Omar F Mohammed

List of Publications by Year in Descending Order

301 papers	23,186 citations	73 h-index	146 g-index
320 ext. papers	28,017 ext. citations	11.8 avg, IF	7.24 L-index

#	Paper	IF	Citations
301	Self-Assembly and Regrowth of Metal Halide Perovskite Nanocrystals for Optoelectronic Applications.. *Accounts of Chemical Research*, **2022**,	24.3	13
300	Large-Area Perovskite-Related Copper Halide Film for High-Resolution Flexible X-ray Imaging Scintillation Screens. *ACS Energy Letters*, **2022**, 7, 844-846	20.1	18
299	Energy Transfer in Metal-Organic Frameworks for Fluorescence Sensing.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	15
298	Engineering Surface Orientations for Efficient and Stable Hybrid Perovskite Single-Crystal Solar Cells. *ACS Energy Letters*, **2022**, 7, 1544-1552	20.1	6
297	Exciton Self-Trapping for White Emission in 100-Oriented Two-Dimensional Perovskites via Halogen Substitution. *ACS Energy Letters*, **2022**, 7, 453-460	20.1	9
296	Soft perovskites stabilized by robust heterojunctions. *Joule*, **2022**, 6, 951-952	27.8	0
295	Resonance-mediated dynamic modulation of perovskite crystallization for efficient and stable solar cells. *Advanced Materials*, **2021**, e2107111	24	10
294	Ultrafast Aggregation-Induced Tunable Emission Enhancement in a Benzothiadiazole-Based Fluorescent Metal-Organic Framework Linker. *Journal of Physical Chemistry B*, **2021**, 125, 13298-13308	3.4	2
293	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. *Joule*, **2021**,	27.8	15
292	Nearly 100% energy transfer at the interface of metal-organic frameworks for X-ray imaging scintillators. *Matter*, **2021**,	12.7	15
291	Tunable Selectivity in CO Photo-Thermal Reduction by Perovskite-Supported Pd Nanoparticles. *ChemSusChem*, **2021**,	8.3	4
290	Cyanamide Passivation Enables Robust Elemental Imaging of Metal Halide Perovskites at Atomic Resolution. *Journal of Physical Chemistry Letters*, **2021**, 12, 10402-10409	6.4	6
289	Linked Nickel Oxide/Perovskite Interface Passivation for High-Performance Textured Monolithic Tandem Solar Cells (Adv. Energy Mater. 40/2021). *Advanced Energy Materials*, **2021**, 11, 2170160	21.8	
288	Luminescence and Stability Enhancement of Inorganic Perovskite Nanocrystals via Selective Surface Ligand Binding. *ACS Nano*, **2021**,	16.7	10
287	Light Propagation and Radiative Exciton Transport in Two-Dimensional Layered Perovskite Microwires. *ACS Photonics*, **2021**, 8, 276-282	6.3	7
286	Engineering Band-Type Alignment in CsPbBr Perovskite-Based Artificial Multiple Quantum Wells. *Advanced Materials*, **2021**, 33, e2005166	24	1
285	[Ag(1,2-BDT)]: How Square-Pyramidal Building Blocks Self-Assemble into the Smallest Silver Nanocluster. *Inorganic Chemistry*, **2021**, 60, 4306-4312	5.1	3

284	[Cu (PPh) (PET)] : a Copper Nanocluster with Crystallization Enhanced Photoluminescence. *Small*, **2021**, 17, e2006839	11	10
283	Successes and Challenges of Core/Shell Lead Halide Perovskite Nanocrystals. *ACS Energy Letters*, **2021**, 6, 1340-1357	20.1	30
282	Effect of Zinc-Doping on the Reduction of the Hot-Carrier Cooling Rate in Halide Perovskites. *Angewandte Chemie*, **2021**, 133, 11052-11058	3.6	
281	Effect of Zinc-Doping on the Reduction of the Hot-Carrier Cooling Rate in Halide Perovskites. *Angewandte Chemie - International Edition*, **2021**, 60, 10957-10963	16.4	14
280	Gentle Materials Need Gentle Fabrication: Encapsulation of Perovskites by Gas-Phase Alumina Deposition. *Journal of Physical Chemistry Letters*, **2021**, 12, 2348-2357	6.4	4
279	Intriguing Ultrafast Charge Carrier Dynamics in Two-Dimensional Ruddlesden□Popper Hybrid Perovskites. *Journal of Physical Chemistry C*, **2021**, 125, 9630-9637	3.8	3
278	Theory-Guided Synthesis of Highly Luminescent Colloidal Cesium Tin Halide Perovskite Nanocrystals. *Journal of the American Chemical Society*, **2021**, 143, 5470-5480	16.4	17
277	Shining Light on the Structure of Lead Halide Perovskite Nanocrystals **2021**, 3, 845-861		8
276	Directional Exciton Migration in Benzoimidazole-Based Metal-Organic Frameworks. *Journal of Physical Chemistry Letters*, **2021**, 12, 4917-4927	6.4	4
275	Manipulation of hot carrier cooling dynamics in two-dimensional Dion-Jacobson hybrid perovskites via Rashba band splitting. *Nature Communications*, **2021**, 12, 3995	17.4	11
274	State of the Art and Prospects for Halide Perovskite Nanocrystals. *ACS Nano*, **2021**, 15, 10775-10981	16.7	222
273	Access to Ultrafast Surface and Interface Carrier Dynamics Simultaneously in Space and Time. *Journal of Physical Chemistry C*, **2021**, 125, 14495-14516	3.8	0
272	Cascade Electron Transfer Induces Slow Hot Carrier Relaxation in CsPbBr3 Asymmetric Quantum Wells. *ACS Energy Letters*, **2021**, 6, 2602-2609	20.1	4
271	[CuH(PET)(PPh)Cl] Reveals Surface Vacancy Defects in Ligand-Stabilized Metal Nanoclusters. *Journal of the American Chemical Society*, **2021**, 143, 11026-11035	16.4	7
270	Oriented Halide Perovskite Nanostructures and Thin Films for Optoelectronics. *Chemical Reviews*, **2021**, 121, 12112-12180	68.1	25
269	Efficient Visible-Light Driven Photothermal Conversion of CO2 to Methane by Nickel Nanoparticles Supported on Barium Titanate. *Advanced Functional Materials*, **2021**, 31, 2008244	15.6	22
268	[Cu23(PhSe)16(Ph3P)8(H)6]□BF4: Atomic-Level Insights into Cuboidal Polyhydrido Copper Nanoclusters and Their Quasi-simple Cubic Self-Assembly **2021**, 3, 90-99		12
267	Twisted BODIPY derivative: intersystem crossing, electron spin polarization and application as a novel photodynamic therapy reagent. *Physical Chemistry Chemical Physics*, **2021**, 23, 8641-8652	3.6	13

266	Metal Halide Perovskites for X-ray Imaging Scintillators and Detectors. *ACS Energy Letters*, **2021**, 6, 739-768	20.1	127
265	Phosphatidylcholine-mediated regulation of growth kinetics for colloidal synthesis of cesium tin halide nanocrystals. *Nanoscale*, **2021**, 13, 16726-16733	7.7	1
264	Domain-Size-Dependent Residual Stress Governs the Phase-Transition and Photoluminescence Behavior of Methylammonium Lead Iodide. *Advanced Functional Materials*, **2021**, 31, 2008088	15.6	3
263	CsMnBr3: Lead-Free Nanocrystals with High Photoluminescence Quantum Yield and Picosecond Radiative Lifetime **2021**, 3, 290-297		37
262	Photothermal Catalysis: Efficient Visible-Light Driven Photothermal Conversion of CO2 to Methane by Nickel Nanoparticles Supported on Barium Titanate (Adv. Funct. Mater. 8/2021). *Advanced Functional Materials*, **2021**, 31, 2170053	15.6	2
261	Air-Resistant Lead Halide Perovskite Nanocrystals Embedded into Polyimide of Intrinsic Microporosity. *Energy Material Advances*, **2021**, 2021, 1-9	1	4
260	Chromophore Orientation-Dependent Photophysical Properties of Pyrene-Naphthalimide Compact Electron Donor-Acceptor Dyads: Electron Transfer and Intersystem Crossing. *Journal of Physical Chemistry B*, **2021**, 125, 9244-9259	3.4	3
259	Experimental and Theoretical Study on the Interchange between Zr and Ti within the MIL-125-NH Metal Cluster. *Chemistry - an Asian Journal*, **2021**, 16, 2520-2528	4.5	2
258	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. *Nature Communications*, **2021**, 12, 4831	17.4	16
257	Stimuli-responsive switchable halide perovskites: Taking advantage of instability. *Joule*, **2021**, 5, 2027-2068	41.8	13
256	Spin-Orbit Charge-Transfer Intersystem Crossing of Compact Naphthalenediimide-Carbazole Electron-Donor-Acceptor Triads. *Journal of Physical Chemistry B*, **2021**, 125, 10813-10831	3.4	3
255	22.8%-Efficient single-crystal mixed-cation inverted perovskite solar cells with a near-optimal bandgap. *Energy and Environmental Science*, **2021**, 14, 2263-2268	35.4	64
254	Ultrafast electron imaging of surface charge carrier dynamics at low voltage. *Structural Dynamics*, **2020**, 7, 021001	3.2	2
253	Long-Lived Charge-Transfer State Induced by Spin-Orbit Charge Transfer Intersystem Crossing (SOCT-ISC) in a Compact Spiro Electron Donor/Acceptor Dyad. *Angewandte Chemie*, **2020**, 132, 11688-11696	3.6	9
252	Intersystem crossing via charge recombination in a perylene–naphthalimide compact electron donor/acceptor dyad. *Journal of Materials Chemistry C*, **2020**, 8, 8305-8319	7.1	15
251	Correlation of Photoluminescence and Structural Morphologies at the Individual Nanoparticle Level. *Journal of Physical Chemistry A*, **2020**, 124, 4855-4860	2.8	4
250	Modulation of Broadband Emissions in Two-Dimensional <100>-Oriented Ruddlesden–Popper Hybrid Perovskites. *ACS Energy Letters*, **2020**, 5, 2149-2155	20.1	33
249	Structurally Tunable Two-Dimensional Layered Perovskites: From Confinement and Enhanced Charge Transport to Prolonged Hot Carrier Cooling Dynamics. *Journal of Physical Chemistry Letters*, **2020**, 11, 5705-5718	6.4	27

248	Facile and noninvasive passivation, doping and chemical tuning of macroscopic hybrid perovskite crystals. *PLoS ONE*, **2020**, 15, e0230540	3.7	3
247	Doping Induces Structural Phase Transitions in All-Inorganic Lead Halide Perovskite Nanocrystals **2020**, 2, 367-375		27
246	Unprecedented Surface Plasmon Modes in Monoclinic MoO Nanostructures. *Advanced Materials*, **2020**, 32, e1908392	24	12
245	Highly Stable Phosphonate-Based MOFs with Engineered Bandgaps for Efficient Photocatalytic Hydrogen Production. *Advanced Materials*, **2020**, 32, e1906368	24	60
244	Interface Matters: Enhanced Photoluminescence and Long-Term Stability of Zero-Dimensional Cesium Lead Bromide Nanocrystals Gas-Phase Aluminum Oxide Encapsulation. *ACS Applied Materials & Interfaces*, **2020**, 12, 35598-35605	9.5	7
243	Defect Passivation in Perovskite Solar Cells by Cyano-Based □Conjugated Molecules for Improved Performance and Stability. *Advanced Functional Materials*, **2020**, 30, 2002861	15.6	43
242	Chlorine Vacancy Passivation in Mixed Halide Perovskite Quantum Dots by Organic Pseudohalides Enables Efficient Rec. 2020 Blue Light-Emitting Diodes. *ACS Energy Letters*, **2020**, 5, 793-798	20.1	100
241	Real-Space Mapping of Surface-Oxygen Defect States in Photovoltaic Materials Using Low-Voltage Scanning Ultrafast Electron Microscopy. *ACS Applied Materials & Interfaces*, **2020**, 12, 7760-7767	9.5	9
240	Low-Temperature Crystallization Enables 21.9% Efficient Single-Crystal MAPbI3 Inverted Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 657-662	20.1	96
239	Dynamical Interconversion between Excitons and Geminate Charge Pairs in Two-Dimensional Perovskite Layers Described by the Onsager-Braun Model. *Journal of Physical Chemistry Letters*, **2020**, 11, 1112-1119	6.4	8
238	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. *Nature Energy*, **2020**, 5, 131-140	62.3	552
237	Long-Lived Charge-Transfer State Induced by Spin-Orbit Charge Transfer Intersystem Crossing (SOCT-ISC) in a Compact Spiro Electron Donor/Acceptor Dyad. *Angewandte Chemie - International Edition*, **2020**, 59, 11591-11599	16.4	32
236	[Cu(PhS)(BuNH)(H)] 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	16.4	37
235	Boosting Self-Trapped Emissions in Zero-Dimensional Perovskite Heterostructures. *Chemistry of Materials*, **2020**, 32, 5036-5043	9.6	24
234	Large Polaron Self-Trapped States in Three-Dimensional Metal-Halide Perovskites **2020**, 2, 20-27		15
233	Metal Halide Perovskites for Solar-to-Chemical Fuel Conversion. *Advanced Energy Materials*, **2020**, 10, 1902433	21.8	75
232	Near-unity photoluminescence quantum yield in inorganic perovskite nanocrystals by metal-ion doping. *Journal of Chemical Physics*, **2020**, 152, 020902	3.9	26
231	Single Crystals: The Next Big Wave of Perovskite Optoelectronics **2020**, 2, 184-214		56

230	Photoluminescence Origin of Zero-Dimensional Cs4PbBr6 Perovskite. *ACS Energy Letters*, **2020**, 5, 87-99	20.1	62
229	Sunlight-Driven Biomass Photorefinery for Coproduction of Sustainable Hydrogen and Value-Added Biochemicals. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 15772-15781	8.3	14
228	Hydrated MgxV5O12 Cathode with Improved Mg2+ Storage Performance. *Advanced Energy Materials*, **2020**, 10, 2002128	21.8	13
227	Shape Control of Metal Halide Perovskite Single Crystals: From Bulk to Nanoscale. *Chemistry of Materials*, **2020**, 32, 7602-7617	9.6	30
226	Light-Harvesting Two-Photon-Absorbing Polymers. *Macromolecules*, **2020**, 53, 6279-6287	5.5	2
225	A Titanium Metal-Organic Framework with Visible-Light-Responsive Photocatalytic Activity. *Angewandte Chemie - International Edition*, **2020**, 59, 13468-13472	16.4	33
224	Designed growth and patterning of perovskite nanowires for lasing and wide color gamut phosphors with long-term stability. *Nano Energy*, **2020**, 73, 104801	17.1	39
223	Access to Highly Efficient Energy Transfer in Metal-Organic Frameworks via Mixed Linkers Approach. *Journal of the American Chemical Society*, **2020**, 142, 8580-8584	16.4	34
222	Halide Perovskites: Metal Halide Perovskites for Solar-to-Chemical Fuel Conversion (Adv. Energy Mater. 13/2020). *Advanced Energy Materials*, **2020**, 10, 2070059	21.8	7
221	Elucidation of the Intersystem Crossing Mechanism in a Helical BODIPY for Low-Dose Photodynamic Therapy. *Angewandte Chemie*, **2020**, 132, 16248-16255	3.6	9
220	Elucidation of the Intersystem Crossing Mechanism in a Helical BODIPY for Low-Dose Photodynamic Therapy. *Angewandte Chemie - International Edition*, **2020**, 59, 16114-16121	16.4	55
219	Pillar[5]arene-Stabilized Silver Nanoclusters: Extraordinary Stability and Luminescence Enhancement Induced by Host□Guest Interactions. *Angewandte Chemie*, **2019**, 131, 15812-15817	3.6	5
218	Pillar[5]arene-Stabilized Silver Nanoclusters: Extraordinary Stability and Luminescence Enhancement Induced by Host-Guest Interactions. *Angewandte Chemie - International Edition*, **2019**, 58, 15665-15670	16.4	26
217	Outstanding Challenges of Zero-Dimensional Perovskite Materials. *Journal of Physical Chemistry Letters*, **2019**, 10, 5886-5888	6.4	26
216	Relationship between the Photocatalytic Hydrogen Ion Reduction and Charge Carrier Dynamics of Pt/Cd1□NixS Catalysts. *Journal of Physical Chemistry C*, **2019**, 123, 24051-24061	3.8	1
215	MAPbI3 Single Crystals Free from Hole-Trapping Centers for Enhanced Photodetectivity. *ACS Energy Letters*, **2019**, 4, 2579-2584	20.1	28
214	Extraordinary Carrier Diffusion on CdTe Surfaces Uncovered by 4D Electron Microscopy. *CheM*, **2019**, 5, 706-718	16.2	14
213	Controllable Charge-Transfer Mechanism at Push□Pull Porphyrin/Nanocarbon Interfaces. *Journal of Physical Chemistry C*, **2019**, 123, 14283-14291	3.8	3

212	MXenes for Plasmonic Photodetection. *Advanced Materials*, **2019**, 31, e1807658	24	90
211	Solution-Processed Visible-Blind Ultraviolet Photodetectors with Nanosecond Response Time and High Detectivity. *Advanced Optical Materials*, **2019**, 7, 1900506	8.1	40
210	Assembly of Atomically Precise Silver Nanoclusters into Nanocluster-Based Frameworks. *Journal of the American Chemical Society*, **2019**, 141, 9585-9592	16.4	81
209	Tuning Solute-Redistribution Dynamics for Scalable Fabrication of Colloidal Quantum-Dot Optoelectronics. *Advanced Materials*, **2019**, 31, e1805886	24	20
208	Defect-Triggered Phase Transition in Cesium Lead Halide Perovskite Nanocrystals **2019**, 1, 185-191		37
207	Impressive near-infrared brightness and singlet oxygen generation from strategic lanthanide-porphyrin double-decker complexes in aqueous solution. *Light: Science and Applications*, **2019**, 8, 46	16.7	23
206	Compositionally Screened Eutectic Catalytic Coatings on Halide Perovskite Photocathodes for Photoassisted Selective CO2 Reduction. *ACS Energy Letters*, **2019**, 4, 1279-1286	20.1	32
205	Compositional, Processing, and Interfacial Engineering of Nanocrystal- and Quantum-Dot-Based Perovskite Solar Cells. *Chemistry of Materials*, **2019**, 31, 6387-6411	9.6	66
204	Single-Crystal MAPbI3 Perovskite Solar Cells Exceeding 21% Power Conversion Efficiency. *ACS Energy Letters*, **2019**, 4, 1258-1259	20.1	291
203	Why are Hot Holes Easier to Extract than Hot Electrons from Methylammonium Lead Iodide Perovskite?. *Advanced Energy Materials*, **2019**, 9, 1900084	21.8	30
202	Perovskite-Based Artificial Multiple Quantum Wells. *Nano Letters*, **2019**, 19, 3535-3542	11.5	17
201	Reducing Defects in Halide Perovskite Nanocrystals for Light-Emitting Applications. *Journal of Physical Chemistry Letters*, **2019**, 10, 2629-2640	6.4	122
200	Unprecedented Ultralow Detection Limit of Amines using a Thiadiazole-Functionalized Zr(IV)-Based Metal-Organic Framework. *Journal of the American Chemical Society*, **2019**, 141, 7245-7249	16.4	139
199	Light-Induced Self-Assembly of Cubic CsPbBr3 Perovskite Nanocrystals into Nanowires. *Chemistry of Materials*, **2019**, 31, 6642-6649	9.6	73
198	Visualization of Charge Carrier Trapping in Silicon at the Atomic Surface Level Using Four-Dimensional Electron Imaging. *Journal of Physical Chemistry Letters*, **2019**, 10, 1960-1966	6.4	5
197	Metal Halide Perovskite Nanosheet for X-ray High-Resolution Scintillation Imaging Screens. *ACS Nano*, **2019**, 13, 2520-2525	16.7	218
196	Unlocking the Effect of Trivalent Metal Doping in All-Inorganic CsPbBr3 Perovskite. *ACS Energy Letters*, **2019**, 4, 789-795	20.1	77
195	Metal Halide Perovskite and Phosphorus Doped g-C3N4 Bulk Heterojunctions for Air-Stable Photodetectors. *ACS Energy Letters*, **2019**, 4, 2315-2322	20.1	23

194	Layer-Dependent Coherent Acoustic Phonons in Two-Dimensional Ruddlesden-Popper Perovskite Crystals. *Journal of Physical Chemistry Letters*, **2019**, 10, 5259-5264	6.4	23
193	Impact of the chemical nature and position of spacers on controlling the optical properties of silicon quantum dots. *Physical Chemistry Chemical Physics*, **2019**, 21, 17096-17108	3.6	2
192	[Cu61(StBu)26S6Cl6H14]+: A Core□Shell Superatom Nanocluster with a Quasi-J36 Cu19 Core and an □18-Crown-6□Metal-Sulfide-like Stabilizing Belt **2019**, 1, 297-302		37
191	Emergence of multiple fluorophores in individual cesium lead bromide nanocrystals. *Nature Communications*, **2019**, 10, 2930	17.4	31
190	Quantum Dots Supply Bulk- and Surface-Passivation Agents for Efficient and Stable Perovskite Solar Cells. *Joule*, **2019**, 3, 1963-1976	27.8	154
189	Tuning Hot Carrier Cooling Dynamics by Dielectric Confinement in Two-Dimensional Hybrid Perovskite Crystals. *ACS Nano*, **2019**, 13, 12621-12629	16.7	55
188	Delayed Photoluminescence and Modified Blinking Statistics in Alumina-Encapsulated Zero-Dimensional Inorganic Perovskite Nanocrystals. *Journal of Physical Chemistry Letters*, **2019**, 10, 6780-6787	6.4	21
187	High-speed colour-converting photodetector with all-inorganic CsPbBr perovskite nanocrystals for ultraviolet light communication. *Light: Science and Applications*, **2019**, 8, 94	16.7	125
186	Halogen Vacancies Enable Ligand-Assisted Self-Assembly of Perovskite Quantum Dots into Nanowires. *Angewandte Chemie*, **2019**, 131, 16223-16227	3.6	13
185	Halogen Vacancies Enable Ligand-Assisted Self-Assembly of Perovskite Quantum Dots into Nanowires. *Angewandte Chemie - International Edition*, **2019**, 58, 16077-16081	16.4	32
184	Tunable Twisting Motion of Organic Linkers via Concentration and Hydrogen-Bond Formation. *Journal of Physical Chemistry C*, **2019**, 123, 5900-5906	3.8	10
183	High-Speed Ultraviolet-C Photodetector Based on Frequency Down-Converting CsPbBr3 Perovskite Nanocrystals on Silicon Platform **2019**,		1
182	Reduced ion migration and enhanced photoresponse in cuboid crystals of methylammonium lead iodide perovskite. *Journal Physics D: Applied Physics*, **2019**, 52, 054001	3	11
181	Tellurium-Based Double Perovskites A2TeX6 with Tunable Band Gap and Long Carrier Diffusion Length for Optoelectronic Applications. *ACS Energy Letters*, **2019**, 4, 228-234	20.1	34
180	Ligand-Free Nanocrystals of Highly Emissive Cs4PbBr6 Perovskite. *Journal of Physical Chemistry C*, **2018**, 122, 6493-6498	3.8	52
179	Study of the Bulk Charge Carrier Dynamics in Anatase and Rutile TiO2 Single Crystals by Femtosecond Time-Resolved Spectroscopy. *Journal of Physical Chemistry C*, **2018**, 122, 8925-8932	3.8	41
178	Synthesis and Characterization of Branched fcc/hcp Ruthenium Nanostructures and Their Catalytic Activity in Ammonia Borane Hydrolysis. *Crystal Growth and Design*, **2018**, 18, 1509-1516	3.5	15
177	On the relationship between rutile/anatase ratio and the nature of defect states in sub-100 nm TiO nanostructures: experimental insights. *Physical Chemistry Chemical Physics*, **2018**, 20, 5975-5982	3.6	20

176	Solvent-dependent dual fluorescence of the push-pull system 2-diethylamino-7-nitrofluorene. *Physical Chemistry Chemical Physics*, **2018**, 20, 5942-5951	3.6	8
175	Imaging Localized Energy States in Silicon-Doped InGaN Nanowires Using 4D Electron Microscopy. *ACS Energy Letters*, **2018**, 3, 476-481	20.1	11
174	Water-Induced Dimensionality Reduction in Metal-Halide Perovskites. *Journal of Physical Chemistry C*, **2018**, 122, 14128-14134	3.8	56
173	Tailoring the Crystal Structure of Nanoclusters Unveiled High Photoluminescence via Ion Pairing. *Chemistry of Materials*, **2018**, 30, 2719-2725	9.6	60
172	Zeolite-like Metal-Organic Framework (MOF) Encaged Pt(II)-Porphyrin for Anion-Selective Sensing. *ACS Applied Materials & Interfaces*, **2018**, 10, 11399-11405	9.5	56
171	Scanning ultrafast electron microscopy: Four-dimensional imaging of materials dynamics in space and time. *MRS Bulletin*, **2018**, 43, 491-496	3.2	13
170	Tunable Multipolar Surface Plasmons in 2D TiC T MXene Flakes. *ACS Nano*, **2018**, 12, 8485-8493	16.7	105
169	All-inorganic perovskite nanocrystal scintillators. *Nature*, **2018**, 561, 88-93	50.4	773
168	Bidentate Ligand-Passivated CsPbI Perovskite Nanocrystals for Stable Near-Unity Photoluminescence Quantum Yield and Efficient Red Light-Emitting Diodes. *Journal of the American Chemical Society*, **2018**, 140, 562-565	16.4	537
167	2D Layered Perovskites: Surface Effect on 2D Hybrid Perovskite Crystals: Perovskites Using an Ethanolamine Organic Layer as an Example (Adv. Mater. 46/2018). *Advanced Materials*, **2018**, 30, 1870351	24	3
166	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. *Communications Physics*, **2018**, 1,	5.4	84
165	Atomic-Level Doping of Metal Clusters. *Accounts of Chemical Research*, **2018**, 51, 3094-3103	24.3	185
164	Layer-edge device of two-dimensional hybrid perovskites. *Nature Communications*, **2018**, 9, 5196	17.4	49
163	Ultrathin-Film Titania Photocatalyst on Nanocavity for CO Reduction with Boosted Catalytic Efficiencies. *Global Challenges*, **2018**, 2, 1800032	4.3	5
162	Surface Effect on 2D Hybrid Perovskite Crystals: Perovskites Using an Ethanolamine Organic Layer as an Example. *Advanced Materials*, **2018**, 30, e1804372	24	29
161	Reversible Band Gap Narrowing of Sn-Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. *Angewandte Chemie*, **2018**, 130, 15084-15088	3.6	13
160	Reversible Band Gap Narrowing of Sn-Based Hybrid Perovskite Single Crystal with Excellent Phase Stability. *Angewandte Chemie - International Edition*, **2018**, 57, 14868-14872	16.4	35
159	Layer-Dependent Rashba Band Splitting in 2D Hybrid Perovskites. *Chemistry of Materials*, **2018**, 30, 8538-8545	9.6	66

158	Halogen Migration in Hybrid Perovskites: The Organic Cation Matters. *Journal of Physical Chemistry Letters*, **2018**, 9, 5474-5480	6.4	77
157	Point Defects and Green Emission in Zero-Dimensional Perovskites. *Journal of Physical Chemistry Letters*, **2018**, 9, 5490-5495	6.4	103
156	Giant Photoluminescence Enhancement in CsPbCl3 Perovskite Nanocrystals by Simultaneous Dual-Surface Passivation. *ACS Energy Letters*, **2018**, 3, 2301-2307	20.1	189
155	Imaging the Reduction of Electron Trap States in Shelled Copper Indium Gallium Selenide Nanocrystals Using Ultrafast Electron Microscopy. *Journal of Physical Chemistry C*, **2018**, 122, 15010-15016	3.8	3
154	Efficient Photon Recycling and Radiation Trapping in Cesium Lead Halide Perovskite Waveguides. *ACS Energy Letters*, **2018**, 3, 1492-1498	20.1	56
153	Intramolecular Energy and Electron Transfers in Bodipy Naphthalenediimide Triads. *Journal of Physical Chemistry A*, **2018**, 122, 6081-6088	2.8	15
152	The Benefit and Challenges of Zero-Dimensional Perovskites. *Journal of Physical Chemistry Letters*, **2018**, 9, 4131-4138	6.4	86
151	Doping-Induced Anisotropic Self-Assembly of Silver Icosahedra in [PtAgCl(PPh)] Nanoclusters. *Journal of the American Chemical Society*, **2017**, 139, 1053-1056	16.4	67
150	Double Charged Surface Layers in Lead Halide Perovskite Crystals. *Nano Letters*, **2017**, 17, 2021-2027	11.5	52
149	Ultrahigh Carrier Mobility Achieved in Photoresponsive Hybrid Perovskite Films via Coupling with Single-Walled Carbon Nanotubes. *Advanced Materials*, **2017**, 29, 1602432	24	87
148	Zero-Dimensional CsPbBr Perovskite Nanocrystals. *Journal of Physical Chemistry Letters*, **2017**, 8, 961-965	6.4	229
147	Amorphous Tin Oxide as a Low-Temperature-Processed Electron-Transport Layer for Organic and Hybrid Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 11828-11836	9.5	110
146	The Surface of Hybrid Perovskite Crystals: A Boon or Bane. *ACS Energy Letters*, **2017**, 2, 846-856	20.1	73
145	Low-Dimensional-Networked Metal Halide Perovskites: The Next Big Thing. *ACS Energy Letters*, **2017**, 2, 889-896	20.1	288
144	The impact of Au doping on the charge carrier dynamics at the interfaces between cationic porphyrin and silver nanoclusters. *Chemical Physics Letters*, **2017**, 683, 393-397	2.5	6
143	2D Organic–Inorganic Hybrid Thin Films for Flexible UV–Visible Photodetectors. *Advanced Functional Materials*, **2017**, 27, 1605554	15.6	87
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