

# Yi-Xin Zhao

## List of Publications by Year in Descending Order

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

199 papers	14,732 citations	61 h-index	118 g-index
223 ext. papers	17,378 ext. citations	11 avg, IF	7.42 L-index

#	Paper	IF	Citations
199	Overcoming Acidic HO/Fe(II/III) Redox-Induced Low HO Utilization Efficiency by Carbon Quantum Dots Fenton-like Catalysis.. <i>Environmental Science &amp; Technology</i> , <b>2022</b> ,	10.3	7
198	Two dimensional porous Ni <sub>12</sub> P <sub>5</sub> sheet modified Mn <sub>0.5</sub> Cd <sub>0.5</sub> S for efficient photo-catalytic hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2022</b> , 47, 8275-8283	6.7	2
197	Electro-Reforming Polyethylene Terephthalate Plastic to Co-Produce Valued Chemicals and Green Hydrogen.. <i>Journal of Physical Chemistry Letters</i> , <b>2022</b> , 13, 622-627	6.4	5
196	Synergistic stabilization of CsPbI <sub>3</sub> inorganic perovskite via 1D capping and secondary growth. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 68, 387-392	12	1
195	Perovskite solar cells by vapor deposition based and assisted methods. <i>Applied Physics Reviews</i> , <b>2022</b> , 9, 021305	17.3	9
194	Potential lead toxicity and leakage issues on lead halide perovskite photovoltaics. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 127848	12.8	16
193	The Chemical Design in High-Performance Lead Halide Perovskite: Additive vs Dopant?. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 11636-11644	6.4	3
192	Amorphous NiCoB-coupled MAPbI <sub>3</sub> for efficient photocatalytic hydrogen evolution. <i>Dalton Transactions</i> , <b>2021</b> ,	4.3	1
191	Deep-Red Perovskite Light-Emitting Diodes Based on One-Step-Formed CsPbI <sub>3</sub> Cuboid Crystallites. <i>Advanced Materials</i> , <b>2021</b> , 33, e2105699	24	8
190	In situ growth of ultra-thin perovskitoid layer to stabilize and passivate MAPbI <sub>3</sub> for efficient and stable photovoltaics. <i>EScience</i> , <b>2021</b> ,		20
189	Organic Tetrabutylammonium Cation Intercalation to Heal Inorganic CsPbI <sub>3</sub> Perovskite. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 12459-12463	3.6	11
188	Organic Tetrabutylammonium Cation Intercalation to Heal Inorganic CsPbI Perovskite. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 12351-12355	16.4	32
187	Modification of Ti-doped Hematite Photoanode with Quasi-molecular Cocatalyst: A Comparison of Improvement Mechanism Between Non-noble and Noble Metals. <i>ChemSusChem</i> , <b>2021</b> , 14, 2180-2187	8.3	2
186	Near UV luminescent Cs <sub>2</sub> NaBi <sub>0.75</sub> Sb <sub>0.25</sub> Cl <sub>6</sub> perovskite colloidal nanocrystals with high stability. <i>Chinese Chemical Letters</i> , <b>2021</b> , 33, 537-537	8.1	2
185	All-inorganic lead-free metal halide perovskite quantum dots: progress and prospects. <i>Chemical Communications</i> , <b>2021</b> , 57, 7465-7479	5.8	4
184	Using steric hindrance to manipulate and stabilize metal halide perovskites for optoelectronics. <i>Chemical Science</i> , <b>2021</b> , 12, 7231-7247	9.4	14
183	Advances to High-Performance Black-Phase FAPbI <sub>3</sub> Perovskite for Efficient and Stable Photovoltaics. <i>Small Structures</i> , <b>2021</b> , 2, 2000130	8.7	25

182	Cu-Sb-S Ternary Semiconductor Nanoparticle Plasmonics. <i>Nano Letters</i> , <b>2021</b> , 21, 2610-2617	11.5	5
181	Stable Cesium-Rich Formamidinium/Cesium Pure-Iodide Perovskites for Efficient Photovoltaics. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 2735-2741	20.1	9
180	Incorporation of Two-Dimensional WSe into MAPbI Perovskite for Efficient and Stable Photovoltaics. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 6883-6888	6.4	1
179	Two-Dimensional Materials for Perovskite Solar Cells with Enhanced Efficiency and Stability <b>2021</b> , 3, 1402-1416		7
178	Highly Stable Inorganic Lead Halide Perovskite toward Efficient Photovoltaics. <i>Accounts of Chemical Research</i> , <b>2021</b> , 54, 3452-3461	24.3	9
177	MA Cation-Induced Diffusional Growth of Low-Bandgap FA-Cs Perovskites Driven by Natural Gradient Annealing. <i>Research</i> , <b>2021</b> , 2021, 9765106	7.8	2
176	Hybrid Phase MoS <sub>2</sub> as a Noble Metal-Free Photocatalyst for Conversion of Nitroaromatics to Aminoaromatics. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 20887-20895	3.8	1
175	Efficient and Stable CsPbI Inorganic Perovskite Photovoltaics Enabled by Crystal Secondary Growth. <i>Advanced Materials</i> , <b>2021</b> , 33, e2103688	24	24
174	Organic Matrix Assisted Low-temperature Crystallization of Black Phase Inorganic Perovskites. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> ,	16.4	9
173	The ClO <sub>2</sub> generation and chlorate suppression in photoelectrochemical reactive chlorine species systems on BiVO <sub>4</sub> photoanodes. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 296, 120387	21.8	4
172	Peroxydisulfate activation by photo-generated charges on mesoporous carbon nitride for removal of chlorophenols. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 296, 120370	21.8	11
171	Cu <sub>7</sub> S <sub>4</sub> /MnIn <sub>2</sub> S <sub>4</sub> heterojunction for efficient photocatalytic hydrogen generation. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 884, 161035	5.7	2
170	Lead-Free Cs AgSbCl Double Perovskite Nanocrystals for Effective Visible-Light Photocatalytic C-C Coupling Reactions.. <i>ChemSusChem</i> , <b>2021</b> , e202102334	8.3	6
169	Surface Coordination Layer to Enhance the Stability of Plasmonic Cu Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 27624-27630	3.8	0
168	Nano-Fe(0)/mesoporous carbon supported on biochar for activating peroxydisulfate to remove polycyclic aromatics hydrocarbons. <i>Emergent Materials</i> , <b>2020</b> , 3, 307-313	3.5	2
167	CaMnO <sub>3</sub> perovskite nanocrystals for efficient peroxydisulfate activation. <i>Chemical Engineering Journal</i> , <b>2020</b> , 398, 125638	14.7	19
166	Enhanced visible/near-infrared light harvesting and superior charge separation via 0D/2D all-carbon hybrid architecture for photocatalytic oxygen evolution. <i>Carbon</i> , <b>2020</b> , 167, 724-735	10.4	14
165	In situ modification of BiVO nanosheets on graphene for boosting photocatalytic water oxidation. <i>Nanoscale</i> , <b>2020</b> , 12, 14853-14862	7.7	15

164	Partial Cu ion exchange induced triangle hexagonal MnCuCdS nanocrystals for enhanced photocatalytic hydrogen evolution. <i>Chemical Communications</i> , <b>2020</b> , 56, 8127-8130	5.8	7
163	Top-down fabrication of colloidal plasmonic MoO nanocrystals via solution chemistry hydrogenation. <i>Chemical Communications</i> , <b>2020</b> , 56, 4816-4819	5.8	2
162	NiFe Layered Double Hydroxide (LDH) Nanosheet Catalysts with Fe as Electron Transfer Mediator for Enhanced Persulfate Activation. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 968-973	6.4	22
161	Potassium stabilization of methylammonium lead bromide perovskite for robust photocatalytic H <sub>2</sub> generation. <i>EcoMat</i> , <b>2020</b> , 2, e12015	9.4	8
160	2-Aminobenzenethiol-Functionalized Silver-Decorated Nanoporous Silicon Photoelectrodes for Selective CO <sub>2</sub> Reduction. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 11559-11566	3.6	4
159	2-Aminobenzenethiol-Functionalized Silver-Decorated Nanoporous Silicon Photoelectrodes for Selective CO Reduction. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 11462-11469	16.4	11
158	Interface modification of SnO <sub>2</sub> layer using p/n junction double layer for efficiency enhancement of perovskite solar cell. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 505103	3	6
157	Lead-free double perovskite Cs <sub>2</sub> AgBiBr <sub>6</sub> /RGO composite for efficient visible light photocatalytic H <sub>2</sub> evolution. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 268, 118399	21.8	79
156	Steric Mixed-Cation 2D Perovskite as a Methylammonium Locker to Stabilize MAPbI <sub>3</sub> . <i>Angewandte Chemie</i> , <b>2020</b> , 132, 1485-1489	3.6	11
155	Steric Mixed-Cation 2D Perovskite as a Methylammonium Locker to Stabilize MAPbI. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 1469-1473	16.4	35
154	Tuning layered Fe-doped g-C <sub>3</sub> N <sub>4</sub> structure through pyrolysis for enhanced Fenton and photo-Fenton activities. <i>Carbon</i> , <b>2020</b> , 159, 461-470	10.4	58
153	V-rich Bi <sub>2</sub> S <sub>3</sub> nanowire with efficient charge separation and transport for high-performance and robust photoelectrochemical application under visible light. <i>Catalysis Today</i> , <b>2020</b> , 350, 47-55	5.3	7
152	Influence of PbS Quantum Dots-Doped TiO <sub>2</sub> Nanotubes in TiO <sub>2</sub> Film as an Electron Transport Layer for Enhanced Perovskite Solar Cell Performance. <i>IEEE Journal of Photovoltaics</i> , <b>2020</b> , 10, 287-295	3.7	1
151	Design of Advanced Functional Materials Using Nanoporous Single-Site Photocatalysts. <i>Chemical Record</i> , <b>2020</b> , 20, 660-671	6.6	3
150	Effective removal of chlorinated organic pollutants by bimetallic iron-nickel sulfide activation of peroxydisulfate. <i>Chinese Chemical Letters</i> , <b>2020</b> , 31, 1535-1539	8.1	13
149	Mechanochemically sulfured FeS <sub>1.92</sub> as stable and efficient heterogeneous Fenton catalyst. <i>Chinese Chemical Letters</i> , <b>2020</b> , 31, 1978-1981	8.1	6
148	Stabilizing the MAPbI <sub>3</sub> perovskite via the in-situ formed lead sulfide layer for efficient and robust solar cells. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 47, 62-65	12	13
147	Binderless and Oxygen Vacancies Rich FeNi/Graphitized Mesoporous Carbon/Ni Foam for Electrocatalytic Reduction of Nitrate. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 13344-13353	10.3	32

146	Recent progress and prospects of integrated perovskite/organic solar cells. <i>Applied Physics Reviews</i> , <b>2020</b> , 7, 031303	17.3	16
145	Incorporating quantum dots for high efficiency and stable perovskite photovoltaics. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 25017-25027	13	13
144	Chemically Stable Black Phase CsPbI <sub>3</sub> Inorganic Perovskites for High-Efficiency Photovoltaics. <i>Advanced Materials</i> , <b>2020</b> , 32, e2001025	24	48
143	5-Ammonium Valeric Acid Iodide to Stabilize MAPbI <sub>3</sub> via a Mixed-Cation Perovskite with Reduced Dimension. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 8170-8176	6.4	7
142	Highly Efficient (110) Orientated FA-MA Mixed Cation Perovskite Solar Cells via Functionalized Carbon Nanotube and Methylammonium Chloride Additive. <i>Small Methods</i> , <b>2020</b> , 4, 1900511	12.8	13
141	MoS <sub>2</sub> -Stratified CdS-CuS Core-Shell Nanorods for Highly Efficient Photocatalytic Hydrogen Production. <i>ACS Nano</i> , <b>2020</b> , 14, 5468-5479	16.7	54
140	Spontaneous low-temperature crystallization of FAPbI <sub>3</sub> for highly efficient perovskite solar cells. <i>Science Bulletin</i> , <b>2019</b> , 64, 1608-1616	10.6	27
139	Tubular morphology preservation and doping engineering of Sn/P-codoped hematite for photoelectrochemical water oxidation. <i>Dalton Transactions</i> , <b>2019</b> , 48, 928-935	4.3	4
138	All-inorganic lead-free perovskites for optoelectronic applications. <i>Materials Chemistry Frontiers</i> , <b>2019</b> , 3, 365-375	7.8	77
137	Defect Engineering in Semiconductors: Manipulating Nonstoichiometric Defects and Understanding Their Impact in Oxynitrides for Solar Energy Conversion. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1808389	15.6	37
136	CuO nanosheet as a recyclable Fenton-like catalyst prepared from simulated Cu(II) waste effluents by alkaline H <sub>2</sub> O <sub>2</sub> reaction. <i>Environmental Science: Nano</i> , <b>2019</b> , 6, 105-114	7.1	25
135	Photostability of MAPbI <sub>3</sub> Perovskite Solar Cells by Incorporating Black Phosphorus. <i>Solar Rrl</i> , <b>2019</b> , 3, 1900197	7.1	28
134	Chemical stability and instability of inorganic halide perovskites. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 1495-1511	35.4	335
133	Fast Charge Diffusion in MAPb(I Br) <sub>2</sub> Films for High-Efficiency Solar Cells Revealed by Ultrafast Time-Resolved Reflectivity. <i>Journal of Physical Chemistry A</i> , <b>2019</b> , 123, 2674-2678	2.8	5
132	Thermodynamically stabilized $\delta$ -CsPbI <sub>3</sub> -based perovskite solar cells with efficiencies >18. <i>Science</i> , <b>2019</b> , 365, 591-595	33.3	644
131	CsPb(I Br) <sub>2</sub> solar cells. <i>Science Bulletin</i> , <b>2019</b> , 64, 1532-1539	10.6	92
130	Stable Lead-Free (CH <sub>3</sub> NH <sub>3</sub> ) <sub>3</sub> Bi <sub>2</sub> I <sub>9</sub> Perovskite for Photocatalytic Hydrogen Generation. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 15080-15085	8.3	47
129	Highly Efficient Utilization of Nano-Fe(0) Embedded in Mesoporous Carbon for Activation of Peroxydisulfate. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 9081-9090	10.3	83

128	Inorganic CsPbI <sub>3</sub> Perovskites toward High-Efficiency Photovoltaics. <i>Energy and Environmental Materials</i> , <b>2019</b> , 2, 73-78	13	27
127	The Role of Dimethylammonium Iodide in CsPbI Perovskite Fabrication: Additive or Dopant?. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 16691-16696	16.4	264
126	The Role of Dimethylammonium Iodide in CsPbI <sub>3</sub> Perovskite Fabrication: Additive or Dopant?. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 16844-16849	3.6	32
125	Organic salt mediated growth of phase pure and stable all-inorganic CsPbX <sub>3</sub> (X = I, Br) perovskites for efficient photovoltaics. <i>Science Bulletin</i> , <b>2019</b> , 64, 1773-1779	10.6	29
124	Effect of chloride substitution on interfacial charge transfer processes in MAPbI <sub>3</sub> perovskite thin film solar cells: planar versus mesoporous. <i>Nanoscale Advances</i> , <b>2019</b> , 1, 827-833	5.1	19
123	Recent Progress of Photocatalysis Based on Metal Halide Perovskites. <i>Acta Chimica Sinica</i> , <b>2019</b> , 77, 1075-1083	3.3	7
122	Organic ammonium salt surface treatment stabilizing all-inorganic CsPbI <sub>2</sub> Br perovskite. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2019</b> , 68, 158805	0.6	1
121	Lead-free silver-antimony halide double perovskite quantum dots with superior blue photoluminescence. <i>Chemical Communications</i> , <b>2019</b> , 55, 14741-14744	5.8	25
120	[MoS <sub>2</sub> /TiO <sub>2</sub> ] modified TiO <sub>2</sub> coating on non-woven fabric for efficient photocatalytic mineralization of acetone. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 245, 190-196	21.8	17
119	Secondary battery inspired NiO nanosheets with rich Ni(III) defects for enhancing persulfates activation in phenolic waste water degradation. <i>Chemical Engineering Journal</i> , <b>2019</b> , 360, 97-103	14.7	24
118	Phosphorus-doped Isotype g-C <sub>3</sub> N <sub>4</sub> /g-C <sub>3</sub> N <sub>4</sub> : An Efficient Charge Transfer System for Photoelectrochemical Water Oxidation. <i>ChemCatChem</i> , <b>2019</b> , 11, 729-736	5.2	22
117	Ferric (hydr)oxide/mesoporous carbon composites as Fenton-like catalysts for degradation of phenol. <i>Research on Chemical Intermediates</i> , <b>2018</b> , 44, 4103-4117	2.8	15
116	Hydrophilic mesoporous carbon as iron(III)/(II) electron shuttle for visible light enhanced Fenton-like degradation of organic pollutants. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 231, 108-114	21.8	72
115	Secondary battery inspired Nickel hydroxide as an efficient Ni-based heterogeneous catalyst for sulfate radical activation. <i>Science Bulletin</i> , <b>2018</b> , 63, 278-281	10.6	16
114	A metal-free visible light active photo-electro-Fenton-like cell for organic pollutants degradation. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 229, 211-217	21.8	39
113	A Facile Low Temperature Fabrication of High Performance CsPbI <sub>2</sub> Br All-Inorganic Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2018</b> , 2, 1700180	7.1	124
112	Formation of highly luminescent cesium bismuth halide perovskite quantum dots tuned by anion exchange. <i>Chemical Communications</i> , <b>2018</b> , 54, 3779-3782	5.8	82
111	A Stable Plasmonic Cu@Cu O/ZnO Heterojunction for Enhanced Photocatalytic Hydrogen Generation. <i>ChemSusChem</i> , <b>2018</b> , 11, 1505-1511	8.3	63



110	A mixed-cation lead iodide MA1 $\times$ EAxPbI <sub>3</sub> absorber for perovskite solar cells. <i>Journal of Energy Chemistry</i> , <b>2018</b> , 27, 215-218	12	18
109	Li dopant induces moisture sensitive phase degradation of an all-inorganic CsPbI <sub>3</sub> perovskite. <i>Chemical Communications</i> , <b>2018</b> , 54, 9809-9812	5.8	66
108	Interfacial crosslinked quasi-2D perovskite with boosted carrier transport and enhanced stability. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 404001	3	18
107	Dry Chemistry of Ferrate(VI): A Solvent-Free Mechanochemical Way for Versatile Green Oxidation. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 11115-11119	3.6	5
106	Efficient $\text{CsPbI}_3$ Photovoltaics with Surface Terminated Organic Cations. <i>Joule</i> , <b>2018</b> , 2, 2065-2075	27.8	210
105	Harvest of ocean energy by triboelectric generator technology. <i>Applied Physics Reviews</i> , <b>2018</b> , 5, 031303	17.3	9
104	Integration of a functionalized graphene nano-network into a planar perovskite absorber for high-efficiency large-area solar cells. <i>Materials Horizons</i> , <b>2018</b> , 5, 868-873	14.4	21
103	A highly efficient nanoporous BiVO <sub>4</sub> photoelectrode with enhanced interface charge transfer Co-catalyzed by molecular catalyst. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 225, 504-511	21.8	29
102	Rod-shaped thiocyanate-induced abnormal band gap broadening in SCN <sup>-</sup> -doped CsPbBr <sub>3</sub> perovskite nanocrystals. <i>Nano Research</i> , <b>2018</b> , 11, 2715-2723	10	30
101	Highly efficient colloidal MnxCd1-x nanorod solid solution for photocatalytic hydrogen generation. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 23683-23689	13	32
100	All-inorganic CsCuX (X = Cl, Br, and Br/I) perovskite quantum dots with blue-green luminescence. <i>Chemical Communications</i> , <b>2018</b> , 54, 11638-11641	5.8	65
99	Bifunctional Stabilization of All-Inorganic $\text{CsPbI}_3$ Perovskite for 17% Efficiency Photovoltaics. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 12345-12348	16.4	434
98	A Tandem Water Splitting Cell Based on Nanoporous BiVO <sub>4</sub> Photoanode Cocatalyzed by Ultrasmall Cobalt Borate Sandwiched with Conformal TiO <sub>2</sub> Layers. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 16228-16234	8.3	11
97	Brand new 1D branched CuO nanowire arrays for efficient photoelectrochemical water reduction. <i>Dalton Transactions</i> , <b>2018</b> , 47, 14566-14572	4.3	12
96	Optoelectronic Dichotomy of Mixed Halide CH <sub>3</sub> NHPb(BrCl) Single Crystals: Surface versus Bulk Photoluminescence. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 11811-11819	16.4	18
95	Efficient hydrogen evolution from the hydrolysis of ammonia borane using bilateral-like WO <sub>3</sub> nanorods coupled with NiP nanoparticles. <i>Chemical Communications</i> , <b>2018</b> , 54, 6188-6191	5.8	21
94	FeOOH quantum dots coupled g-C <sub>3</sub> N <sub>4</sub> for visible light driving photo-Fenton degradation of organic pollutants. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 237, 513-520	21.8	143
93	Dry Chemistry of Ferrate(VI): A Solvent-Free Mechanochemical Way for Versatile Green Oxidation. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 10949-10953	16.4	17

92	A simple fabrication of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite for solar cells using low-purity PbI <sub>2</sub> . <i>Journal of Semiconductors</i> , <b>2017</b> , 38, 014004	2.3	8
91	Sulfurated [NiFe]-based layered double hydroxides nanoparticles as efficient co-catalysts for photocatalytic hydrogen evolution using CdTe/CdS quantum dots. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 209, 155-160	21.8	48
90	Visible Light Assisted Heterogeneous Fenton-Like Degradation of Organic Pollutant via FeOOH/Mesoporous Carbon Composites. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 3993-4000	10.3	167
89	Synergetic Effect of Chloride Doping and CH <sub>3</sub> NH <sub>3</sub> PbCl on CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite-Based Solar Cells. <i>ChemSusChem</i> , <b>2017</b> , 10, 2365-2369	8.3	42
88	Mesoporous TiO <sub>2</sub> films coated on carbon foam based on waste polyurethane for enhanced photocatalytic oxidation of VOCs. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 212, 1-6	21.8	89
87	Mixed cation hybrid lead halide perovskites with enhanced performance and stability. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 11450-11461	13	123
86	Highly Active IrO <sub>x</sub> Nanoparticles/Black Si Electrode for Efficient Water Splitting with Conformal TiO <sub>2</sub> Interface Engineering. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 10940-10946	8.3	22
85	Bication lead iodide 2D perovskite component to stabilize inorganic CsPbI <sub>3</sub> perovskite phase for high-efficiency solar cells. <i>Science Advances</i> , <b>2017</b> , 3, e1700841	14.3	450
84	Additive-Assisted Controllable Growth of Perovskites. <i>Series on Chemistry, Energy and the Environment</i> , <b>2017</b> , 1-26	0.2	4
83	A facile deposition of large grain and phase pure FAPbI <sub>3</sub> for perovskite solar cells via a flash crystallization. <i>Materials Today Energy</i> , <b>2017</b> , 5, 293-298	7	19
82	Photodeposited FeOOH vs electrodeposited Co-Pi to enhance nanoporous BiVO <sub>4</sub> for photoelectrochemical water splitting. <i>Journal of Semiconductors</i> , <b>2017</b> , 38, 053004	2.3	7
81	In Situ Fabrication of Highly Luminescent Bifunctional Amino Acid Crosslinked 2D/3D NH <sub>3</sub> C <sub>4</sub> H <sub>9</sub> COO(CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> ) <sub>n</sub> Perovskite Films. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1603568	15.6	103
80	Complete Conversion of PbI <sub>2</sub> to Methyl Ammonium PbI <sub>3</sub> Improves Perovskite Solar Cell Efficiency. <i>ChemPhysChem</i> , <b>2017</b> , 18, 47-50	3.2	8
79	CH <sub>3</sub> NH <sub>3</sub> Cl Assisted Solvent Engineering for Highly Crystallized and Large Grain Size Mixed-Composition (FAPbI <sub>3</sub> ) <sub>0.85</sub> (MAPbBr <sub>3</sub> ) <sub>0.15</sub> Perovskites. <i>Crystals</i> , <b>2017</b> , 7, 272	2.3	20
78	Ultrasensitive optical detection of anions by quantum dots. <i>Nanoscale Horizons</i> , <b>2016</b> , 1, 125-134	10.8	14
77	The layer boundary effect on multi-layer mesoporous TiO <sub>2</sub> film based dye sensitized solar cells. <i>RSC Advances</i> , <b>2016</b> , 6, 98167-98170	3.7	2
76	Facile fabrication of large-grain CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> -xBr <sub>x</sub> films for high-efficiency solar cells via CH <sub>3</sub> NH <sub>3</sub> Br-selective Ostwald ripening. <i>Nature Communications</i> , <b>2016</b> , 7, 12305	17.4	358
75	Organic-inorganic interactions of single crystalline organolead halide perovskites studied by Raman spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 18112-8	3.6	68



74	High performance nanoporous silicon photoelectrodes co-catalyzed with an earth abundant [Mo <sub>3</sub> S <sub>13</sub> ] <sub>2</sub> nanocluster via drop coating. <i>RSC Advances</i> , <b>2016</b> , 6, 15610-15614	3.7	7
73	Proton Reduction Using a Hydrogenase-Modified Nanoporous Black Silicon Photoelectrode. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 14481-7	9.5	33
72	Light-Driven Overall Water Splitting Enabled by a Photo-Dember Effect Realized on 3D Plasmonic Structures. <i>ACS Nano</i> , <b>2016</b> , 10, 6693-701	16.7	34
71	Identification and characterization of the intermediate phase in hybrid organic-inorganic MAPbI <sub>3</sub> perovskite. <i>Dalton Transactions</i> , <b>2016</b> , 45, 3806-13	4.3	212
70	Organic-inorganic hybrid lead halide perovskites for optoelectronic and electronic applications. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 655-89	58.5	1049
69	Highly photocatalytic active thiomolybdate [Mo <sub>3</sub> S <sub>13</sub> ] <sub>2</sub> clusters/Bi <sub>2</sub> WO <sub>6</sub> nanocomposites. <i>Catalysis Today</i> , <b>2016</b> , 274, 22-27	5.3	10
68	A general non-CH <sub>3</sub> NH <sub>3</sub> X (X = I, Br) one-step deposition of CH <sub>3</sub> NH <sub>3</sub> PbX <sub>3</sub> perovskite for high performance solar cells. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 3245-3248	13	43
67	Size-dependent nanocrystal sorbent for copper removal from water. <i>Chemical Engineering Journal</i> , <b>2016</b> , 284, 565-570	14.7	25
66	Intercalation crystallization of phase-pure HC(NH <sub>4</sub> )PbI <sub>4</sub> upon microstructurally engineered PbI <sub>2</sub> thin films for planar perovskite solar cells. <i>Nanoscale</i> , <b>2016</b> , 8, 6265-70	7.7	33
65	Highly photocatalytic active thiomolybdate [Mo <sub>3</sub> S <sub>13</sub> ] <sub>2</sub> clusters/BiOBr nanocomposite with enhanced sulfur tolerance. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 183, 1-7	21.8	28
64	A controllable fabrication of grain boundary PbI <sub>2</sub> nanoplates passivated lead halide perovskites for high performance solar cells. <i>Nano Energy</i> , <b>2016</b> , 26, 50-56	17.1	138
63	Carbon quantum dots decorated Bi <sub>2</sub> WO <sub>6</sub> nanocomposite with enhanced photocatalytic oxidation activity for VOCs. <i>Applied Catalysis B: Environmental</i> , <b>2016</b> , 193, 16-21	21.8	198
62	Ion-Exchange-Induced 2D-3D Conversion of HMA FA PbI Cl Perovskite into a High-Quality MA FA PbI Perovskite. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 13460-13464	16.4	71
61	CdTe/CdS Core/Shell Quantum Dots Cocatalyzed by Sulfur Tolerant [Mo <sub>3</sub> S <sub>13</sub> ] <sub>2</sub> Nanoclusters for Efficient Visible-Light-Driven Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 6653-6658	8.3	50
60	Ion-Exchange-Induced 2D-3D Conversion of HMA <sub>1-x</sub> FA <sub>x</sub> PbI <sub>3</sub> Cl Perovskite into a High-Quality MA <sub>1-x</sub> FA <sub>x</sub> PbI <sub>3</sub> Perovskite. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 13658-13662	3.6	7
59	In situ gas/solid reaction for the formation of luminescent quantum confined CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> perovskite planar film. <i>Chemical Communications</i> , <b>2016</b> , 52, 11080-3	5.8	18
58	Carbon Counter-Electrode-Based Quantum-Dot-Sensitized Solar Cells with Certified Efficiency Exceeding 11. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 3103-11	6.4	154
57	Growth control of compact CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> thin films via enhanced solid-state precursor reaction for efficient planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9249-9256	13	118

56	Sn-doped hematite films as photoanodes for efficient photoelectrochemical water oxidation. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 6751-6755	13	43
55	Oxidatively stable nanoporous silicon photocathodes with enhanced onset voltage for photoelectrochemical proton reduction. <i>Nano Letters</i> , <b>2015</b> , 15, 2517-25	11.5	69
54	Non-Thermal Annealing Fabrication of Efficient Planar Perovskite Solar Cells with Inclusion of NH <sub>4</sub> Cl. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 1448-1451	9.6	114
53	Understanding the Effect of Monomeric Iridium(III/IV) Aquo Complexes on the Photoelectrochemistry of IrO(x)/H <sub>2</sub> O-Catalyzed Water-Splitting Systems. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 8749-57	16.4	36
52	Nonvolatile chlorinated additives adversely influence CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> based planar solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9137-9140	13	32
51	A facile solvothermal growth of single crystal mixed halide perovskite CH <sub>3</sub> NH <sub>3</sub> Pb(Br(1-x)Cl(x)) <sub>3</sub> . <i>Chemical Communications</i> , <b>2015</b> , 51, 7820-3	5.8	114
50	Ultrasensitive Photodetectors Based on Island-Structured CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Thin Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 21634-8	9.5	96
49	General Method for the Synthesis of Ultrastable Core/Shell Quantum Dots by Aluminum Doping. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 12430-3	16.4	71
48	Photocatalytic remediation of ionic pollutant. <i>Science Bulletin</i> , <b>2015</b> , 60, 1791-1806	10.6	48
47	Hydrochloric acid accelerated formation of planar CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite with high humidity tolerance. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 19674-19678	13	108
46	A novel highly active nanostructured IrO <sub>2</sub> /Ti anode for water oxidation. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 14279-14283	6.7	48
45	Amorphous TiO <sub>2</sub> Buffer Layer Boosts Efficiency of Quantum Dot Sensitized Solar Cells to over 9%. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 8398-8405	9.6	184
44	Three-step sequential solution deposition of PbI <sub>2</sub> -free CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9086-9091	13	89
43	Controllable Sequential Deposition of Planar CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Films via Adjustable Volume Expansion. <i>Nano Letters</i> , <b>2015</b> , 15, 3959-63	11.5	217
42	Photoelectrochemical reduction of nitrates with visible light by nanoporous Si photoelectrode. <i>Electrochimica Acta</i> , <b>2015</b> , 177, 366-369	6.7	9
41	Photocurrent enhanced by singlet fission in a dye-sensitized solar cell. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 2286-93	9.5	47
40	Recent Progress of Lead Halide Perovskite Sensitized Solar Cells. <i>Acta Chimica Sinica</i> , <b>2015</b> , 73, 202	3.3	7
39	TiO <sub>2</sub> nanoparticles as functional building blocks. <i>Chemical Reviews</i> , <b>2014</b> , 114, 9283-318	68.1	340

38	CH <sub>3</sub> NH <sub>3</sub> Cl-Assisted One-Step Solution Growth of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> : Structure, Charge-Carrier Dynamics, and Photovoltaic Properties of Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 9412-9418	3.8	461
37	Metal ions optical sensing by semiconductor quantum dots. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 595-613	7.1	134
36	Solid-State Mesoporous Perovskite CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Solar Cells: Charge Transport, Recombination, and Diffusion Length. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 490-4	6.4	244
35	Optical bleaching of perovskite (CH <sub>3</sub> NH <sub>3</sub> )PbI <sub>3</sub> through room-temperature phase transformation induced by ammonia. <i>Chemical Communications</i> , <b>2014</b> , 50, 1605-7	5.8	141
34	Solution Chemistry Engineering toward High-Efficiency Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 4175-86	6.4	209
33	Substrate-controlled band positions in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite films. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 22122-30	3.6	152
32	Effective hole extraction using MoO <sub>x</sub> -Al contact in perovskite CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> solar cells. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 213906	3.4	126
31	Femtosecond time-resolved transient absorption spectroscopy of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite films: evidence for passivation effect of PbI <sub>2</sub> . <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 12205-8	16.4	417
30	Mesoporous perovskite solar cells: material composition, charge-carrier dynamics, and device characteristics. <i>Faraday Discussions</i> , <b>2014</b> , 176, 301-12	3.6	103
29	Efficient planar perovskite solar cells based on 1.8 eV band gap CH <sub>3</sub> NH <sub>3</sub> PbI <sub>2</sub> Br nanosheets via thermal decomposition. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 12241-4	16.4	203
28	Charge Transport and Recombination in Perovskite (CH <sub>3</sub> NH <sub>3</sub> )PbI <sub>3</sub> Sensitized TiO <sub>2</sub> Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 2880-2884	6.4	255
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26	Electron transfer kinetics in water splitting dye-sensitized solar cells based on core-shell oxide electrodes. <i>Faraday Discussions</i> , <b>2012</b> , 155, 165-76; discussion 207-22	3.6	57
25	Development of plasmonic semiconductor nanomaterials with copper chalcogenides for a future with sustainable energy materials. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 5564-5576	35.4	296
24	Improving the efficiency of water splitting in dye-sensitized solar cells by using a biomimetic electron transfer mediator. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 15612-6	11.5	260
23	Toward high-performance nanostructured thermoelectric materials: the progress of bottom-up solution chemistry approaches. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 17049		57
22	Anodic deposition of colloidal iridium oxide thin films from hexahydroxyiridate(IV) solutions. <i>Small</i> , <b>2011</b> , 7, 2087-93	11	100
21	Sensing Thermally Denatured DNA by Inhibiting the Growth of Au Nanoparticles: Spectral and Electrochemical Studies. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 14461-14468	3.8	5

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15	Wireless activation of neurons in brain slices using nanostructured semiconductor photoelectrodes. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 2407-10	16.4	18
14	Chemical synthesis of Bi(0.5)Sb(1.5)Te <sub>3</sub> nanocrystals and their surface oxidation properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2009</b> , 1, 1259-63	9.5	53
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11	Synthesis, characterization and computational study of nitrogen-doped CeO <sub>2</sub> nanoparticles with visible-light activity. <i>Physical Chemistry Chemical Physics</i> , <b>2008</b> , 10, 5633-8	3.6	84
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8	Relativistic DFT study on the reaction mechanism of second-row transition metal Ru with CO <sub>2</sub> . <i>Journal of Physical Chemistry A</i> , <b>2006</b> , 110, 3552-8	2.8	10
7	CsI Enhanced Buried Interface for Efficient and UV-Robust Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2103151	21.8	27
6	Synergetic effects of DMA cation doping and Cl anion additives induced re-growth of MA <sub>1-x</sub> DMAXPbI <sub>3</sub> perovskites. <i>Sustainable Energy and Fuels</i> ,	5.8	2
5	Organic Matrix Assisted Low-temperature Crystallization of Black Phase Inorganic Perovskites. <i>Angewandte Chemie</i> ,	3.6	1
4	Inorganic CsPbBr <sub>3</sub> Perovskite Nanocrystals as Interfacial Ion Reservoirs to Stabilize FAPbI <sub>3</sub> Perovskite for Efficient Photovoltaics. <i>Advanced Energy Materials</i> , 2200203	21.8	1
3	Multi-Level Passivation of MAPbI <sub>3</sub> Perovskite for Efficient and Stable Photovoltaics. <i>Advanced Functional Materials</i> , 2108944	15.6	6

2	Electrocatalytic Valorization of Poly(ethylene terephthalate) Plastic and CO <sub>2</sub> for Simultaneous Production of Formic Acid. <i>ACS Catalysis</i> ,6722-6728	13.1	6
1	Stable Pure Iodide MA <sub>0.95</sub> Cs <sub>0.05</sub> PbI <sub>3</sub> Perovskite toward Efficient 1.6 eV Bandgap Photovoltaics. <i>Journal of Physical Chemistry Letters</i> ,5088-5093	6.4	1