Tsutomu Miyasaka

List of Publications by Year in Descending Order

233 papers	35,779 citations	60 h-index	189 g-index
263 ext. papers	40,652 ext. citations	7.9 avg, IF	7.89 L-index

#	Paper	IF	Citations
233	FAPbBr3 perovskite solar cells with VOC values over 1.5 V by controlled crystal growth using tetramethylenesulfoxide. *Journal of Materials Chemistry A*, **2022**, 10, 672-681	13	2
232	Research Background and Recent Progress of Perovskite Photovoltaics **2022**, 1-60		0
231	Defect Properties of Halide Perovskites for Photovoltaic Applications **2022**, 107-126		
230	Halide Perovskite Materials, Structural Dimensionality, and Synthesis **2022**, 61-79		
229	Phenethylamine-Based Interfacial Dipole Engineering for High Voc Triple-Cation Perovskite Solar Cells. *Advanced Energy Materials*, **2022**, 12, 2102856	21.8	3
228	Perovskites Enabled Highly Sensitive and Fast Photodetectors **2022**, 383-409		
227	Ionic/Electronic Conduction and Capacitance of Halide Perovskite Materials **2022**, 173-213		
226	Quantum Dots of Halide Perovskite **2022**, 321-344		
225	All-Inorganic Perovskite Photovoltaics **2022**, 247-292		
224	High-Efficiency Solar Cells with Polyelemental, Multicomponent Perovskite Materials **2022**, 233-246		0
223	Hysteresis of I V Performance: Its Origin and Engineering for Elimination **2022**, 215-232		
222	Perovskite Light - Emitting Diode Technologies **2022**, 345-381		
221	Overview of Hybrid Perovskite Solar Cells **2021**, 29-64		
220	Fundamental and Development of Perovskite Solar Cells. *Journal of the Institute of Electrical Engineers of Japan*, **2021**, 141, 762-765	0	
219	Single- or double A-site cations in A3Bi2I9 bismuth perovskites: What is the suitable choice?. *Journal of Materials Research*, **2021**, 36, 1794-1804	2.5	6
218	Ionic Liquid-Assisted MAPbI Nanoparticle-Seeded Growth for Efficient and Stable Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 21194-21206	9.5	20
217	Passivation of Bulk and Interface Defects in Sputtered-NiOx-Based Planar Perovskite Solar Cells: A Facile Interfacial Engineering Strategy with Alkali Metal Halide Salts. *ACS Applied Energy Materials*, **2021**, 4, 4530-4540	6.1	8

216	Optical behaviour of black CsPbI3 phases formed by quenching from 80 °C and 325 °C. *JPhys Materials*, **2021**, 4, 034011	4.2	2
215	Formation of CsPbI3 Phase at 80 °C by Europium-Assisted Snowplow Effect. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100091	1.6	4
214	Evaluation of Damage Coefficient for Minority-Carrier Diffusion Length of Triple-Cation Perovskite Solar Cells under 1 MeV Electron Irradiation for Space Applications. *Journal of Physical Chemistry C*, **2021**, 125, 13131-13137	3.8	4
213	Dopant-Free Polymer HTM-Based CsPbI2Br Solar Cells with Efficiency Over 17% in Sunlight and 34% in Indoor Light. *Advanced Functional Materials*, **2021**, 31, 2103614	15.6	18
212	Artemisinin-passivated mixed-cation perovskite films for durable flexible perovskite solar cells with over 21% efficiency. *Journal of Materials Chemistry A*, **2021**, 9, 1574-1582	13	63
211	Drastic Change of Surface Morphology of Cesium-Formamidinium Perovskite Solar Cells by Antisolvent Processing. *ACS Applied Energy Materials*, **2021**, 4, 1069-1077	6.1	1
210	Chlorophyll Derivative-Sensitized TiO Electron Transport Layer for Record Efficiency of CsAgBiBr Double Perovskite Solar Cells. *Journal of the American Chemical Society*, **2021**, 143, 2207-2211	16.4	61
209	Concerted Ion Migration and Diffusion-Induced Degradation in Lead-Free Ag3BiI6 Rudorffite Solar Cells under Ambient Conditions. *Solar Rrl*, **2021**, 5, 2100077	7.1	7
208	Organic Dye/CsAgBiBr Double Perovskite Heterojunction Solar Cells. *Journal of the American Chemical Society*, **2021**, 143, 14877-14883	16.4	19
207	Performance improvement of MXene-based perovskite solar cells upon property transition from metallic to semiconductive by oxidation of Ti3C2Tx in air. *Journal of Materials Chemistry A*, **2021**, 9, 5016-5025	13	24
206	Photoluminescence Excitation Spectroscopy of Defect-Related States in MAPbI3 Perovskite Single Crystals. *Advanced Optical Materials*, **2020**, 9, 2001327	8.1	3
205	Electron irradiation induced aging effects on radiative recombination properties of quadruple cation organic-inorganic perovskite layers. *Emergent Materials*, **2020**, 3, 133-160	3.5	2
204	Residual PbI2 Beneficial in the Bulk or at the Interface? An Investigation Study in Sputtered NiOx Hole-Transport-Layer-Based Perovskite Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 6215-6221	6.1	13
203	Low-Temperature Synthesized Nb-Doped TiO Electron Transport Layer Enabling High-Efficiency Perovskite Solar Cells by Band Alignment Tuning. *ACS Applied Materials & Interfaces*, **2020**, 12, 15175-15182	9.5	14
202	Lead(II) Propionate Additive and a Dopant-Free Polymer Hole Transport Material for CsPbI2Br Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 1292-1299	20.1	54
201	Cesium Acetate-Induced Interfacial Compositional Change and Graded Band Level in MAPbI Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 33631-33637	9.5	8
200	A single-phase brookite TiO2 nanoparticle bridge enhances the stability of perovskite solar cells. *Sustainable Energy and Fuels*, **2020**, 4, 2009-2017	5.8	19
199	Light-Emitting Diodes: Sensitized Yb3+ Luminescence in CsPbCl3 Film for Highly Efficient Near-Infrared Light-Emitting Diodes (Adv. Sci. 4/2020). *Advanced Science*, **2020**, 7, 2070021	13.6	78

198	Femto- to Microsecond Dynamics of Excited Electrons in a Quadruple Cation Perovskite. *ACS Energy Letters*, **2020**, 5, 785-792	20.1	8
197	Sensitized Yb Luminescence in CsPbCl Film for Highly Efficient Near-Infrared Light-Emitting Diodes. *Advanced Science*, **2020**, 7, 1903142	13.6	27
196	Photoactive Zn-Chlorophyll Hole Transporter-Sensitized Lead-Free Cs2AgBiBr6 Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 2000166	7.1	31
195	Over 1.4 V for Amorphous Tin-Oxide-Based Dopant-Free CsPbIBr Perovskite Solar Cells. *Journal of the American Chemical Society*, **2020**, 142, 9725-9734	16.4	55
194	Full Efficiency Recovery in Hole-Transporting Layer-Free Perovskite Solar Cells With Free-Standing Dry-Carbon Top-Contacts. *Frontiers in Chemistry*, **2020**, 8, 200	5	6
193	Synthesis, optoelectronic properties and applications of halide perovskites. *Chemical Society Reviews*, **2020**, 49, 2869-2885	58.5	123
192	MACl-Assisted Ge Doping of Pb-Hybrid Perovskite: A Universal Route to Stabilize High Performance Perovskite Solar Cells. *Advanced Energy Materials*, **2020**, 10, 1903299	21.8	22
191	Investigating the Growth of CH3NH3PbI3 Thin Films on RF-Sputtered NiOx for Inverted Planar Perovskite Solar Cells: Effect of CH3NH3+ Halide Additives versus CH3NH3+ Halide Vapor Annealing. *Advanced Materials Interfaces*, **2020**, 7, 1901748	4.6	31
190	Planar perovskite solar cells using triazatruxene-based hyperbranched conjugated polymers and small molecule as hole-transporting materials. *Journal of Photochemistry and Photobiology A: Chemistry*, **2020**, 389, 112228	4.7	1
189	Tetrahydrofuran as an Oxygen Donor Additive to Enhance Stability and Reproducibility of Perovskite Solar Cells Fabricated in High Relative Humidity (50%) Atmosphere. *Energy Technology*, **2020**, 8, 1900990	3.5	2
188	Quantum cutting-induced near-infrared luminescence of Yb and Er in a layer structured perovskite film. *Journal of Chemical Physics*, **2020**, 153, 194704	3.9	6
187	Direct detection of circular polarized light in helical 1D perovskite-based photodiode. *Science Advances*, **2020**, 6,	14.3	59
186	Improved Electrical and Structural Stability in HTL-Free Perovskite Solar Cells by Vacuum Curing Treatment. *Energies*, **2020**, 13, 3953	3.1	6
185	Benzodithiophene-thienopyrroledione-thienothiophene-based random copolymeric hole transporting material for perovskite solar cell. *Chemical Engineering Journal*, **2020**, 382, 122830	14.7	11
184	Perovskite Solar Cells: Can We Go Organic-Free, Lead-Free, and Dopant-Free?. *Advanced Energy Materials*, **2020**, 10, 1902500	21.8	124
183	Photomultiplying Visible Light Detection by Halide Perovskite Nanoparticles Hybridized with an Organo Eu Complex. *Journal of Physical Chemistry Letters*, **2019**, 10, 5935-5942	6.4	8
182	SnO2Ti3C2 MXene electron transport layers for perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 5635-5642	13	111
181	Performance enhancement of AgBiI solar cells by modulating a solvent-mediated adduct and tuning remnant BiI in one-step crystallization. *Chemical Communications*, **2019**, 55, 4031-4034	5.8	35

180	Thermo-evaporated pentacene and perylene as hole transport materials for perovskite solar cells. *Dyes and Pigments*, **2019**, 160, 285-291	4.6	11
179	Thermal Degradation Analysis of Sealed Perovskite Solar Cell with Porous Carbon Electrode at 100 °C for 7000 h. *Energy Technology*, **2019**, 7, 245-252	3.5	24
178	Bilayer chlorophyll derivatives as efficient hole-transporting layers for perovskite solar cells. *Materials Chemistry Frontiers*, **2019**, 3, 2357-2362	7.8	12
177	Surface-Modified Metallic Ti3C2Tx MXene as Electron Transport Layer for Planar Heterojunction Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1905694	15.6	67
176	Proton Irradiation Tolerance of High-Efficiency Perovskite Absorbers for Space Applications. *Journal of Physical Chemistry Letters*, **2019**, 10, 6990-6995	6.4	17
175	Exceptional Progress of Perovskite Solar Cell. *Seikei-Kakou*, **2019**, 31, 456-457	0	
174	Halide Perovskite Photovoltaics: Background, Status, and Future Prospects. *Chemical Reviews*, **2019** , 119, 3036-3103	68.1	1189
173	Perovskite solar cells based on chlorophyll hole transporters: Dependence of aggregation and photovoltaic performance on aliphatic chains at C17-propionate residue. *Dyes and Pigments*, **2019**, 162, 763-770	4.6	13
172	Stable and efficient perovskite solar cells fabricated using aqueous lead nitrate precursor: Interpretation of the conversion mechanism and renovation of the sequential deposition. *Materials Today Energy*, **2019**, 14, 100125	7	8
171	Solid-State Thin-Film Dye-Sensitized Solar Cell Co-Sensitized with Methylammonium Lead Bromide Perovskite. *Bulletin of the Chemical Society of Japan*, **2018**, 91, 754-760	5.1	10
170	Vapor Annealing Controlled Crystal Growth and Photovoltaic Performance of Bismuth Triiodide Embedded in Mesostructured Configurations. *ACS Applied Materials & Interfaces*, **2018**, 10, 9547-9554	9.5	31
169	Nb-doped amorphous titanium oxide compact layer for formamidinium-based high efficiency perovskite solar cells by low-temperature fabrication. *Journal of Materials Chemistry A*, **2018**, 6, 9583-9591	13	26
168	Lead Halide Perovskites in Thin Film Photovoltaics: Background and Perspectives. *Bulletin of the Chemical Society of Japan*, **2018**, 91, 1058-1068	5.1	73
167	Copper iodide-PEDOT:PSS double hole transport layers for improved efficiency and stability in perovskite solar cells. *Journal of Photochemistry and Photobiology A: Chemistry*, **2018**, 357, 36-40	4.7	28
166	Microstructural analysis and optical properties of the halide double perovskite Cs2BiAgBr6 single crystals. *Chemical Physics Letters*, **2018**, 694, 18-22	2.5	29
165	Sulfate-Assisted Interfacial Engineering for High Yield and Efficiency of Triple Cation Perovskite Solar Cells with Alkali-Doped TiO2 Electron-Transporting Layers. *Advanced Functional Materials*, **2018**, 28, 1706287	15.6	147
164	Role of spiro-OMeTAD in performance deterioration of perovskite solar cells at high temperature and reuse of the perovskite films to avoid Pb-waste. *Journal of Materials Chemistry A*, **2018**, 6, 2219-2230	13	161
163	Amorphous Metal Oxide Blocking Layers for Highly Efficient Low-Temperature Brookite TiO-Based Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 2224-2229	9.5	78

162	Spontaneous Synthesis of Highly Crystalline TiO Compact/Mesoporous Stacked Films by a Low-Temperature Steam-Annealing Method for Efficient Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 17195-17202	9.5	10
161	Tolerance of Perovskite Solar Cell to High-Energy Particle Irradiations in Space Environment. *IScience*, **2018**, 2, 148-155	6.1	87
160	ZnO/ZnS core-shell composites for low-temperature-processed perovskite solar cells. *Journal of Energy Chemistry*, **2018**, 27, 1461-1467	12	14
159	Biosupramolecular bacteriochlorin aggregates as hole-transporters for perovskite solar cells. *Journal of Photochemistry and Photobiology A: Chemistry*, **2018**, 353, 639-644	4.7	16
158	Stabilizing the Efficiency Beyond 20% with a Mixed Cation Perovskite Solar Cell Fabricated in Ambient Air under Controlled Humidity. *Advanced Energy Materials*, **2018**, 8, 1700677	21.8	334
157	Effects of Cyclic Tetrapyrrole Rings of Aggregate-Forming Chlorophyll Derivatives as Hole-Transporting Materials on Performance of Perovskite Solar Cells. *ACS Applied Energy Materials* , **2018**, 1, 9-16	6.1	22
156	Thiocyanate Containing Two-Dimensional Cesium Lead Iodide Perovskite, CsPbI(SCN): Characterization, Photovoltaic Application, and Degradation Mechanism. *ACS Applied Materials & Interfaces*, **2018**, 10, 42363-42371	9.5	28
155	Ambient Fabrication of 126 m Thick Complete Perovskite Photovoltaic Device for High Flexibility and Performance. *ACS Applied Energy Materials*, **2018**, 1, 6741-6747	6.1	21
154	Stabilization of CsPbI3 in Ambient Room Temperature Conditions by Incorporating Eu into CsPbI3. *Chemistry of Materials*, **2018**, 30, 6668-6674	9.6	143
153	Invalidity of Band-Gap Engineering Concept for Bi Heterovalent Doping in CsPbBr Halide Perovskite. *Journal of Physical Chemistry Letters*, **2018**, 9, 5408-5411	6.4	55
152	Stability and Degradation in Hybrid Perovskites: Is the Glass Half-Empty or Half-Full?. *Journal of Physical Chemistry Letters*, **2018**, 9, 3000-3007	6.4	72
151	Tuning of perovskite solar cell performance via low-temperature brookite scaffolds surface modifications. *APL Materials*, **2017**, 5, 016103	5.7	15
150	An Ultrathin Sputtered TiO2 Compact Layer for Mesoporous Brookite-based Plastic CH3NH3PbI3Clx Solar Cells. *Chemistry Letters*, **2017**, 46, 530-532	1.7	22
149	Photovoltaic enhancement of bismuth halide hybrid perovskite by N-methyl pyrrolidone-assisted morphology conversion. *RSC Advances*, **2017**, 7, 9456-9460	3.7	63
148	Solution-Processed Transparent Nickel-Mesh Counter Electrode with in-Situ Electrodeposited Platinum Nanoparticles for Full-Plastic Bifacial Dye-Sensitized Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 8083-8091	9.5	35
147	Controlled Crystal Grain Growth in Mixed Cation-Halide Perovskite by Evaporated Solvent Vapor Recycling Method for High Efficiency Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 18739-18747	9.5	34
146	Photovoltaic Properties of Two-dimensional (CH3(CH2)3NH3)2PbI4 Perovskite Crystals Oriented with TiO2 Nanowire Array. *Chemistry Letters*, **2017**, 46, 1204-1206	1.7	16
145	Revealing a Discontinuity in the Degradation Behavior of CH3NH3PbI3 during Thermal Operation. *Journal of Physical Chemistry C*, **2017**, 121, 13577-13585	3.8	27

144	Highly efficient and stable low-temperature processed ZnO solar cells with triple cation perovskite absorber. *Journal of Materials Chemistry A*, **2017**, 5, 13439-13447	13	71
143	First Evidence of CH3NH3PbI3 Optical Constants Improvement in a N2 Environment in the Range 40□80 □C. *Journal of Physical Chemistry C*, **2017**, 121, 7703-7710	3.8	35
142	Degradation of CH3NH3PbI3 perovskite due to soft x-ray irradiation as analyzed by an x-ray photoelectron spectroscopy time-dependent measurement method. *Journal of Applied Physics*, **2017**, 121, 085501	2.5	25
141	Formamidine and cesium-based quasi-two-dimensional perovskites as photovoltaic absorbers. *Chemical Communications*, **2017**, 53, 4366-4369	5.8	58
140	Poly(4-Vinylpyridine)-Based Interfacial Passivation to Enhance Voltage and Moisture Stability of Lead Halide Perovskite Solar Cells. *ChemSusChem*, **2017**, 10, 2473-2479	8.3	132
139	Enhancement of the hole conducting effect of NiO by a N blow drying method in printable perovskite solar cells with low-temperature carbon as the counter electrode. *Nanoscale*, **2017**, 9, 5475-5482	7.7	30
138	Low-temperature and Ambient Air Processes of Amorphous SnOx-based Mixed Halide Perovskite Planar Solar Cell. *Chemistry Letters*, **2017**, 46, 382-384	1.7	24
137	Solar Water Splitting Utilizing a SiC Photocathode, a BiVO Photoanode, and a Perovskite Solar Cell. *ChemSusChem*, **2017**, 10, 4420-4423	8.3	20
136	Lead-free perovskite solar cells using Sb and Bi-based ABX and ABX crystals with normal and inverse cell structures. *Nano Convergence*, **2017**, 4, 26	9.2	38
135	Effect of Electrochemically Deposited MgO Coating on Printable Perovskite Solar Cell Performance. *Coatings*, **2017**, 7, 36	2.9	9
134	Severe Morphological Deformation of Spiro-OMeTAD in (CH3NH3)PbI3 Solar Cells at High Temperature. *ACS Energy Letters*, **2017**, 2, 1760-1761	20.1	103
133	All-inorganic inverse perovskite solar cells using zinc oxide nanocolloids on spin coated perovskite layer. *Nano Convergence*, **2017**, 4, 18	9.2	14
132	Fullerene Multiadducts as Electron Collection Layers for Perovskite Solar Cells. *Chemistry Letters*, **2017**, 46, 101-103	1.7	7
131	Evolution of Organic and Hybrid Photovoltaics on Interdiscipline of Science. *Electrochemistry*, **2017**, 85, 221-221	1.2	1
130	Role of Metal Oxide Electron-Transport Layer Modification on the Stability of High Performing Perovskite Solar Cells. *ChemSusChem*, **2016**, 9, 2559-2566	8.3	59
129	100 □C Thermal Stability of Printable Perovskite Solar Cells Using Porous Carbon Counter Electrodes. *ChemSusChem*, **2016**, 9, 2604-2608	8.3	88
128	Dopant-Free Zinc Chlorophyll Aggregates as an Efficient Biocompatible Hole Transporter for Perovskite Solar Cells. *ChemSusChem*, **2016**, 9, 2862-2869	8.3	52
127	Anatase and Brookite Electron Collectors from Binder-free Precursor Pastes for Low-temperature Solution-processed Perovskite Solar Cells. *Chemistry Letters*, **2016**, 45, 143-145	1.7	11

126	Revealing and reducing the possible recombination loss within TiO_2 compact layer by incorporating MgO layer in perovskite solar cells. *Solar Energy*, **2016**, 136, 379-384	6.8	43
125	Towards stable and commercially available perovskite solar cells. *Nature Energy*, **2016**, 1,	62.3	763
124	Analysis of Sputtering Damage on I-V Curves for Perovskite Solar Cells and Simulation with Reversed Diode Model. *Journal of Physical Chemistry C*, **2016**, 120, 28441-28447	3.8	32
123	Efficiency Enhancement of Hybrid Perovskite Solar Cells with MEH-PPV Hole-Transporting Layers. *Scientific Reports*, **2016**, 6, 34319	4.9	63
122	A SnO_x-brookite TiO_2 bilayer electron collector for hysteresis-less high efficiency plastic perovskite solar cells fabricated at low process temperature. *Chemical Communications*, **2016**, 52, 8119-22	5.8	54
121	Impacts of Heterogeneous TiO_2 and Al_2O_3 Composite Mesoporous Scaffold on Formamidinium Lead Trihalide Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 4608-15	9.5	31
120	Steady state performance, photo-induced performance degradation and their relation to transient hysteresis in perovskite solar cells. *Journal of Power Sources*, **2016**, 309, 1-10	8.9	41
119	The mechanism of toluene-assisted crystallization of organic-inorganic perovskites for highly efficient solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 4464-4471	13	74
118	Low-temperature-processed ZnO-SnO_2 nanocomposite for efficient planar perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2016**, 144, 623-630	6.4	120
117	Characterization of Adhesion in Ceramics Coating by AE Technique. *The Proceedings of Mechanical Engineering Congress Japan*, **2016**, 2016, S0420105	0	
116	Solution-processed tBu4-ZnPc:C61bulk heterojunction organic photovoltaic cells. *Japanese Journal of Applied Physics*, **2016**, 55, 032301	1.4	3
115	Effect of Electron Transporting Layer on Bismuth-Based Lead-Free Perovskite $(CH_3NH_3)_3Bi_2I_9$ for Photovoltaic Applications. *ACS Applied Materials & Interfaces*, **2016**, 8, 14542-7	9.5	225
114	Stability of solution-processed $MAPbI_3$ and $FAPbI_3$ layers. *Physical Chemistry Chemical Physics*, **2016**, 18, 13413-22	3.6	151
113	High performance perovskite solar cell via multi-cycle low temperature processing of lead acetate precursor solutions. *Chemical Communications*, **2016**, 52, 4784-7	5.8	33
112	$HC(NH_2)_2PbI_3$ as a thermally stable absorber for efficient ZnO-based perovskite solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 8435-8443	13	59
111	Magnesium-doped Zinc Oxide as Electron Selective Contact Layers for Efficient Perovskite Solar Cells. *ChemSusChem*, **2016**, 9, 2640-2647	8.3	56
110	Hysteresis Characteristics and Device Stability **2016**, 255-284		3
109	Trend of Perovskite Solar Cells: Dig Deeper to Build Higher. *Journal of Physical Chemistry Letters*, **2015**, 6, 2315-7	6.4	25

108	PbI2-Based Dipping-Controlled Material Conversion for Compact Layer Free Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 18156-62	9.5	60
107	Efficient perovskite solar cells fabricated using an aqueous lead nitrate precursor. *Chemical Communications*, **2015**, 51, 13294-7	5.8	59
106	A Switchable High-Sensitivity Photodetecting and Photovoltaic Device with Perovskite Absorber. *Journal of Physical Chemistry Letters*, **2015**, 6, 1773-9	6.4	66
105	The Interface between FTO and the TiO2 Compact Layer Can Be One of the Origins to Hysteresis in Planar Heterojunction Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 9817-23	9.5	129
104	High Efficiency and Robust Performance of Organo Lead Perovskite Solar Cells with Large Grain Absorbers Prepared in Ambient Air Conditions. *Chemistry Letters*, **2015**, 44, 321-323	1.7	28
103	Low-temperature SnO2-based electron selective contact for efficient and stable perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 10837-10844	13	272
102	Brookite TiO2 as a low-temperature solution-processed mesoporous layer for hybrid perovskite solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 20952-20957	13	35
101	Emergence of Hysteresis and Transient Ferroelectric Response in Organo-Lead Halide Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2015**, 6, 164-9	6.4	256
100	Efficient and Environmentally Stable Perovskite Solar Cells Based on ZnO Electron Collection Layer. *Chemistry Letters*, **2015**, 44, 610-612	1.7	65
99	Nb2O5 Blocking Layer for High Open-circuit Voltage Perovskite Solar Cells. *Chemistry Letters*, **2015**, 44, 829-830	1.7	69
98	Excitonic Feature in Hybrid Perovskite CH3NH3PbBr3 Single Crystals. *Chemistry Letters*, **2015**, 44, 852-854	1.7	43
97	Determination of Chloride Content in Planar CH3NH3PbI3�Clx Solar Cells by Chemical Analysis. *Chemistry Letters*, **2015**, 44, 1089-1091	1.7	29
96	Photocurrent Enhancement of Formamidinium Lead Trihalide Mesoscopic Perovskite Solar Cells with Large Size TiO2 Nanoparticles. *Chemistry Letters*, **2015**, 44, 1619-1621	1.7	8
95	Perovskite Photovoltaics: Rare Functions of Organo Lead Halide in Solar Cells and Optoelectronic Devices. *Chemistry Letters*, **2015**, 44, 720-729	1.7	194
94	Similar Structural Dynamics for the Degradation of CH3 NH3 PbI3 in Air and in Vacuum. *ChemPhysChem*, **2015**, 16, 3064-71	3.2	68
93	Atomistic origins of CH3NH3PbI3 degradation to PbI2 in vacuum. *Applied Physics Letters*, **2015**, 106, 131904	3.4	141
92	Evaluation of radiation tolerance of perovskite solar cell for use in space **2015**,		16
91	A room-temperature process for fabricating a nano-Pt counter electrode on a plastic substrate for efficient dye-sensitized cells. *Journal of Power Sources*, **2015**, 283, 351-357	8.9	15

90	214 Mechanical study with AE Technique for Fracture Mechanism in Transparent Conductive Film under Tensile Loading. *The Proceedings of the Materials and Processing Conference*, **2015**, 2015.23, _214-1_-_214-4_		
89	MgO-hybridized TiO2 interfacial layers assisting efficiency enhancement of solid-state dye-sensitized solar cells. *Applied Physics Letters*, **2014**, 104, 063303	3.4	4
88	A metallocene molecular complex as visible-light absorber for high-voltage organic-inorganic hybrid photovoltaic cells. *ChemPhysChem*, **2014**, 15, 1028-32	3.2	10
87	Efficiency Enhancement in ZnO:Al-Based Dye-Sensitized Solar Cells Structured with Sputtered TiO2 Blocking Layers. *Journal of Physical Chemistry C*, **2014**, 118, 6576-6585	3.8	29
86	Quantum conversion enhancement with TiO(x) compact layers for ITO-plastic-film-based low-temperature-processed dye-sensitized photoelectrodes. *ChemPhysChem*, **2014**, 15, 1190-3	3.2	6
85	Fully crystalline perovskite-perylene hybrid photovoltaic cell capable of 1.2 V output with a minimized voltage lossa). *APL Materials*, **2014**, 2, 091102	5.7	35
84	Highly efficient plastic-based quasi-solid-state dye-sensitized solar cells with light-harvesting mesoporous silica nanoparticles gel-electrolyte. *Journal of Power Sources*, **2014**, 245, 411-417	8.9	76
83	Plastic based dye-sensitized solar cells using Co9S8 acicular nanotube arrays as the counter electrode. *Journal of Materials Chemistry A*, **2013**, 1, 13759	13	43
82	Nickel Oxide Hybridized Carbon Film as an Efficient Mesoscopic Cathode for Dye-Sensitized Solar Cells. *Journal of the Electrochemical Society*, **2013**, 160, H155-H159	3.9	17
81	Tri-functional Nb2O5 nano-islands coated on an indium tin oxide layer for a highly efficient dye-sensitized plastic photoanode. *Journal of Power Sources*, **2013**, 240, 753-758	8.9	5
80	Efficiency Enhancement of ZnO-Based Dye-Sensitized Solar Cells by Low-Temperature TiCl4 Treatment and Dye Optimization. *Journal of Physical Chemistry C*, **2013**, 117, 10949-10956	3.8	77
79	Alternation of Charge Injection and Recombination in Dye-Sensitized Solar Cells by the Addition of Nonconjugated Bridge to Organic Dyes. *Journal of Physical Chemistry C*, **2013**, 117, 2024-2031	3.8	31
78	A high voltage organic-inorganic hybrid photovoltaic cell sensitized with metal-ligand interfacial complexes. *Chemical Communications*, **2012**, 48, 9900-2	5.8	17
77	Efficient hybrid solar cells based on meso-superstructured organometal halide perovskites. *Science*, **2012**, 338, 643-7	33.3	7959
76	Highly Luminescent Lead Bromide Perovskite Nanoparticles Synthesized with Porous Alumina Media. *Chemistry Letters*, **2012**, 41, 397-399	1.7	285
75	The photo charge of a bacterioRhodopsin electrochemical cells measured by a charge amplifier. *IEICE Electronics Express*, **2011**, 8, 505-511	0.5	2
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