Youhei Numata

List of Publications by Year
in descending order

25 papers	1,269 citations	516710 16 h-index	642732 23 g-index
25 all docs	25 docs citations	25 times ranked	2357 citing authors

#	Article	IF	Citations
1	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
2	Stability of solution-processed MAPbI₃ and FAPbI₃ layers. Physical Chemistry Chemical Physics, 2016, 18, 13413-13422.	2.8	208
3	V_{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
4	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
5	Nb2O5 Blocking Layer for High Open-circuit Voltage Perovskite Solar Cells. Chemistry Letters, 2015, 44, 829-830.	1.3	79
6	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
7	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
8	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
9	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
10	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
11	Revealing a Discontinuity in the Degradation Behavior of CH₃NH₃PbI₃ during Thermal Operation. Journal of Physical Chemistry C, 2017, 121, 13577-13585.	3.1	37
12	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
13	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
14	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
15	Solar Water Splitting Utilizing a SiC Photocathode, a BiVO₄ Photoanode, and a Perovskite Solar Cell. ChemSusChem, 2017, 10, 4420-4423.	6.8	24
16	Photovoltaic Properties of Two-dimensional (CH₃(CH₂)₃NH₃)₂PbI₄ Perovskite Crystals Oriented with TiO₂ Nanowire Array. Chemistry Letters, 2017, 46, 1204-1206.	1.3	17
17	Spontaneous Synthesis of Highly Crystalline TiO₂ Compact/Mesoporous Stacked Films by a Low-Temperature Steam-Annealing Method for Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 17195-17202.	8.0	11
18	FAPbBr₃perovskite solar cells withV_{OC}values over 1.5 V by controlled crystal growth using tetramethylenesulfoxide. Journal of Materials Chemistry A, 2022, 10, 672-681.	10.3	10

#	Article	IF	Citations
19	Photocurrent Enhancement of Formamidinium Lead Trihalide Mesoscopic Perovskite Solar Cells with Large Size TiO2 Nanoparticles. Chemistry Letters, 2015, 44, 1619-1621.	1.3	8
20	Full Efficiency Recovery in Hole-Transporting Layer-Free Perovskite Solar Cells With Free-Standing Dry-Carbon Top-Contacts. Frontiers in Chemistry, 2020, 8, 200.	3.6	8
21	Formation of CsPbI₃ Î³â€Phase at 80â€‰Â°C by Europiumâ€Assisted Snowplow Effect. Advanced Energy and Sustainability Research, 2021, 2, 2100091.	5.8	8
22	Improved Electrical and Structural Stability in HTL-Free Perovskite Solar Cells by Vacuum Curing Treatment. Energies, 2020, 13, 3953.	3.1	7
23	Drastic Change of Surface Morphology of Cesiumâ€“Formamidinium Perovskite Solar Cells by Antisolvent Processing. ACS Applied Energy Materials, 2021, 4, 1069-1077.	5.1	4
24	Structural and Optical Behaviour of MAPbI<inf>3</inf> Layers in Nitrogen and Humid Air. , 2018, , .		0
25	Why the gamma-phase of CsPbI3 can be formed at 80 C by adding Europium. , 0, , .		0