Tsutomu Miyasaka

List of Publications by Year
in descending order

244 papers	45,445 citations	13099 68 h-index	1825 210 g-index
263 all docs	263 docs citations	263 times ranked	28212 citing authors

#	Article	IF	Citations
1	Organometal Halide Perovskites as Visible-Light Sensitizers for Photovoltaic Cells. Journal of the American Chemical Society, 2009, 131, 6050-6051.	13.7	17,777
2	Efficient Hybrid Solar Cells Based on Meso-Superstructured Organometal Halide Perovskites. Science, 2012, 338, 643-647.	12.6	9,249
3	Tin-Based Amorphous Oxide: A High-Capacity Lithium-Ion-Storage Material. Science, 1997, 276, 1395-1397.	12.6	2,490
4	Halide Perovskite Photovoltaics: Background, Status, and Future Prospects. Chemical Reviews, 2019, 119, 3036-3103.	47.7	2,009
5	Towards stable and commercially available perovskite solar cells. Nature Energy, 2016, 1, .	39.5	941
6	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.	19.5	459
7	Highly Luminescent Lead Bromide Perovskite Nanoparticles Synthesized with Porous Alumina Media. Chemistry Letters, 2012, 41, 397-399.	1.3	329
8	Low-temperature SnO₂-based electron selective contact for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 10837-10844.	10.3	324
9	Emergence of Hysteresis and Transient Ferroelectric Response in Organo-Lead Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 164-169.	4.6	283
10	Synthesis, optoelectronic properties and applications of halide perovskites. Chemical Society Reviews, 2020, 49, 2869-2885.	38.1	282
11	Effect of Electron Transporting Layer on Bismuth-Based Lead-Free Perovskite (CH₃NH₃)₃ Bi₂I₉ for Photovoltaic Applications. ACS Applied Materials & Interfaces, 2016, 8, 14542-14547.	8.0	270
12	Quantum Conversion and Image Detection by a Bacteriorhodopsin-Based Artificial Photoreceptor. Science, 1992, 255, 342-344.	12.6	265
13	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.	10.3	229
14	Low-Temperature Fabrication of Dye-Sensitized Plastic Electrodes by Electrophoretic Preparation of Mesoporous TiO[sub 2] Layers. Journal of the Electrochemical Society, 2004, 151, A1767.	2.9	219
15	The photocapacitor: An efficient self-charging capacitor for direct storage of solar energy. Applied Physics Letters, 2004, 85, 3932-3934.	3.3	218
16	Perovskite Photovoltaics: Rare Functions of Organo Lead Halide in Solar Cells and Optoelectronic Devices. Chemistry Letters, 2015, 44, 720-729.	1.3	216
17	Stability of solution-processed MAPbI₃ and FAPbI₃ layers. Physical Chemistry Chemical Physics, 2016, 18, 13413-13422.	2.8	208
18	Sulfateâ€Assisted Interfacial Engineering for High Yield and Efficiency of Triple Cation Perovskite Solar Cells with Alkaliâ€Doped TiO₂ Electronâ€Transporting Layers. Advanced Functional Materials, 2018, 28, 1706287.	14.9	208

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19	Stabilization of Î±-CsPbI₃ in Ambient Room Temperature Conditions by Incorporating Eu into CsPbI₃. Chemistry of Materials, 2018, 30, 6668-6674.	6.7	199
20	Perovskite Solar Cells: Can We Go Organicâ€Free, Leadâ€Free, and Dopantâ€Free?. Advanced Energy Materials, 2020, 10, 1902500.	19.5	198
21	Photovoltaic Performance of Plastic Dye-Sensitized Electrodes Prepared by Low-Temperature Binder-Free Coating of Mesoscopic Titania. Journal of the Electrochemical Society, 2007, 154, A455.	2.9	185
22	The high open-circuit voltage of perovskite solar cells: a review. Energy and Environmental Science, 2022, 15, 3171-3222.	30.8	181
23	SnO₂â€“Ti₃C₂ MXene electron transport layers for perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 5635-5642.	10.3	173
24	Light energy conversion with chlorophyll monolayer electrodes. In vitro electrochemical simulation of photosynthetic primary processes. Journal of the American Chemical Society, 1978, 100, 6657-6665.	13.7	168
25	Direct detection of circular polarized light in helical 1D perovskite-based photodiode. Science Advances, 2020, 6, .	10.3	163
26	<i>V</i>_{OC} Over 1.4 V for Amorphous Tin-Oxide-Based Dopant-Free CsPbI₂Br Perovskite Solar Cells. Journal of the American Chemical Society, 2020, 142, 9725-9734.	13.7	162
27	Atomistic origins of CH3NH3PbI3 degradation to PbI2 in vacuum. Applied Physics Letters, 2015, 106, .	3.3	158
28	Poly(4â€Vinylpyridine)â€Based Interfacial Passivation to Enhance Voltage and Moisture Stability of Lead Halide Perovskite Solar Cells. ChemSusChem, 2017, 10, 2473-2479.	6.8	157
29	Tolerance of Perovskite Solar Cell to High-Energy Particle Irradiations in Space Environment. IScience, 2018, 2, 148-155.	4.1	156
30	Severe Morphological Deformation of Spiro-OMeTAD in (CH₃NH₃)PbI₃ Solar Cells at High Temperature. ACS Energy Letters, 2017, 2, 1760-1761.	17.4	155
31	Chlorophyll Derivative-Sensitized TiO₂ Electron Transport Layer for Record Efficiency of Cs₂AgBiBr₆ Double Perovskite Solar Cells. Journal of the American Chemical Society, 2021, 143, 2207-2211.	13.7	154
32	Antibody-Mediated Bacteriorhodopsin Orientation for Molecular Device Architectures. Science, 1994, 265, 762-765.	12.6	150
33	Low temperature preparation of mesoporous TiO2 films for efficient dye-sensitized photoelectrode by chemical vapor deposition combined with UV light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 187-191.	3.9	149
34	A high-voltage dye-sensitized photocapacitor of a three-electrode system. Chemical Communications, 2005, , 3346.	4.1	148
35	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, 9817-9823.	8.0	131
36	Low-temperature-processed ZnOâ€“SnO2 nanocomposite for efficient planar perovskite solar cells. Solar Energy Materials and Solar Cells, 2016, 144, 623-630.	6.2	129

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37	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.	10.3	126
38	Surfaceâ€Modified Metallic Ti₃C₂T_x MXene as Electron Transport Layer for Planar Heterojunction Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905694.	14.9	125
39	Toward Printable Sensitized Mesoscopic Solar Cells: Light-Harvesting Management with Thin TiO₂Films. Journal of Physical Chemistry Letters, 2011, 2, 262-269.	4.6	121
40	Highly efficient quantum conversion at chlorophyll aâ€"lecithin mixed monolayer coated electrodes. Nature, 1979, 277, 638-640.	27.8	114
41	Efficient Nonsintering Type Dye-sensitized Photocells Based on Electrophoretically Deposited TiO2Layers. Chemistry Letters, 2002, 31, 1250-1251.	1.3	110
42	Amorphous Metal Oxide Blocking Layers for Highly Efficient Low-Temperature Brookite TiO₂-Based Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 2224-2229.	8.0	104
43	100â€‰Â°C Thermal Stability of Printable Perovskite Solar Cells Using Porous Carbon Counter Electrodes. ChemSusChem, 2016, 9, 2604-2608.	6.8	103
44	Stability and Degradation in Hybrid Perovskites: Is the Glass Half-Empty or Half-Full?. Journal of Physical Chemistry Letters, 2018, 9, 3000-3007.	4.6	102
45	Highly porous PProDOT-Et2 film as counter electrode for plastic dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2009, 11, 3375.	2.8	100
46	Highly Efficient Plastic Dye-sensitized Photoelectrodes Prepared by Low-temperature Binder-free Coating of Mesoscopic Titania Pastes. Chemistry Letters, 2007, 36, 190-191.	1.3	97
47	Conductive polymerâ€"carbonâ€"imidazolium composite: a simple means for constructing solid-state dye-sensitized solar cells. Chemical Communications, 2006, , 1733-1735.	4.1	94
48	Invalidity of Band-Gap Engineering Concept for Bi³⁺ Heterovalent Doping in CsPbBr₃ Halide Perovskite. Journal of Physical Chemistry Letters, 2018, 9, 5408-5411.	4.6	88
49	The mechanism of toluene-assisted crystallization of organicâ€"inorganic perovskites for highly efficient solar cells. Journal of Materials Chemistry A, 2016, 4, 4464-4471.	10.3	86
50	Highly efficient and stable low-temperature processed ZnO solar cells with triple cation perovskite absorber. Journal of Materials Chemistry A, 2017, 5, 13439-13447.	10.3	86
51	Lead Halide Perovskites in Thin Film Photovoltaics: Background and Perspectives. Bulletin of the Chemical Society of Japan, 2018, 91, 1058-1068.	3.2	84
52	Highly efficient plastic-based quasi-solid-state dye-sensitized solarÂcells with light-harvesting mesoporous silica nanoparticles gel-electrolyte. Journal of Power Sources, 2014, 245, 411-417.	7.8	82
53	Lead(II) Propionate Additive and a Dopant-Free Polymer Hole Transport Material for CsPbI₂Br Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 1292-1299.	17.4	81
54	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.	3.1	80

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55	Similar Structural Dynamics for the Degradation of CH₃NH₃PbI₃ in Air and in Vacuum. ChemPhysChem, 2015, 16, 3064-3071.	2.1	80
56	Photovoltaic enhancement of bismuth halide hybrid perovskite by N-methyl pyrrolidone-assisted morphology conversion. RSC Advances, 2017, 7, 9456-9460.	3.6	80
57	Nb2O5 Blocking Layer for High Open-circuit Voltage Perovskite Solar Cells. Chemistry Letters, 2015, 44, 829-830.	1.3	79
58	Performance improvement of MXene-based perovskite solar cells upon property transition from metallic to semiconductive by oxidation of Ti₃C₂T_xin air. Journal of Materials Chemistry A, 2021, 9, 5016-5025.	10.3	77
59	Efficient perovskite solar cells fabricated using an aqueous lead nitrate precursor. Chemical Communications, 2015, 51, 13294-13297.	4.1	76
60	Role of Metal Oxide Electronâ€Transport Layer Modification on the Stability of High Performing Perovskite Solar Cells. ChemSusChem, 2016, 9, 2559-2566.	6.8	76
61	Magnesiumâ€doped Zinc Oxide as Electron Selective Contact Layers for Efficient Perovskite Solar Cells. ChemSusChem, 2016, 9, 2640-2647.	6.8	74
62	Organic Dye/Cs₂AgBiBr₆ Double Perovskite Heterojunction Solar Cells. Journal of the American Chemical Society, 2021, 143, 14877-14883.	13.7	74
63	Image sensing and processing by a bacteriorhodopsin-based artificial photoreceptor. Applied Optics, 1993, 32, 6371.	2.1	73
64	Efficient and stable plastic dye-sensitized solar cells based on a high light-harvesting ruthenium sensitizer. Journal of Materials Chemistry, 2009, 19, 5009.	6.7	72
65	Efficient and Environmentally Stable Perovskite Solar Cells Based on ZnO Electron Collection Layer. Chemistry Letters, 2015, 44, 610-612.	1.3	72
66	HC(NH₂)₂PbI₃as a thermally stable absorber for efficient ZnO-based perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 8435-8443.	10.3	72
67	Efficiency Enhancement of Hybrid Perovskite Solar Cells with MEH-PPV Hole-Transporting Layers. Scientific Reports, 2016, 6, 34319.	3.3	72
68	PbI₂-Based Dipping-Controlled Material Conversion for Compact Layer Free Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 18156-18162.	8.0	71
69	A solid-state dye-sensitized photovoltaic cell with a poly(N-vinyl-carbazole) hole transporter mediated by an alkali iodide. Chemical Communications, 2005, , 1886.	4.1	69
70	Platinum/titanium bilayer deposited on polymer film as efficient counter electrodes for plastic dye-sensitized solar cells. Applied Physics Letters, 2007, 90, 153122.	3.3	69
71	A Switchable High-Sensitivity Photodetecting and Photovoltaic Device with Perovskite Absorber. Journal of Physical Chemistry Letters, 2015, 6, 1773-1779.	4.6	69
72	Improvement in durability of flexible plastic dye-sensitized solar cell modules. Solar Energy Materials and Solar Cells, 2009, 93, 836-839.	6.2	68

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73	Lead-free perovskite solar cells using Sb and Bi-based A3B2X9 and A3BX6 crystals with normal and inverse cell structures. Nano Convergence, 2017, 4, 26.	12.1	67
74	A SnOxâ€“brookite TiO2 bilayer electron collector for hysteresis-less high efficiency plastic perovskite solar cells fabricated at low process temperature. Chemical Communications, 2016, 52, 8119-8122.	4.1	65
75	Co-sensitization promoted light harvesting for plastic dye-sensitized solar cells. Journal of Power Sources, 2011, 196, 2416-2421.	7.8	64
76	UV Light-assisted Chemical Vapor Deposition of TiO2for Efficiency Development at Dye-sensitized Mesoporous Layers on Plastic Film Electrodes. Chemistry Letters, 2003, 32, 1076-1077.	1.3	62
77	Analysis of Sputtering Damage on <i>I</i>â€“<i>V</i> Curves for Perovskite Solar Cells and Simulation with Reversed Diode Model. Journal of Physical Chemistry C, 2016, 120, 28441-28447.	3.1	61
78	Formamidine and cesium-based quasi-two-dimensional perovskites as photovoltaic absorbers. Chemical Communications, 2017, 53, 4366-4369.	4.1	61
79	Dopantâ€Free Polymer HTMâ€Based CsPbI₂Br Solar Cells with Efficiency Over 17% in Sunlight and 34% in Indoor Light. Advanced Functional Materials, 2021, 31, 2103614.	14.9	60
80	Dopantâ€Free Zinc Chlorophyll Aggregates as an Efficient Biocompatible Hole Transporter for Perovskite Solar Cells. ChemSusChem, 2016, 9, 2862-2869.	6.8	58
81	Photoactive Znâ€Chlorophyll Hole Transporterâ€Sensitized Leadâ€Free Cs₂AgBiBr₆ Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000166.	5.8	58
82	Polythiophene-Based Mesoporous Counter Electrodes for Plastic Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2010, 157, B1195.	2.9	55
83	Performance enhancement of AgBi₂I₇ solar cells by modulating a solvent-mediated adduct and tuning remnant BiI₃ in one-step crystallization. Chemical Communications, 2019, 55, 4031-4034.	4.1	54
84	Sensitized Yb³⁺ Luminescence in CsPbCl₃ Film for Highly Efficient Nearâ€Infrared Lightâ€Emitting Diodes. Advanced Science, 2020, 7, 1903142.	11.2	54
85	Rectified photocurrents from purple membrane Langmuir-Blodgett films at the electrode-electrolyte interface. Thin Solid Films, 1992, 210-211, 146-149.	1.8	53
86	Mechanism of Photocurrent Generation from Bacteriorhodopsin on Gold Electrodes. Journal of Physical Chemistry B, 1999, 103, 234-238.	2.6	51
87	Conductive Polymer-based Mesoscopic Counterelectrodes for Plastic Dye-sensitized Solar Cells. Chemistry Letters, 2007, 36, 804-805.	1.3	51
88	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.	7.8	49
89	First Evidence of CH₃NH₃PbI₃ Optical Constants Improvement in a N₂ Environment in the Range 40â€“80 Â°C. Journal of Physical Chemistry C, 2017, 121, 7703-7710.	3.1	49
90	Excitonic Feature in Hybrid Perovskite CH3NH3PbBr3 Single Crystals. Chemistry Letters, 2015, 44, 852-854.	1.3	48

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91	Revealing and reducing the possible recombination loss within TiO2 compact layer by incorporating MgO layer in perovskite solar cells. Solar Energy, 2016, 136, 379-384.	6.1	48
92	Investigating the Growth of CH₃NH₃PbI₃ Thin Films on RFâ€Šputtered NiO<i>_x</i> for Inverted Planar Perovskite Solar Cells: Effect of CH₃NH₃⁺ Halide Additives versus CH₃NH₃⁺ Halide Vapor Annealing. Advanced Materials Interfaces, 2020, 7, 1901748.	3.7	48
93	Ionic Liquid-Assisted MAPbI₃ Nanoparticle-Seeded Growth for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 21194-21206.	8.0	47
94	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.	8.0	45
95	Vapor Annealing Controlled Crystal Growth and Photovoltaic Performance of Bismuth Triiodide Embedded in Mesostructured Configurations. ACS Applied Materials & Interfaces, 2018, 10, 9547-9554.	8.0	45
96	Plastic based dye-sensitized solar cells using Co9S8 acicular nanotube arrays as the counter electrode. Journal of Materials Chemistry A, 2013, 1, 13759.	10.3	44
97	Brookite TiO₂ as a low-temperature solution-processed mesoporous layer for hybrid perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 20952-20957.	10.3	43
98	Plastic and Solid-state Dye-sensitized Solar Cells Incorporating Single-wall Carbon Nanotubes. Chemistry Letters, 2007, 36, 466-467.	1.3	42
99	Controlled Crystal Grain Growth in Mixed Cationâ€“Halide Perovskite by Evaporated Solvent Vapor Recycling Method for High Efficiency Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 18739-18747.	8.0	42
100	Microstructural analysis and optical properties of the halide double perovskite Cs2BiAgBr6 single crystals. Chemical Physics Letters, 2018, 694, 18-22.	2.6	42
101	Proton Irradiation Tolerance of High-Efficiency Perovskite Absorbers for Space Applications. Journal of Physical Chemistry Letters, 2019, 10, 6990-6995.	4.6	42
102	Plastic Dye-sensitized Photovoltaic Cells and Modules Based on Low-temperature Preparation of Mesoscopic Titania Electrodes. Electrochemistry, 2007, 75, 2-12.	1.4	40
103	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.	3.9	40
104	Thiocyanate Containing Two-Dimensional Cesium Lead Iodide Perovskite, Cs₂PbI₂(SCN)₂: Characterization, Photovoltaic Application, and Degradation Mechanism. ACS Applied Materials & Interfaces, 2018, 10, 42363-42371.	8.0	40
105	PHOTOELECTROCHEMICAL STUDY OF CHLOROPHYLLâ€<i>a</i> MULTILAYERS ON SnO₂ ELECTRODE. Photochemistry and Photobiology, 1980, 32, 217-222.	2.5	39
106	High performance perovskite solar cell via multi-cycle low temperature processing of lead acetate precursor solutions. Chemical Communications, 2016, 52, 4784-4787.	4.1	39
107	Water-based Dye-sensitized Solar Cells: Interfacial Activation of TiO2Mesopores in Contact with Aqueous Electrolyte for Efficiency Development. Chemistry Letters, 2003, 32, 1154-1155.	1.3	37
108	Fully crystalline perovskite-perylene hybrid photovoltaic cell capable of 1.2 V output with a minimized voltage loss. APL Materials, 2014, 2, .	5.1	37

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109	Revealing a Discontinuity in the Degradation Behavior of CH₃NH₃PbI₃ during Thermal Operation. Journal of Physical Chemistry C, 2017, 121, 13577-13585.	3.1	37
110	Impacts of Heterogeneous TiO₂ and Al₂O₃ Composite Mesoporous Scaffold on Formamidinium Lead Trihalide Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 4608-4615.	8.0	36
111	MAClâ€Assisted Ge Doping of Pbâ€Hybrid Perovskite: A Universal Route to Stabilize High Performance Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903299.	19.5	36
112	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, .	2.5	34
113	Light Energy Conversion and Storage with Soft Carbonaceous Materials that Solidify Mesoscopic Electrochemical Interfaces. Chemistry Letters, 2007, 36, 480-487.	1.3	33
114	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.	3.1	33
115	Determination of Chloride Content in Planar CH3NH3PbI3â^'<i>x</i>Cl<i>x</i> Solar Cells by Chemical Analysis. Chemistry Letters, 2015, 44, 1089-1091.	1.3	33
116	Enhancement of the hole conducting effect of NiO by a N₂blow drying method in printable perovskite solar cells with low-temperature carbon as the counter electrode. Nanoscale, 2017, 9, 5475-5482.	5.6	33
117	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.	1.3	32
118	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.	10.3	30
119	Ambient Fabrication of 126 Î¼m Thick Complete Perovskite Photovoltaic Device for High Flexibility and Performance. ACS Applied Energy Materials, 2018, 1, 6741-6747.	5.1	30
120	Efficiency Enhancement in ZnO:Al-Based Dye-Sensitized Solar Cells Structured with Sputtered TiO₂Blocking Layers. Journal of Physical Chemistry C, 2014, 118, 6576-6585.	3.1	29
121	Thermal Degradation Analysis of Sealed Perovskite Solar Cell with Porous Carbon Electrode at 100â€‰Â°C for 7000â€…h. Energy Technology, 2019, 7, 245-252.	3.8	29
122	Low-Temperature Synthesized Nb-Doped TiO₂ Electron Transport Layer Enabling High-Efficiency Perovskite Solar Cells by Band Alignment Tuning. ACS Applied Materials & Interfaces, 2020, 12, 15175-15182.	8.0	29
123	Low-temperature and Ambient Air Processes of Amorphous SnO<i>_x</i>-based Mixed Halide Perovskite Planar Solar Cell. Chemistry Letters, 2017, 46, 382-384.	1.3	28
124	Concerted Ion Migration and Diffusionâ€Induced Degradation in Leadâ€Free Ag₃BiI₆ Rudorffite Solar Cells under Ambient Conditions. Solar Rrl, 2021, 5, 2100077.	5.8	28
125	Trend of Perovskite Solar Cells: Dig Deeper to Build Higher. Journal of Physical Chemistry Letters, 2015, 6, 2315-2317.	4.6	27
126	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.	5.1	27

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127	Molecular organization of bacterio- rhodopsin films in optoelectronic devices. Advanced Materials, 1995, 7, 590-594.	21.0	26
128	Novel Photoelectrochemical Cell with Mesoscopic Electrodes Sensitized by Lead-halide Compounds (11). ECS Meeting Abstracts, 2008, MA2008-02, 27-27.	0.0	26
129	ZnO/ZnS core-shell composites for low-temperature-processed perovskite solar cells. Journal of Energy Chemistry, 2018, 27, 1461-1467.	12.9	26
130	Chlorin-sensitized High-efficiency Photovoltaic Cells that Mimic Spectral Response of Photosynthesis. Electrochemistry, 2008, 76, 140-143.	1.4	25
131	An Ultrathin Sputtered TiO₂ Compact Layer for Mesoporous Brookite-based Plastic CH₃NH₃PbI_{3âˆ’}<i>_x</i>Cl<i>_x</i> Solar Cells. Chemistry Letters, 2017, 46, 530-532.	1.3	25
132	A single-phase brookite TiO₂ nanoparticle bridge enhances the stability of perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 2009-2017.	4.9	25
133	Passivation of Bulk and Interface Defects in Sputtered-NiO_{<i>x</i>}-Based Planar Perovskite Solar Cells: A Facile Interfacial Engineering Strategy with Alkali Metal Halide Salts. ACS Applied Energy Materials, 2021, 4, 4530-4540.	5.1	25
134	Phenethylamineâ€Based Interfacial Dipole Engineering for High <i>V</i>_{oc} Tripleâ€Cation Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, 2102856.	19.5	25
135	Photoelectrochemical studies on the monolayer assemblies of chlorophyll a on the quantum efficiency of photocurrent generation. Surface Science, 1980, 101, 541-550.	1.9	24
136	Photoelectrochemical Verification of Protonâ€Releasing Groups in Bacteriorhodopsin. Photochemistry and Photobiology, 1998, 68, 400-406.	2.5	24
137	Fabrication and Efficiency Enhancement of Water-based Dye-Sensitized Solar Cells by Interfacial Activation of TiO₂ Mesopores. Electrochemistry, 2004, 72, 310-316.	1.4	24
138	Solar Water Splitting Utilizing a SiC Photocathode, a BiVO₄ Photoanode, and a Perovskite Solar Cell. ChemSusChem, 2017, 10, 4420-4423.	6.8	24
139	Residual PbI₂ Beneficial in the Bulk or at the Interface? An Investigation Study in Sputtered NiO<i>_x</i> Hole-Transport-Layer-Based Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 6215-6221.	5.1	24
140	Evaluation of radiation tolerance of perovskite solar cell for use in space. , 2015, , .		23
141	Tuning of perovskite solar cell performance via low-temperature brookite scaffolds surface modifications. APL Materials, 2017, 5, .	5.1	23
142	Anticancer Effect of Dye-sensitized TiO2Nanocrystals by Polychromatic Visible Light Irradiation. Chemistry Letters, 2006, 35, 496-497.	1.3	21
143	Femto- to Microsecond Dynamics of Excited Electrons in a Quadruple Cation Perovskite. ACS Energy Letters, 2020, 5, 785-792.	17.4	20
144	Single- or double A-site cations in A3Bi2I9 bismuth perovskites: What is the suitable choice?. Journal of Materials Research, 2021, 36, 1794-1804.	2.6	20

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145	Effect of Thin TiO2 Buffer Layer on the Performance of Plastic-based Dye-sensitized Solar Cells Using Indoline Dye. Electrochemistry, 2008, 76, 158-160.	1.4	19
146	A high voltage organicâ€“inorganic hybrid photovoltaic cell sensitized with metalâ€“ligand interfacial complexes. Chemical Communications, 2012, 48, 9900.	4.1	19
147	Photoelectrochemical Behavior of Purple Membrane Langmuirâ€“Blodgett Films at the Electrodeâ€“Electrolyte Interface. Chemistry Letters, 1991, 20, 1645-1648.	1.3	18
148	Nickel Oxide Hybridized Carbon Film as an Efficient Mesoscopic Cathode for Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2013, 160, H155-H159.	2.9	18
149	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.	7.8	18
150	Biosupramolecular bacteriochlorin aggregates as hole-transporters for perovskite solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 353, 639-644.	3.9	18
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