The mechanism of universal green antisolvents for inte
high-efficiency formamidinium-based perovskite solar

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Citation Report

#	Article	IF	Citations
1	Compositional optimization of a 2Dâ€“3D heterojunction interface for 22.6% efficient and stable planar perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 25831-25841.	5.2	59
2	A simple fabrication of high efficiency planar perovskite solar cells: controlled film growth with methylammonium iodide and green antisolvent sec-butyl alcohol. Journal of Materials Chemistry C, 2020, 8, 12560-12567.	2.7	15
3	A Critical Review on Crystal Growth Techniques for Scalable Deposition of Photovoltaic Perovskite Thin Films. Materials, 2020, 13, 4851.	1.3	38
4	Low-Temperature Aging Provides 22% Efficient Bromine-Free and Passivation Layer-Free Planar Perovskite Solar Cells. Nano-Micro Letters, 2020, 12, 84.	14.4	33
5	Intermediates transformation for efficient perovskite solar cells. Journal of Energy Chemistry, 2021, 52, 102-114.	7.1	26
6	Highly Reproducible Fabrication of Perovskite Films with an Ultrawide Antisolvent Dripping Window for Largeâ€Scale Flexible Solar Cells. Solar Rrl, 2021, 5, .	3.1	16
7	Greenâ€“Solventâ€“Processable Perovskite Solar Cells. Advanced Energy and Sustainability Research, 2021, 2, 2000047.	2.8	28
8	Design of Low Crystallinity Spiro-Typed Hole Transporting Material for Planar Perovskite Solar Cells to Achieve 21.76% Efficiency. Chemistry of Materials, 2021, 33, 285-297.	3.2	57
9	Balancing crystallization rate in a mixed Snâ€“Pb perovskite film for efficient and stable perovskite solar cells of more than 20% efficiency. Journal of Materials Chemistry A, 2021, 9, 17830-17840.	5.2	51
10	Lead-free bright blue light-emitting cesium halide nanocrystals by zinc doping. RSC Advances, 2021, 11, 2437-2445.	1.7	7
11	Boosting the performance of MA-free inverted perovskite solar cells<i>via</i>multifunctional ion liquid. Journal of Materials Chemistry A, 2021, 9, 12746-12754.	5.2	44
12	Towards the environmentally friendly solution processing of metal halide perovskite technology. Green Chemistry, 2021, 23, 5302-5336.	4.6	38
13	Tuning the Interfacial Dipole Moment of Spacer Cations for Charge Extraction in Efficient and Ultrastable Perovskite Solar Cells. Journal of Physical Chemistry C, 2021, 125, 1256-1268.	1.5	56
14	Low-Toxicity Antisolvent as a Polar Auxiliary Agent for High-Performance Perovskite Photodetectors. Journal of Physical Chemistry C, 2021, 125, 2850-2859.	1.5	8
15	Surface Passivation of Triple-Cation Perovskite via Organic Halide-Saturated Antisolvent for Inverted Planar Solar Cells. ACS Applied Energy Materials, 2021, 4, 3297-3309.	2.5	13
16	Environment-friendly antisolvent tert-amyl alcohol modified hybrid perovskite photodetector with high responsivity. Photonics Research, 2021, 9, 781.	3.4	13
17	Progress of Perovskite Solar Modules. Advanced Energy and Sustainability Research, 2021, 2, 2000051.	2.8	19
18	Low-pressure treatment of CuSCN hole transport layers for enhanced carbon-based perovskite solar cells. Journal of Power Sources, 2021, 499, 229970.	4.0	22

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19	Role of defects in organicâ€“inorganic metal halide perovskite: detection and remediation for solar cell applications. Emergent Materials, 2022, 5, 987-1020.	3.2	10
20	Favorable grain growth of thermally stable formamidinium-methylammonium perovskite solar cells by hydrazine chloride. Chemical Engineering Journal, 2022, 430, 132730.	6.6	21
21	Small Molecules with Controllable Molecular Weights Passivate Surface Defects in Airâ€Stable pâ€iâ€n Perovskite Solar Cells. Advanced Electronic Materials, 2021, 7, 2000870.	2.6	18
22	Rear Interface Engineering to Suppress Migration of Iodide Ions for Efficient Perovskite Solar Cells with Minimized Hysteresis. Advanced Functional Materials, 2022, 32, 2107823.	7.8	57
23	High-performance perovskite photodetector with the additive of antisolvent to improve the quality of the perovskite films. , 2020, , .		0
24	Size-tunable MoS₂nanosheets for controlling the crystal morphology and residual stress in sequentially deposited perovskite solar cells with over 22.5% efficiency. Journal of Materials Chemistry A, 2022, 10, 3605-3617.	5.2	15
25	Facet Orientation and Intermediate Phase Regulation via a Green Antisolvent for Highâ€Performance Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	12
26	Improving water-resistance of inverted flexible perovskite solar cells via tailoring the top electron-selective layers. Solar Energy Materials and Solar Cells, 2022, 238, 111609.	3.0	19
27	Improving the Efficiency and Stability of In-Air Fabricated Perovskite Solar Cells Using the Mixed Antisolvent of Methyl Acetate and Chloroform. SSRN Electronic Journal, 0, , .	0.4	0
28	Intermediate phase engineering of halide perovskites for photovoltaics. Joule, 2022, 6, 315-339.	11.7	60
29	Sustainable Green Process for Environmentally Viable Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 1154-1177.	8.8	43
30	Phaseâ€Pure Engineering for Efficient and Stable Formamidiniumâ€Based Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	16
31	Halide Perovskite Crystallization Processes and Methods in Nanocrystals, Single Crystals, and Thin Films. Advanced Materials, 2022, 34, e2200720.	11.1	50
32	Manipulating the film morphology evolution toward green solventâ€processed perovskite solar cells. SusMat, 2021, 1, 537-544.	7.8	21
33	Formation of a Secondary Phase in Thermally Evaporated MAPbI₃ and Its Effects on Solar Cell Performance. ACS Applied Materials & Interfaces, 2022, 14, 34269-34280.	4.0	5
34	Improving the efficiency and stability of in-air fabricated perovskite solar cells using the mixed antisolvent of methyl acetate and chloroform. Organic Electronics, 2022, 107, 106552.	1.4	2
35	Effect of anti-solvents on the performance of solar cells based on two-dimensional Ruddlesdenâ€“Popper-phase perovskite films. Journal Physics D: Applied Physics, 2022, 55, 354004.	1.3	2
36	Resolving Mixed Intermediate Phases in Methylammonium-Free Snâ€“Pb Alloyed Perovskites for High-Performance Solar Cells. Nano-Micro Letters, 2022, 14, .	14.4	19

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37	Green-solvent-processed formamidinium-based perovskite solar cells with uniform grain growth and strengthened interfacial contact <i>via</i> a nanostructured tin oxide layer. Materials Horizons, 2023, 10, 122-135.	6.4	18
38	Crystallization Tailoring for Efficient and Stable Perovskite Solar Cells Via Introduction of Propionic Acid in a Green Anti-Solvent. Journal of Electronic Materials, 0, , .	1.0	0
39	Use of Green Materials for Perovskite Solar Cells. , 2022, , 1-9.		0
40	Precise Control of Crystallization and Phaseâ€Transition with Green Antiâ€Solvent in Wideâ€Bandgap Perovskite Solar Cells with Openâ€Circuit Voltage Exceeding 1.25ÂV. Small, 2023, 19, .	5.2	11
41	The effect of permanent electric dipoles on the stability and photoelectric properties of MAPbI₃ films. Journal of Materials Chemistry C, 2023, 11, 5806-5814.	2.7	2