Shaik Mohammed Zakeeruddin

List of Publications by Year in Descending Order

240 papers	46,256 citations	87 h-index	214 g-index
250 ext. papers	52,392 ext. citations	14.7 avg, IF	7.63 L-index

#	Paper	IF	Citations
240	A universal co-solvent dilution strategy enables facile and cost-effective fabrication of perovskite photovoltaics.. *Nature Communications*, **2022**, 13, 89	17.4	14
239	Solid-state synthesis of CdFeO binary catalyst for potential application in renewable hydrogen fuel generation.. *Scientific Reports*, **2022**, 12, 1632	4.9	1
238	Conformal quantum dot-SnO layers as electron transporters for efficient perovskite solar cells.. *Science*, **2022**, 375, 302-306	33.3	181
237	Revisiting the Impact of Morphology and Oxidation State of Cu on CO Reduction Using Electrochemical Flow Cell.. *Journal of Physical Chemistry Letters*, **2022**, 345-351	6.4	3
236	Efficient and Stable Large Bandgap MAPbBr3 Perovskite Solar Cell Attaining an Open Circuit Voltage of 1.65 V. *ACS Energy Letters*, **2022**, 7, 1112-1119	20.1	4
235	Molecularly Engineered Low-Cost Organic Hole-Transporting Materials for Perovskite Solar Cells: The Substituent Effect on Non-fused Three-Dimensional Systems. *ACS Applied Energy Materials*, **2022**, 5, 3156-3165	6.1	1
234	Ti1□graphene single-atom material for improved energy level alignment in perovskite solar cells. *Nature Energy*, **2021**, 6, 1154-1163	62.3	14
233	Thermodynamic stability screening of IR-photonic processed multication halide perovskite thin films. *Journal of Materials Chemistry A*, **2021**, 9, 26885-26895	13	0
232	Interfacial Passivation Engineering of Perovskite Solar Cells with Fill Factor over 82% and Outstanding Operational Stability on n-i-p Architecture. *ACS Energy Letters*, **2021**, 6, 3916-3923	20.1	35
231	Combined Precursor Engineering and Grain Anchoring Leading to MA-Free, Phase-Pure, and Stable □Formamidinium Lead Iodide Perovskites for Efficient Solar Cells. *Angewandte Chemie - International Edition*, **2021**, 60, 27299	16.4	10
230	The Rise of Dye-Sensitized Solar Cells: From Molecular Photovoltaics to Emerging Solid-State Photovoltaic Technologies. *Helvetica Chimica Acta*, **2021**, 104, e2000230	2	8
229	Transparent and Colorless Dye-Sensitized Solar Cells Exceeding 75% Average Visible Transmittance. *Jacs Au*, **2021**, 1, 409-426		19
228	Formation of High-Performance Multi-Cation Halide Perovskites Photovoltaics by □CsPbI3/□RbPbI3 Seed-Assisted Heterogeneous Nucleation. *Advanced Energy Materials*, **2021**, 11, 2003785	21.8	14
227	A molecular photosensitizer achieves a V of 1.24 V enabling highly efficient and stable dye-sensitized solar cells with copper(II/I)-based electrolyte. *Nature Communications*, **2021**, 12, 1777	17.4	67
226	Pseudo-halide anion engineering for □FAPbI perovskite solar cells. *Nature*, **2021**, 592, 381-385	50.4	814
225	A combined molecular dynamics and experimental study of two-step process enabling low-temperature formation of phase-pure □FAPbI. *Science Advances*, **2021**, 7,	14.3	17
224	Quantifying Stabilized Phase Purity in Formamidinium-Based Multiple-Cation Hybrid Perovskites. *Chemistry of Materials*, **2021**, 33, 2769-2776	9.6	4

223	Benzylammonium-Mediated Formamidinium Lead Iodide Perovskite Phase Stabilization for Photovoltaics. *Advanced Functional Materials*, **2021**, 31, 2101163	15.6	10
222	Surface Reconstruction Engineering with Synergistic Effect of Mixed-Salt Passivation Treatment toward Efficient and Stable Perovskite Solar Cells. *Advanced Functional Materials*, **2021**, 31, 2102902	15.6	17
221	Cyclopentadiene-Based Hole-Transport Material for Cost-Reduced Stabilized Perovskite Solar Cells with Power Conversion Efficiencies Over 23%. *Advanced Energy Materials*, **2021**, 11, 2003953	21.8	4
220	Multimodal host-guest complexation for efficient and stable perovskite photovoltaics. *Nature Communications*, **2021**, 12, 3383	17.4	17
219	Layered Hybrid Formamidinium Lead Iodide Perovskites: Challenges and Opportunities. *Accounts of Chemical Research*, **2021**, 54, 2729-2740	24.3	8
218	Flexible perovskite solar cells with simultaneously improved efficiency, operational stability, and mechanical reliability. *Joule*, **2021**, 5, 1587-1601	27.8	45
217	Carboxymethyl cellulose nanocomposite beads as super-efficient catalyst for the reduction of organic and inorganic pollutants. *International Journal of Biological Macromolecules*, **2021**, 167, 101-116	7.9	15
216	Low-Cost Dopant Additive-Free Hole-Transporting Material for a Robust Perovskite Solar Cell with Efficiency Exceeding 21%. *ACS Energy Letters*, **2021**, 6, 208-215	20.1	30
215	Modulation of perovskite crystallization processes towards highly efficient and stable perovskite solar cells with MXene quantum dot-modified SnO2. *Energy and Environmental Science*, **2021**, 14, 3447-3454	35.4	38
214	Synergistic Effect of Fluorinated Passivator and Hole Transport Dopant Enables Stable Perovskite Solar Cells with an Efficiency Near 24. *Journal of the American Chemical Society*, **2021**, 143, 3231-3237	16.4	73
213	Efficient and stable inverted perovskite solar cells with very high fill factors via incorporation of star-shaped polymer. *Science Advances*, **2021**, 7,	14.3	54
212	Naphthalenediimide/Formamidinium-Based Low-Dimensional Perovskites. *Chemistry of Materials*, **2021**, 33, 6412-6420	9.6	2
211	New Insights into the Interface of Electrochemical Flow Cells for Carbon Dioxide Reduction to Ethylene. *Journal of Physical Chemistry Letters*, **2021**, 12, 7583-7589	6.4	5
210	Dopant Engineering for Spiro-OMeTAD Hole-Transporting Materials towards Efficient Perovskite Solar Cells. *Advanced Functional Materials*, **2021**, 31, 2102124	15.6	14
209	A Fully Printable Hole-Transporter-Free Semi-Transparent Perovskite Solar Cell. *European Journal of Inorganic Chemistry*, **2021**, 2021, 3752-3760	2.3	1
208	Nanoscale Phase Segregation in Supramolecular Templating for Hybrid Perovskite Photovoltaics from NMR Crystallography. *Journal of the American Chemical Society*, **2021**, 143, 1529-1538	16.4	26
207	Nanoscale interfacial engineering enables highly stable and efficient perovskite photovoltaics. *Energy and Environmental Science*, **2021**, 14, 5552-5562	35.4	20
206	Crown Ether Modulation Enables over 23% Efficient Formamidinium-Based Perovskite Solar Cells. *Journal of the American Chemical Society*, **2020**, 142, 19980-19991	16.4	72

205	Reduced Graphene Oxide Improves Moisture and Thermal Stability of Perovskite Solar Cells. *Cell Reports Physical Science*, **2020**, 1, 100053	6.1	11
204	Passivation Mechanism Exploiting Surface Dipoles Affords High-Performance Perovskite Solar Cells. *Journal of the American Chemical Society*, **2020**, 142, 11428-11433	16.4	48
203	Stabilization of Highly Efficient and Stable Phase-Pure FAPbI Perovskite Solar Cells by Molecularly Tailored 2D-Overlayers. *Angewandte Chemie - International Edition*, **2020**, 59, 15688-15694	16.4	115
202	High-Performance Lead-Free Solar Cells Based on Tin-Halide Perovskite Thin Films Functionalized by a Divalent Organic Cation. *ACS Energy Letters*, **2020**, 5, 2223-2230	20.1	60
201	Stabilization of Highly Efficient and Stable Phase-Pure FAPbI3 Perovskite Solar Cells by Molecularly Tailored 2D-Overlayers. *Angewandte Chemie*, **2020**, 132, 15818-15824	3.6	11
200	Phenanthrene-Fused-Quinoxaline as a Key Building Block for Highly Efficient and Stable Sensitizers in Copper-Electrolyte-Based Dye-Sensitized Solar Cells. *Angewandte Chemie*, **2020**, 132, 9410-9415	3.6	6
199	Phenanthrene-Fused-Quinoxaline as a Key Building Block for Highly Efficient and Stable Sensitizers in Copper-Electrolyte-Based Dye-Sensitized Solar Cells. *Angewandte Chemie - International Edition*, **2020**, 59, 9324-9329	16.4	30
198	Interfacial and bulk properties of hole transporting materials in perovskite solar cells: spiro-MeTAD versus spiro-OMeTAD. *Journal of Materials Chemistry A*, **2020**, 8, 8527-8539	13	16
197	Liquid State and Zombie Dye Sensitized Solar Cells with Copper Bipyridine Complexes Functionalized with Alkoxy Groups. *Journal of Physical Chemistry C*, **2020**, 124, 7071-7081	3.8	17
196	A Blue Photosensitizer Realizing Efficient and Stable Green Solar Cells via Color Tuning by the Electrolyte. *Advanced Materials*, **2020**, 32, e2000193	24	16
195	Compositional and Interface Engineering of Organic-Inorganic Lead Halide Perovskite Solar Cells. *IScience*, **2020**, 23, 101359	6.1	50
194	Cyclopentadithiophene-Based Hole-Transporting Material for Highly Stable Perovskite Solar Cells with Stabilized Efficiencies Approaching 21%. *ACS Applied Energy Materials*, **2020**, 3, 7456-7463	6.1	14
193	Electron-Selective Layers for Dye-Sensitized Solar Cells Based on TiO2 and SnO2. *Journal of Physical Chemistry C*, **2020**, 124, 6512-6521	3.8	22
192	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. *Nature Energy*, **2020**, 5, 35-49	62.3	369
191	Black phosphorus quantum dots in inorganic perovskite thin films for efficient photovoltaic application. *Science Advances*, **2020**, 6, eaay5661	14.3	49
190	Vapor-assisted deposition of highly efficient, stable black-phase FAPbI perovskite solar cells. *Science*, **2020**, 370,	33.3	257
189	Molecular Engineering of Simple Metal-Free Organic Dyes Derived from Triphenylamine for Dye-Sensitized Solar Cell Applications. *ChemSusChem*, **2020**, 13, 212-220	8.3	16
188	Supramolecular Modulation of Hybrid Perovskite Solar Cells via Bifunctional Halogen Bonding Revealed by Two-Dimensional F Solid-State NMR Spectroscopy. *Journal of the American Chemical Society*, **2020**, 142, 1645-1654	16.4	43

187	New Strategies for Defect Passivation in High-Efficiency Perovskite Solar Cells. *Advanced Energy Materials*, **2020**, 10, 1903090	21.8	152
186	Guanine-Stabilized Formamidinium Lead Iodide Perovskites. *Angewandte Chemie - International Edition*, **2020**, 59, 4691-4697	16.4	40
185	Guanine-Stabilized Formamidinium Lead Iodide Perovskites. *Angewandte Chemie*, **2020**, 132, 4721-4727	3.6	
184	Formamidinium-Based Dion-Jacobson Layered Hybrid Perovskites: Structural Complexity and Optoelectronic Properties. *Advanced Functional Materials*, **2020**, 30, 2003428	15.6	34
183	Minimizing the Trade-Off between Photocurrent and Photovoltage in Triple-Cation Mixed-Halide Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2020**, 11, 10188-10195	6.4	20
182	Unravelling the structural complexity and photophysical properties of adamantyl-based layered hybrid perovskites. *Journal of Materials Chemistry A*, **2020**, 8, 17732-17740	13	7
181	Blue Photosensitizer with Copper(II/I) Redox Mediator for Efficient and Stable Dye-Sensitized Solar Cells. *Advanced Functional Materials*, **2020**, 30, 2004804	15.6	13
180	Halide Versus Nonhalide Salts: The Effects of Guanidinium Salts on the Structural, Morphological, and Photovoltaic Performances of Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 1900234	7.1	10
179	Photovoltaic Performance of Porphyrin-Based Dye-Sensitized Solar Cells with Binary Ionic Liquid Electrolytes. *Energy Technology*, **2020**, 8, 2000092	3.5	2
178	Tailored Amphiphilic Molecular Mitigators for Stable Perovskite Solar Cells with 23.5% Efficiency. *Advanced Materials*, **2020**, 32, e1907757	24	178
177	Guanidinium-Assisted Surface Matrix Engineering for Highly Efficient Perovskite Quantum Dot Photovoltaics. *Advanced Materials*, **2020**, 32, e2001906	24	67
176	Selective C-C Coupling in Carbon Dioxide Electroreduction via Efficient Spillover of Intermediates As Supported by Operando Raman Spectroscopy. *Journal of the American Chemical Society*, **2019**, 141, 18704-18714	16.4	113
175	Charge Accumulation, Recombination, and Their Associated Time Scale in Efficient (GUA) (MA) PbI-Based Perovskite Solar Cells. *ACS Omega*, **2019**, 4, 16840-16846	3.9	18
174	PbZrTiO3 ferroelectric oxide as an electron extraction material for stable halide perovskite solar cells. *Sustainable Energy and Fuels*, **2019**, 3, 382-389	5.8	26
173	Sequential catalysis enables enhanced C-C coupling towards multi-carbon alkenes and alcohols in carbon dioxide reduction: a study on bifunctional Cu/Au electrocatalysts. *Faraday Discussions*, **2019**, 215, 282-296	3.6	30
172	Electrochemical Characterization of CuSCN Hole-Extracting Thin Films for Perovskite Photovoltaics. *ACS Applied Energy Materials*, **2019**, 2, 4264-4273	6.1	15
171	Ultrahydrophobic 3D/2D fluoroarene bilayer-based water-resistant perovskite solar cells with efficiencies exceeding 22. *Science Advances*, **2019**, 5, eaaw2543	14.3	362
170	An Oxa[5]helicene-Based Racemic Semiconducting Glassy Film for Photothermally Stable Perovskite Solar Cells. *IScience*, **2019**, 15, 234-242	6.1	24

169	Perovskite Solar Cells Based on Oligotriarylamine Hexaarylbenzene as Hole-Transporting Materials. *Organic Letters*, **2019**, 21, 3261-3264	6.2	10
168	SnS Quantum Dots as Hole Transporter of Perovskite Solar Cells. *ACS Applied Energy Materials*, **2019**, 2, 3822-3829	6.1	17
167	Power output stabilizing feature in perovskite solar cells at operating condition: Selective contact-dependent charge recombination dynamics. *Nano Energy*, **2019**, 61, 126-131	17.1	32
166	Dopant-Free Hole-Transporting Polymers for Efficient and Stable Perovskite Solar Cells. *Macromolecules*, **2019**, 52, 2243-2254	5.5	33
165	Metal Coordination Complexes as Redox Mediators in Regenerative Dye-Sensitized Solar Cells. *Inorganics*, **2019**, 7, 30	2.9	53
164	Toward an alternative approach for the preparation of low-temperature titanium dioxide blocking underlayers for perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 10729-10738	13	8
163	A partially-planarised hole-transporting quart-p-phenylene for perovskite solar cells. *Journal of Materials Chemistry C*, **2019**, 7, 4332-4335	7.1	5
162	Supramolecular Engineering for Formamidinium-Based Layered 2D Perovskite Solar Cells: Structural Complexity and Dynamics Revealed by Solid-State NMR Spectroscopy. *Advanced Energy Materials*, **2019**, 9, 1900284	21.8	71
161	A tandem redox system with a cobalt complex and 2-azaadamantane-N-oxyl for fast dye regeneration and open circuit voltages exceeding 1 V. *Journal of Materials Chemistry A*, **2019**, 7, 10998-11006	13	5
160	Influence of Alkoxy Chain Length on the Properties of Two-Dimensionally Expanded Azulene-Core-Based Hole-Transporting Materials for Efficient Perovskite Solar Cells. *Chemistry - A European Journal*, **2019**, 25, 6741-6752	4.8	13
159	Engineering of Perovskite Materials Based on Formamidinium and Cesium Hybridization for High-Efficiency Solar Cells. *Chemistry of Materials*, **2019**, 31, 1620-1627	9.6	77
158	Atomic Layer Deposition of ZnO on CuO Enables Selective and Efficient Electroreduction of Carbon Dioxide to Liquid Fuels. *Angewandte Chemie*, **2019**, 131, 15178-15182	3.6	27
157	Atomic Layer Deposition of ZnO on CuO Enables Selective and Efficient Electroreduction of Carbon Dioxide to Liquid Fuels. *Angewandte Chemie - International Edition*, **2019**, 58, 15036-15040	16.4	73
156	Atomic-level passivation mechanism of ammonium salts enabling highly efficient perovskite solar cells. *Nature Communications*, **2019**, 10, 3008	17.4	178
155	Atomic-Level Microstructure of Efficient Formamidinium-Based Perovskite Solar Cells Stabilized by 5-Ammonium Valeric Acid Iodide Revealed by Multinuclear and Two-Dimensional Solid-State NMR. *Journal of the American Chemical Society*, **2019**, 141, 17659-17669	16.4	63
154	Low-Cost and Highly Efficient Carbon-Based Perovskite Solar Cells Exhibiting Excellent Long-Term Operational and UV Stability. *Small*, **2019**, 15, e1904746	11	53
153	Perovskite Solar Cells Yielding Reproducible Photovoltage of 1.20 V. *Research*, **2019**, 2019, 1-9	7.8	10
152	Perovskite Solar Cells Yielding Reproducible Photovoltage of 1.20 V. *Research*, **2019**, 2019, 8474698	7.8	17

151	Efficient stable graphene-based perovskite solar cells with high flexibility in device assembling via modular architecture design. *Energy and Environmental Science*, **2019**, 12, 3585-3594	35.4	65
150	Bimetallic Electrocatalysts for Carbon Dioxide Reduction. *Chimia*, **2019**, 73, 928-935	1.3	2
149	Doping and phase segregation in Mn2+- and Co2+-doped lead halide perovskites from 133Cs and 1H NMR relaxation enhancement. *Journal of Materials Chemistry A*, **2019**, 7, 2326-2333	13	48
148	Site-selective Synthesis of [70]PCBM-like Fullerenes: Efficient Application in Perovskite Solar Cells. *Chemistry - A European Journal*, **2019**, 25, 3224-3228	4.8	26
147	Bifunctional Organic Spacers for Formamidinium-Based Hybrid Dion-Jacobson Two-Dimensional Perovskite Solar Cells. *Nano Letters*, **2019**, 19, 150-157	11.5	140
146	A peri-Xanthenoxanthene Centered Columnar-Stacking Organic Semiconductor for Efficient, Photothermally Stable Perovskite Solar Cells. *Chemistry - A European Journal*, **2019**, 25, 945-948	4.8	16
145	Influence of redox electrolyte on the device performance of phenothiazine based dye sensitized solar cells. *New Journal of Chemistry*, **2018**, 42, 9045-9050	3.6	18
144	Planar Perovskite Solar Cells with High Open-Circuit Voltage Containing a Supramolecular Iron Complex as Hole Transport Material Dopant. *ChemPhysChem*, **2018**, 19, 1363-1370	3.2	13
143	Impact of Peripheral Groups on Phenothiazine-Based Hole-Transporting Materials for Perovskite Solar Cells. *ACS Energy Letters*, **2018**, 3, 1145-1152	20.1	94
142	Comprehensive control of voltage loss enables 11.7% efficient solid-state dye-sensitized solar cells. *Energy and Environmental Science*, **2018**, 11, 1779-1787	35.4	112
141	Adamantanes Enhance the Photovoltaic Performance and Operational Stability of Perovskite Solar Cells by Effective Mitigation of Interfacial Defect States. *Advanced Energy Materials*, **2018**, 8, 1800275	21.8	86
140	Formation of Stable Mixed Guanidinium-Methylammonium Phases with Exceptionally Long Carrier Lifetimes for High-Efficiency Lead Iodide-Based Perovskite Photovoltaics. *Journal of the American Chemical Society*, **2018**, 140, 3345-3351	16.4	183
139	Poly(ethylene glycol)-[60]Fullerene-Based Materials for Perovskite Solar Cells with Improved Moisture Resistance and Reduced Hysteresis. *ChemSusChem*, **2018**, 11, 1032-1039	8.3	43
138	Influence of the Nature of A Cation on Dynamics of Charge Transfer Processes in Perovskite Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1706073	15.6	46
137	Boosting the Efficiency of Perovskite Solar Cells with CsBr-Modified Mesoporous TiO2 Beads as Electron-Selective Contact. *Advanced Functional Materials*, **2018**, 28, 1705763	15.6	93
136	A Stable Blue Photosensitizer for Color Palette of Dye-Sensitized Solar Cells Reaching 12.6% Efficiency. *Journal of the American Chemical Society*, **2018**, 140, 2405-2408	16.4	221
135	An investigation of the roles furan versus thiophene -bridges play in donor--acceptor porphyrin based DSSCs. *Dalton Transactions*, **2018**, 47, 6549-6556	4.3	18
134	Direct Contact of Selective Charge Extraction Layers Enables High-Efficiency Molecular Photovoltaics. *Joule*, **2018**, 2, 1108-1117	27.8	189

133	Mesoscopic Oxide Double Layer as Electron Specific Contact for Highly Efficient and UV Stable Perovskite Photovoltaics. *Nano Letters*, **2018**, 18, 2428-2434	11.5	96
132	Novel p-dopant toward highly efficient and stable perovskite solar cells. *Energy and Environmental Science*, **2018**, 11, 2985-2992	35.4	149
131	Reduced Graphene Oxide as a Stabilizing Agent in Perovskite Solar Cells. *Advanced Materials Interfaces*, **2018**, 5, 1800416	4.6	33
130	Effect of Coordination Sphere Geometry of Copper Redox Mediators on Regeneration and Recombination Behavior in Dye-Sensitized Solar Cell Applications. *ACS Applied Energy Materials*, **2018**, 1, 4950-4962	6.1	34
129	Electron-Affinity-Triggered Variations on the Optical and Electrical Properties of Dye Molecules Enabling Highly Efficient Dye-Sensitized Solar Cells. *Angewandte Chemie*, **2018**, 130, 14321-14324	3.6	17
128	Insights about the Absence of Rb Cation from the 3D Perovskite Lattice: Effect on the Structural, Morphological, and Photophysical Properties and Photovoltaic Performance. *Small*, **2018**, 14, e1802033	11	19
127	Electron-Affinity-Triggered Variations on the Optical and Electrical Properties of Dye Molecules Enabling Highly Efficient Dye-Sensitized Solar Cells. *Angewandte Chemie - International Edition*, **2018**, 57, 14125-14128	16.4	42
126	Molecular Design of Efficient Organic D-A-□A Dye Featuring Triphenylamine as Donor Fragment for Application in Dye-Sensitized Solar Cells. *ChemSusChem*, **2018**, 11, 494-502	8.3	28
125	Suppressing defects through the synergistic effect of a Lewis base and a Lewis acid for highly efficient and stable perovskite solar cells. *Energy and Environmental Science*, **2018**, 11, 3480-3490	35.4	202
124	Hydrothermally processed CuCrO2 nanoparticles as an inorganic hole transporting material for low-cost perovskite solar cells with superior stability. *Journal of Materials Chemistry A*, **2018**, 6, 20327-20337	13	55
123	Stable and Efficient Organic Dye-Sensitized Solar Cell Based on Ionic Liquid Electrolyte. *Joule*, **2018**, 2, 2145-2153	27.8	63
122	Multifunctional molecular modulators for perovskite solar cells with over 20% efficiency and high operational stability. *Nature Communications*, **2018**, 9, 4482	17.4	189
121	High Open Circuit Voltage for Perovskite Solar Cells with S,Si-Heteropentacene-Based Hole Conductors. *European Journal of Inorganic Chemistry*, **2018**, 2018, 4573-4578	2.3	6
120	Phase Segregation in Potassium-Doped Lead Halide Perovskites from K Solid-State NMR at 21.1 T. *Journal of the American Chemical Society*, **2018**, 140, 7232-7238	16.4	106
119	Elucidation of Charge Recombination and Accumulation Mechanism in Mixed Perovskite Solar Cells. *Journal of Physical Chemistry C*, **2018**, 122, 15149-15154	3.8	49
118	Room-Temperature Formation of Highly Crystalline Multication Perovskites for Efficient, Low-Cost Solar Cells. *Advanced Materials*, **2017**, 29, 1606258	24	106
117	Isomer-Pure Bis-PCBM-Assisted Crystal Engineering of Perovskite Solar Cells Showing Excellent Efficiency and Stability. *Advanced Materials*, **2017**, 29, 1606806	24	276
116	Redox Catalysis for Improved Counter-Electrode Kinetics in Dye-Sensitized Solar Cells. *ChemElectroChem*, **2017**, 4, 1356-1361	4.3	5

115	Long term stability of air processed inkjet infiltrated carbon-based printed perovskite solar cells under intense ultra-violet light soaking. *Journal of Materials Chemistry A*, **2017**, 5, 4797-4802	13	67
114	Function Follows Form: Correlation between the Growth and Local Emission of Perovskite Structures and the Performance of Solar Cells. *Advanced Functional Materials*, **2017**, 27, 1701433	15.6	22
113	Multistep Photoluminescence Decay Reveals Dissociation of Geminate Charge Pairs in Organolead Trihalide Perovskites. *Advanced Energy Materials*, **2017**, 7, 1700405	21.8	8
112	Dye-sensitized solar cells for efficient power generation under ambient lighting. *Nature Photonics*, **2017**, 11, 372-378	33.9	653
111	New Insight into the Formation of Hybrid Perovskite Nanowires via Structure Directing Adducts. *Chemistry of Materials*, **2017**, 29, 587-594	9.6	60
110	Cation Dynamics in Mixed-Cation (MA)(FA)PbI Hybrid Perovskites from Solid-State NMR. *Journal of the American Chemical Society*, **2017**, 139, 10055-10061	16.4	160
109	Hill climbing hysteresis of perovskite-based solar cells: a maximum power point tracking investigation. *Progress in Photovoltaics: Research and Applications*, **2017**, 25, 942-950	6.8	28
108	11% efficiency solid-state dye-sensitized solar cells with copper(II/I) hole transport materials. *Nature Communications*, **2017**, 8, 15390	17.4	181
107	High performance carbon-based printed perovskite solar cells with humidity assisted thermal treatment. *Journal of Materials Chemistry A*, **2017**, 5, 12060-12067	13	74
106	Perovskite solar cells with CuSCN hole extraction layers yield stabilized efficiencies greater than 20. *Science*, **2017**, 358, 768-771	33.3	1030
105	Additives, Hole Transporting Materials and Spectroscopic Methods to Characterize the Properties of Perovskite Films. *Chimia*, **2017**, 71, 754-761	1.3	3
104	Over 20% PCE perovskite solar cells with superior stability achieved by novel and low-cost hole-transporting materials. *Nano Energy*, **2017**, 41, 469-475	17.1	191
103	The Role of Rubidium in Multiple-Cation-Based High-Efficiency Perovskite Solar Cells. *Advanced Materials*, **2017**, 29, 1701077	24	102
102	Phase Segregation in Cs-, Rb- and K-Doped Mixed-Cation (MA)(FA)PbI Hybrid Perovskites from Solid-State NMR. *Journal of the American Chemical Society*, **2017**, 139, 14173-14180	16.4	260
101	Investigation on the Interface Modification of TiO Surfaces by Functional Co-Adsorbents for High-Efficiency Dye-Sensitized Solar Cells. *ChemPhysChem*, **2017**, 18, 2724-2731	3.2	19
100	Reduction in the Interfacial Trap Density of Mechanochemically Synthesized MAPbI. *ACS Applied Materials & Interfaces*, **2017**, 9, 28418-28425	9.5	55
99	Donor-Acceptor-Type S,N-Heteroacene-Based Hole-Transporting Materials for Efficient Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 44423-44428	9.5	27
98	Intrinsic and interfacial kinetics of perovskite solar cells under photo and bias-induced degradation and recovery. *Journal of Materials Chemistry C*, **2017**, 5, 7799-7805	7.1	27

97	Air Processed Inkjet Infiltrated Carbon Based Printed Perovskite Solar Cells with High Stability and Reproducibility. *Advanced Materials Technologies*, **2017**, 2, 1600183	6.8	109
96	Influence of Ionic Liquid Electrolytes on the Photovoltaic Performance of Dye-Sensitized Solar Cells. *Energy Technology*, **2017**, 5, 321-326	3.5	19
95	Effect of Cs-Incorporated NiO on the Performance of Perovskite Solar Cells. *ACS Omega*, **2017**, 2, 9074-9079	3.9	34
94	Interfacial Kinetics of Efficient Perovskite Solar Cells. *Crystals*, **2017**, 7, 252	2.3	20
93	Impact of a Mesoporous Titania-Perovskite Interface on the Performance of Hybrid Organic-Inorganic Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2016**, 7, 3264-9	6.4	75
92	Dopant-Free Donor (D)-D-D Conjugated Hole-Transport Materials for Efficient and Stable Perovskite Solar Cells. *ChemSusChem*, **2016**, 9, 2578-2585	8.3	75
91	Polymer-templated nucleation and crystal growth of perovskite films for solar cells with efficiency greater than 21%. *Nature Energy*, **2016**, 1,	62.3	1422
90	Ultrafast charge separation dynamics in opaque, operational dye-sensitized solar cells revealed by femtosecond diffuse reflectance spectroscopy. *Scientific Reports*, **2016**, 6, 24465	4.9	18
89	Intrinsic and Extrinsic Stability of Formamidinium Lead Bromide Perovskite Solar Cells Yielding High Photovoltage. *Nano Letters*, **2016**, 16, 7155-7162	11.5	87
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