 25506-25514	3.8	7
140	Halogen Migration in Hybrid Perovskites: The Organic Cation Matters. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 5474-5480	6.4	77

139	Point Defects and Green Emission in Zero-Dimensional Perovskites. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 5490-5495	6.4	103
138	Giant Photoluminescence Enhancement in CsPbCl <sub>3</sub> Perovskite Nanocrystals by Simultaneous Dual-Surface Passivation. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 2301-2307	20.1	189
137	Quantification of Ionic Diffusion in Lead Halide Perovskite Single Crystals. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 1477-1481	20.1	84
136	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> , <b>2018</b> , 122, 15010-15016	2.8	3
135	P-203: Late-News Poster: Novel Techniques for Highly Stable Luminescent Perovskite Halide Quantum Dots. <i>Digest of Technical Papers SID International Symposium</i> , <b>2018</b> , 49, 1681-1684	0.5	5
134	Efficient Photon Recycling and Radiation Trapping in Cesium Lead Halide Perovskite Waveguides. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 1492-1498	20.1	56
133	The Benefit and Challenges of Zero-Dimensional Perovskites. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 4131-4138	6.4	86
132	Doping-Induced Anisotropic Self-Assembly of Silver Icosahedra in [PtAgCl(PPh)] Nanoclusters. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 1053-1056	16.4	67
131	Double Charged Surface Layers in Lead Halide Perovskite Crystals. <i>Nano Letters</i> , <b>2017</b> , 17, 2021-2027	11.5	52
130	Zero-Dimensional CsPbBr Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 961-965	6.4	229
129	Trapping shape-controlled nanoparticle nucleation and growth stages via continuous-flow chemistry. <i>Chemical Communications</i> , <b>2017</b> , 53, 2495-2498	5.8	16
128	The Surface of Hybrid Perovskite Crystals: A Boon or Bane. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 846-856	20.1	73
127	Low-Dimensional-Networked Metal Halide Perovskites: The Next Big Thing. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 889-896	20.1	288
126	Evidence of Plasmonic Induced Photocatalytic Hydrogen Production on Pd/TiO <sub>2</sub> Upon Deposition on Thin Films of Gold. <i>Catalysis Letters</i> , <b>2017</b> , 147, 811-820	2.8	19
125	The impact of Au doping on the charge carrier dynamics at the interfaces between cationic porphyrin and silver nanoclusters. <i>Chemical Physics Letters</i> , <b>2017</b> , 683, 393-397	2.5	6
124	Time-Dependent Mechanical Response of APbX (A = Cs, CH <sub>3</sub> NH <sub>2</sub> ; X = I, Br) Single Crystals. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606556	24	42
123	Pyridine-Induced Dimensionality Change in Hybrid Perovskite Nanocrystals. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 4393-4400	9.6	68
122	Tailoring the Energy Landscape in Quasi-2D Halide Perovskites Enables Efficient Green-Light Emission. <i>Nano Letters</i> , <b>2017</b> , 17, 3701-3709	11.5	309

121	8-2: Invited Paper: A New Generation of Luminescent Materials Based on Low-Dimensional Perovskites. <i>Digest of Technical Papers SID International Symposium, 2017</i> , 48, 83-86	0.5	1
120	Direct versus ligand-exchange synthesis of [PtAg(BDT)(TPP)] nanoclusters: effect of a single-atom dopant on the optoelectronic and chemical properties. <i>Nanoscale, 2017</i> , 9, 9529-9536	7.7	47
119	Perovskite solar cells: Shedding light on film crystallization. <i>Nature Materials, 2017</i> , 16, 601-602	27	10
118	Powering up perovskite photoresponse. <i>Science, 2017</i> , 355, 1260-1261	33.3	17
117	Thermochromic Perovskite Inks for Reversible Smart Window Applications. <i>Chemistry of Materials, 2017</i> , 29, 3367-3370	9.6	89
116	Bane of Hydrogen-Bond Formation on the Photoinduced Charge-Transfer Process in Donor-Acceptor Systems. <i>Journal of Physical Chemistry C, 2017</i> , 121, 7837-7843	3.8	
115	Contribution of Metal Defects in the Assembly Induced Emission of Cu Nanoclusters. <i>Journal of the American Chemical Society, 2017</i> , 139, 4318-4321	16.4	123
114	Inorganic Lead Halide Perovskite Single Crystals: Phase-Selective Low-Temperature Growth, Carrier Transport Properties, and Self-Powered Photodetection. <i>Advanced Optical Materials, 2017</i> , 5, 1600704	8.1	277
113	Temperature-Induced Lattice Relaxation of Perovskite Crystal Enhances Optoelectronic Properties and Solar Cell Performance. <i>Journal of Physical Chemistry Letters, 2017</i> , 8, 137-143	6.4	32
112	Engineering Interfacial Charge Transfer in CsPbBr Perovskite Nanocrystals by Heterovalent Doping. <i>Journal of the American Chemical Society, 2017</i> , 139, 731-737	16.4	323
111	Synthesis and Optical Properties of a Dithiolate/Phosphine-Protected Au <sub>28</sub> Nanocluster. <i>Journal of Physical Chemistry C, 2017</i> , 121, 10681-10685	3.8	17
110	Room-Temperature Engineering of All-Inorganic Perovskite Nanocrystals with Different Dimensionalities. <i>Chemistry of Materials, 2017</i> , 29, 8978-8982	9.6	137
109	Ultralong Radiative States in Hybrid Perovskite Crystals: Compositions for Submillimeter Diffusion Lengths. <i>Journal of Physical Chemistry Letters, 2017</i> , 8, 4386-4390	6.4	59
108	Inside Perovskites: Quantum Luminescence from Bulk Cs <sub>4</sub> PbBr <sub>6</sub> Single Crystals. <i>Chemistry of Materials, 2017</i> , 29, 7108-7113	9.6	160
107	CsPb Br Single Crystals: Synthesis and Characterization. <i>ChemSusChem, 2017</i> , 10, 3746-3749	8.3	93
106	Molecular behavior of zero-dimensional perovskites. <i>Science Advances, 2017</i> , 3, e1701793	14.3	137
105	Intrinsic Lead Ion Emissions in Zero-Dimensional Cs <sub>4</sub> PbBr <sub>6</sub> Nanocrystals. <i>ACS Energy Letters, 2017</i> , 2, 2805-2811	20.1	109
104	Direct-Indirect Nature of the Bandgap in Lead-Free Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters, 2017</i> , 8, 3173-3177	6.4	139

103	The Role of Surface Tension in the Crystallization of Metal Halide Perovskites. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 1782-1788	20.1	103
102	Ultralow Self-Doping in Two-dimensional Hybrid Perovskite Single Crystals. <i>Nano Letters</i> , <b>2017</b> , 17, 4759-4767	11.57	202
101	High-Purity Hybrid Organolead Halide Perovskite Nanoparticles Obtained by Pulsed-Laser Irradiation in Liquid. <i>ChemPhysChem</i> , <b>2017</b> , 18, 1047-1054	3.2	19
100	Surface Electronic Structure of Hybrid Organo Lead Bromide Perovskite Single Crystals. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 21710-21715	3.8	52
99	Highly Efficient Perovskite-Quantum-Dot Light-Emitting Diodes by Surface Engineering. <i>Advanced Materials</i> , <b>2016</b> , 28, 8718-8725	24	700
98	Schottky junctions on perovskite single crystals: light-modulated dielectric constant and self-biased photodetection. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 8304-8312	7.1	104
97	Shape-Tunable Charge Carrier Dynamics at the Interfaces between Perovskite Nanocrystals and Molecular Acceptors. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 3913-3919	6.4	38
96	Perovskite Photodetectors Operating in Both Narrowband and Broadband Regimes. <i>Advanced Materials</i> , <b>2016</b> , 28, 8144-8149	24	206
95	[Ag(SPhMe)(PPh)]: Synthesis, Total Structure, and Optical Properties of a Large Box-Shaped Silver Nanocluster. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 14727-14732	16.4	138
94	Pure crystal orientation and anisotropic charge transport in large-area hybrid perovskite films. <i>Nature Communications</i> , <b>2016</b> , 7, 13407	17.4	140
93	Spiro-OMeTAD single crystals: Remarkably enhanced charge-carrier transport via mesoscale ordering. <i>Science Advances</i> , <b>2016</b> , 2, e1501491	14.3	96
92	pH-Induced Surface Modification of Atomically Precise Silver Nanoclusters: An Approach for Tunable Optical and Electronic Properties. <i>Inorganic Chemistry</i> , <b>2016</b> , 55, 11522-11528	5.1	6
91	Surface Restructuring of Hybrid Perovskite Crystals. <i>ACS Energy Letters</i> , <b>2016</b> , 1, 1119-1126	20.1	115
90	Amine-Free Synthesis of Cesium Lead Halide Perovskite Quantum Dots for Efficient Light-Emitting Diodes. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 8757-8763	15.6	265
89	Nanowires: Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy (Small 17/2016). <i>Small</i> , <b>2016</b> , 12, 2312	11	1
88	Gold Doping of Silver Nanoclusters: A 26-Fold Enhancement in the Luminescence Quantum Yield. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 5749-53	16.4	218
87	Real-Space Visualization of Energy Loss and Carrier Diffusion in a Semiconductor Nanowire Array Using 4D Electron Microscopy. <i>Advanced Materials</i> , <b>2016</b> , 28, 5106-11	24	23
86	Synthesis and characterization of mixed ligand chiral nanoclusters. <i>Dalton Transactions</i> , <b>2016</b> , 45, 11297-300	3.90	7

85	Perovskite Nanocrystals as a Color Converter for Visible Light Communication. <i>ACS Photonics</i> , <b>2016</b> , 3, 1150-1156	6.3	171
84	Making and Breaking of Lead Halide Perovskites. <i>Accounts of Chemical Research</i> , <b>2016</b> , 49, 330-8	24.3	491
83	Innentitelbild: Templated Atom-Precise Galvanic Synthesis and Structure Elucidation of a [Ag <sub>24</sub> Au(SR) <sub>18</sub> ] Nanocluster (Angew. Chem. 3/2016). <i>Angewandte Chemie</i> , <b>2016</b> , 128, 834-834	3.6	1
82	Robust and air-stable sandwiched organo-lead halide perovskites for photodetector applications. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 2545-2552	7.1	46
81	Enhanced Etching, Surface Damage Recovery, and Submicron Patterning of Hybrid Perovskites using a Chemically Gas-Assisted Focused-Ion Beam for Subwavelength Grating Photonic Applications. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 137-42	6.4	55
80	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> , <b>2016</b> , 4, 6809-6814	13	17
79	Heterovalent Dopant Incorporation for Bandgap and Type Engineering of Perovskite Crystals. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 295-301	6.4	268
78	Ultrafast static and diffusion-controlled electron transfer at Ag <sub>29</sub> nanocluster/molecular acceptor interfaces. <i>Nanoscale</i> , <b>2016</b> , 8, 5412-6	7.7	37
77	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> , <b>2016</b> , 4, 2894-2900	7.1	11
76	Fast and Sensitive Solution-Processed Visible-Blind Perovskite UV Photodetectors. <i>Advanced Materials</i> , <b>2016</b> , 28, 7264-8	24	192
75	Templated Atom-Precise Galvanic Synthesis and Structure Elucidation of a [Ag <sub>24</sub> Au(SR) <sub>18</sub> ] Nanocluster. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 934-938	3.6	95
74	Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy. <i>Small</i> , <b>2016</b> , 12, 2313-20	11	34
73	Solution-Grown Monocrystalline Hybrid Perovskite Films for Hole-Transporter-Free Solar Cells. <i>Advanced Materials</i> , <b>2016</b> , 28, 3383-90	24	238
72	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> , <b>2016</b> , 55, 922-6	16.4	252
71	The In-Gap Electronic State Spectrum of Methylammonium Lead Iodide Single-Crystal Perovskites. <i>Advanced Materials</i> , <b>2016</b> , 28, 3406-10	24	151
70	Gold Doping of Silver Nanoclusters: A 26-Fold Enhancement in the Luminescence Quantum Yield. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 5843-5847	3.6	51
69	Real-Space Mapping of Surface Trap States in CIGSe Nanocrystals Using 4D Electron Microscopy. <i>Nano Letters</i> , <b>2016</b> , 16, 4417-23	11.5	20
68	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> , <b>2016</b> , 18, 16169-78	3.6	44

67	Atomically monodisperse nickel nanoclusters as highly active electrocatalysts for water oxidation. <i>Nanoscale</i> , <b>2016</b> , 8, 9695-703	7.7	59
66	Switching a Nanocluster Core from Hollow to Nonhollow. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 3292-3297	9.6	61
65	A facile micropatterning method for a highly flexible PEDOT:PSS on SU-8. <i>Organic Electronics</i> , <b>2016</b> , 34, 75-78	3.5	5
64	Formamidinium Lead Halide Perovskite Crystals with Unprecedented Long Carrier Dynamics and Diffusion Length. <i>ACS Energy Letters</i> , <b>2016</b> , 1, 32-37	20.1	551
63	Distinct metal-exchange pathways of doped Ag <sub>25</sub> nanoclusters. <i>Nanoscale</i> , <b>2016</b> , 8, 17333-17339	7.7	69
62	Pure Cs <sub>4</sub> PbBr <sub>6</sub> : Highly Luminescent Zero-Dimensional Perovskite Solids. <i>ACS Energy Letters</i> , <b>2016</b> , 1, 840-845	20.1	367
61	A New Class of Atomically Precise, Hydride-Rich Silver Nanoclusters Co-Protected by Phosphines. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 13770-13773	16.4	93
60	Optical constants of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> perovskite thin films measured by spectroscopic ellipsometry. <i>Optics Express</i> , <b>2016</b> , 24, 16586-94	3.3	76
59	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> , <b>2016</b> , 128, 10844-10848	3.6	15
58	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> , <b>2016</b> , 55, 10686-90	16.4	121
57	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> , <b>2015</b> , 106, 081902	3.4	106
56	Two-Photon Absorption in Organometallic Bromide Perovskites. <i>ACS Nano</i> , <b>2015</b> , 9, 9340-6	16.7	208
55	High-quality bulk hybrid perovskite single crystals within minutes by inverse temperature crystallization. <i>Nature Communications</i> , <b>2015</b> , 6, 7586	17.4	1164
54	Ag <sub>29</sub> (BDT) <sub>12</sub> (TPP) <sub>4</sub> : A Tetravalent Nanocluster. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 11970-5	16.4	284
53	Colloidal Quantum Dot Solar Cells. <i>Chemical Reviews</i> , <b>2015</b> , 115, 12732-63	68.1	812
52	Tuning Properties in Silver Clusters. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 3023-35	6.4	150
51	Facile Synthesis and High Performance of a New Carbazole-Based Hole-Transporting Material for Hybrid Perovskite Solar Cells. <i>ACS Photonics</i> , <b>2015</b> , 2, 849-855	6.3	91
50	Retrograde solubility of formamidinium and methylammonium lead halide perovskites enabling rapid single crystal growth. <i>Chemical Communications</i> , <b>2015</b> , 51, 17658-61	5.8	266



49	[Ag <sub>25</sub> (SR) <sub>18</sub> ] <sup>-</sup> : The "Golden" Silver Nanoparticle. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 11578-81	16.4	387
48	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> , <b>2015</b> , 33, 051207	1.3	37
47	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> , <b>2015</b> , 6, 3781-6	6.4	507
46	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> , <b>2015</b> , 6, 5027-33	6.4	398
45	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?. <i>Journal of Catalysis</i> , <b>2015</b> , 322, 109-117	7.3	100
44	A layer-by-layer ZnO nanoparticle-PbS quantum dot self-assembly platform for ultrafast interfacial electron injection. <i>Small</i> , <b>2015</b> , 11, 112-8	11	28
43	Quantum Dots: Overcoming the Cut-Off Charge Transfer Bandgaps at the PbS Quantum Dot Interface (Adv. Funct. Mater. 48/2015). <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 7548-7548	15.6	
42	The Impact of Grain Alignment of the Electron Transporting Layer on the Performance of Inverted Bulk Heterojunction Solar Cells. <i>Small</i> , <b>2015</b> , 11, 5272-9	11	6
41	Overcoming the Cut-Off Charge Transfer Bandgaps at the PbS Quantum Dot Interface. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 7435-7441	15.6	16
40	Reversible Size Control of Silver Nanoclusters via Ligand-Exchange. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 4289-4297	9.6	82
39	Effect of Precursor Ligands and Oxidation State in the Synthesis of Bimetallic Nano-Alloys. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 4134-4141	9.6	34
38	Porphyritic supramolecular daisy chains incorporating pillar[5]arene-viologen host-guest interactions. <i>Chemical Communications</i> , <b>2015</b> , 51, 10455-8	5.8	48
37	Planar-integrated single-crystalline perovskite photodetectors. <i>Nature Communications</i> , <b>2015</b> , 6, 8724	17.4	497
36	Solar cells. Low trap-state density and long carrier diffusion in organolead trihalide perovskite single crystals. <i>Science</i> , <b>2015</b> , 347, 519-22	33.3	3307
35	Direct Femtosecond Observation of Charge Carrier Recombination in Ternary Semiconductor Nanocrystals: The Effect of Composition and Shelling. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 3439-3446	2.8	36
34	The complete in-gap electronic structure of colloidal quantum dot solids and its correlation with electronic transport and photovoltaic performance. <i>Advanced Materials</i> , <b>2014</b> , 26, 937-42	24	51
33	Direct Functionalization of Nanodiamonds with Maleimide. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 2766-2769	9.6	20
32	Photovoltaics: The Complete In-Gap Electronic Structure of Colloidal Quantum Dot Solids and Its Correlation with Electronic Transport and Photovoltaic Performance (Adv. Mater. 6/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 822-822	24	1

31	Neat and complete: thiolate-ligand exchange on a silver molecular nanoparticle. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 15865-8	16.4	75
30	Routes to tin chalcogenide materials as thin films or nanoparticles: a potentially important class of semiconductor for sustainable solar energy conversion. <i>Inorganic Chemistry Frontiers</i> , <b>2014</b> , 1, 577-598	6.8	72
29	Synthesis of Copper Hydroxide Branched Nanocages and Their Transformation to Copper Oxide. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 19374-19379	3.8	30
28	Characterization of size, anisotropy, and density heterogeneity of nanoparticles by sedimentation velocity. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 7688-95	7.8	63
27	A general mechanism for intracellular toxicity of metal-containing nanoparticles. <i>Nanoscale</i> , <b>2014</b> , 6, 7052-61	7.7	320
26	Quantum confinement-tunable ultrafast charge transfer at the PbS quantum dot and phenyl-C <sub>4</sub> butyric acid methyl ester interface. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 6952-9 <sup>16.4</sup>	16.4	88
25	Air-stable n-type colloidal quantum dot solids. <i>Nature Materials</i> , <b>2014</b> , 13, 822-8	27	466
24	Real-Time Observation of Ultrafast Intraband Relaxation and Exciton Multiplication in PbS Quantum Dots. <i>ACS Photonics</i> , <b>2014</b> , 1, 285-292	6.3	50
23	Directly deposited quantum dot solids using a colloiddally stable nanoparticle ink. <i>Advanced Materials</i> , <b>2013</b> , 25, 5742-9	24	87
22	Automated synthesis of photovoltaic-quality colloidal quantum dots using separate nucleation and growth stages. <i>ACS Nano</i> , <b>2013</b> , 7, 10158-66	16.7	77
21	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> , <b>2013</b> , 1, 10148	13	66
20	Rapid continuous flow synthesis of high-quality silver nanocubes and nanospheres. <i>RSC Advances</i> , <b>2013</b> , 3, 22397	3.7	22
19	Size-controlled fluorescent nanodiamonds: a facile method of fabrication and color-center counting. <i>Nanoscale</i> , <b>2013</b> , 5, 11776-82	7.7	21
18	Gram-scale fractionation of nanodiamonds by density gradient ultracentrifugation. <i>Nanoscale</i> , <b>2013</b> , 5, 5017-26	7.7	26
17	Coexistence of plasmonic and magnetic properties in Au <sub>89</sub> Fe <sub>11</sub> nanoalloys. <i>Nanoscale</i> , <b>2013</b> , 5, 5611-9	7.7	77
16	Long-lived charge-separated states in ligand-stabilized silver clusters. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 11856-9	16.4	61
15	Colloidal quantum dot photovoltaics: the effect of polydispersity. <i>Nano Letters</i> , <b>2012</b> , 12, 1007-12	11.5	95
14	Ag <sub>44</sub> (SR) <sub>30</sub> (4-): a silver-thiolate superatom complex. <i>Nanoscale</i> , <b>2012</b> , 4, 4269-74	7.7	138

13	Solution-processed colloidal quantum dot photovoltaics: A perspective. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 4870	35.4	75
12	Synthesis of novel bis(perfluorophenyl azides) coupling agents: Evaluation of their performance by crosslinking of poly(ethylene oxide). <i>Reactive and Functional Polymers</i> , <b>2011</b> , 71, 1110-1117	4.6	3
11	Determination of nanoparticle size distribution together with density or molecular weight by 2D analytical ultracentrifugation. <i>Nature Communications</i> , <b>2011</b> , 2, 335	17.4	182
10	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> , <b>2010</b> , 5, 85-97	2.4	470
9	Silver nanoparticles with broad multiband linear optical absorption. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 5921-6	16.4	223
8	High-Yield Synthesis of Multi-Branched Urchin-Like Gold Nanoparticles. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 3297-3301	9.6	223
7	Perovskite-Nanosheet Sensitizer for Highly Efficient Organic X-ray Imaging Scintillator. <i>ACS Energy Letters</i> , 10-16	20.1	28
6	Luminescent Copper(I) Halides for Optoelectronic Applications. <i>Physica Status Solidi - Rapid Research Letters</i> , 2100138	2.5	7
5	Single-Particle Spectroscopy as a Versatile Tool to Explore Lower-Dimensional Structures of Inorganic Perovskites. <i>ACS Energy Letters</i> , 3695-3708	20.1	1
4	Advances and Challenges in Tin Halide Perovskite Nanocrystals 1541-1557		3
3	Interface Engineering of Bi-Fluorescence Molecules for High-Performance Data Encryption and Ultralow UV-Light Detection. <i>Advanced Optical Materials</i> , 2200417	8.1	2
2	Photoactivated p-Doping of Organic Interlayer Enables Efficient Perovskite/Silicon Tandem Solar Cells. <i>ACS Energy Letters</i> , 1987-1993	20.1	4
1	Multiple exciton generation in tin lead halide perovskite nanocrystals for photocurrent quantum efficiency enhancement. <i>Nature Photonics</i> ,	33.9	6