

# Solvent Annealing of Perovskite-Induced Crystal Growth Efficiency Enhancement

Advanced Materials

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Optical and electrical simulations of silicon nanowire array/Poly(3-hexylthiophene):Phenyl-C61-butyric acid methyl ester hybrid solar cell. Applied Physics Letters, 2014, 105, .	1.5	8
2	Origin and elimination of photocurrent hysteresis by fullerene passivation in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> planar heterojunction solar cells. Nature Communications, 2014, 5, 5784.	5.8	2,531
3	Moisture assisted perovskite film growth for high performance solar cells. Applied Physics Letters, 2014, 105, .	1.5	667
4	Understanding the solvent-assisted crystallization mechanism inherent in efficient organica€inorganic halide perovskite solar cells. Journal of Materials Chemistry A, 2014, 2, 20454-20461.	5.2	147
5	High performance perovskite solar cells by hybrid chemical vapor deposition. Journal of Materials Chemistry A, 2014, 2, 18742-18745.	5.2	284
6	Low-temperature processed high-performance flexible perovskite solar cells via rationally optimized solvent washing treatments. RSC Advances, 2014, 4, 62971-62977.	1.7	182
7	Direct Conversion of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> from Electrodeposited PbO for Highly Efficient Planar Perovskite Solar Cells. Scientific Reports, 2015, 5, 15889.	1.6	83
9	Direct Observation of Long Electron-Hole Diffusion Distance in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Thin Film. Scientific Reports, 2015, 5, 14485.	1.6	172
10	Self-regulation of charged defect compensation and formation energy pinning in semiconductors. Scientific Reports, 2015, 5, 16977.	1.6	56
11	Efficient CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Solar Cells Employing Nanostructured p-type NiO Electrode Formed by a Pulsed Laser Deposition. Advanced Materials, 2015, 27, 4013-4019.	11.1	485
12	High-Quality Mixed-Organic-Cation Perovskites from a Phase-Pure Non-Stoichiometric Intermediate (FAI) <sub>1-x</sub> MA <sub>x</sub> Pb <sub>2</sub> for Solar Cells. Advanced Materials, 2015, 27, 4918-4923.	11.1	140
13	Controllable Growth of Perovskite Films by Room-Temperature Air Exposure for Efficient Planar Heterojunction Photovoltaic Cells. Angewandte Chemie - International Edition, 2015, 54, 14862-14865.	7.2	41
15	Inverted, Environmentally Stable Perovskite Solar Cell with a Novel Low-Cost and Water-Free PEDOT Hole-Extraction Layer. Advanced Energy Materials, 2015, 5, 1500543.	10.2	81
16	High-Performance Semitransparent Perovskite Solar Cells with 10% Power Conversion Efficiency and 25% Average Visible Transmittance Based on Transparent CuSCN as the Hole-Transporting Material. Advanced Energy Materials, 2015, 5, 1500486.	10.2	221
17	Single-Layer Light-Emitting Diodes Using Organometal Halide Perovskite/Poly(ethylene oxide) Composite Thin Films. Advanced Materials, 2015, 27, 5196-5202.	11.1	288
18	A Low-Temperature, Solution-Processable, Cu-Doped Nickel Oxide Hole-Transporting Layer via the Combustion Method for High-Performance Thin-Film Perovskite Solar Cells. Advanced Materials, 2015, 27, 7874-7880.	11.1	405
20	Controlled growth of Pb <sub>2</sub> nanoplates for rapid preparation of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> in planar perovskite solar cells. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2708-2717.	0.8	63
21	Unraveling the Reasons for Efficiency Loss in Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 3925-3933.	7.8	129

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22	16.1% Efficient Hysteresis-Free Mesoporous Perovskite Solar Cells Based on Synergistically Improved ZnO Nanorod Arrays. <i>Advanced Energy Materials</i> , 2015, 5, 1500568.	10.2	222
23	Atomistic origins of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> degradation to PbI <sub>2</sub> in vacuum. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	158
24	The dynamics of methylammonium ions in hybrid organic-inorganic perovskite solar cells. <i>Nature Communications</i> , 2015, 6, 7124.	5.8	517
25	Novel planar heterostructure perovskite solar cells with CdS nanorods array as electron transport layer. <i>Solar Energy Materials and Solar Cells</i> , 2015, 140, 396-404.	3.0	72
26	Low-Temperature Solution-Processed Tin Oxide as an Alternative Electron Transporting Layer for Efficient Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 6730-6733.	6.6	1,045
27	High-Performance Flexible Perovskite Solar Cells by Using a Combination of Ultrasonic Spray-Coating and Low Thermal Budget Photonic Curing. <i>ACS Photonics</i> , 2015, 2, 680-686.	3.2	268
28	Solvent engineering towards controlled grain growth in perovskite planar heterojunction solar cells. <i>Nanoscale</i> , 2015, 7, 10595-10599.	2.8	294
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30	Efficiency Enhancement of Inverted Structure Perovskite Solar Cells via Oleamide Doping of PCBM Electron Transport Layer. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13659-13665.	4.0	132
31	Lead acetate precursor based p-i-n perovskite solar cells with enhanced reproducibility and low hysteresis. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14121-14125.	5.2	76
32	Elucidating the Reaction Pathways in the Synthesis of Organolead Trihalide Perovskite for High-Performance Solar Cells. <i>Scientific Reports</i> , 2015, 5, 10557.	1.6	48
33	Smooth perovskite thin films and efficient perovskite solar cells prepared by the hybrid deposition method. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14631-14641.	5.2	126
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36	Enhanced reproducibility of the high efficiency perovskite solar cells via a thermal treatment. <i>RSC Advances</i> , 2015, 5, 52571-52577.	1.7	5
37	Enhanced amplified spontaneous emission from morphology-controlled organic-inorganic halide perovskite films. <i>RSC Advances</i> , 2015, 5, 103674-103679.	1.7	23
38	Overcoming the electroluminescence efficiency limitations of perovskite light-emitting diodes. <i>Science</i> , 2015, 350, 1222-1225.	6.0	2,440
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41	Advancements in all-solid-state hybrid solar cells based on organometal halide perovskites. <i>Materials Horizons</i> , 2015, 2, 378-405.	6.4	110
42	Phosphonium Halides as Both Processing Additives and Interfacial Modifiers for High Performance Planar Heterojunction Perovskite Solar Cells. <i>Small</i> , 2015, 11, 3344-3350.	5.2	91
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46	Electron-hole diffusion lengths > 175 $\mu$ m in solution-grown CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> single crystals. <i>Science</i> , 2015, 347, 967-970.	6.0	4,642
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48	Fatigue resistance of a flexible, efficient, and metal oxide-free perovskite solar cell. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9241-9248.	5.2	100
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59	Solvent-assisted growth of organic-inorganic hybrid perovskites with enhanced photovoltaic performances. <i>Solar Energy Materials and Solar Cells</i> , 2015, 143, 360-368.	3.0	14
60	Efficient Light Harvester Layer Prepared by Solid/Mist Interface Reaction for Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 16907-16912.	4.0	26
61	Crystallization Dynamics of Organolead Halide Perovskite by Real-Time X-ray Diffraction. <i>Nano Letters</i> , 2015, 15, 5630-5634.	4.5	77
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74	Efficient and reproducible CH <sub>3</sub> NH <sub>3</sub> Pb <sub>3</sub> (SCN) <sub>x</sub> perovskite based planar solar cells. <i>Chemical Communications</i> , 2015, 51, 11997-11999.	2.2	156
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77	The optoelectronic role of chlorine in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> (Cl)-based perovskite solar cells. Nature Communications, 2015, 6, 7269.	5.8	404
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132	Giant switchable photovoltaic effect in organometal trihalide perovskite devices. <i>Nature Materials</i> , 2015, 14, 193-198.	13.3	1,372
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136	The roles of alkyl halide additives in enhancing perovskite solar cell performance. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9058-9062.	5.2	147
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418	Neutral-colored semitransparent solar cells based on pseudohalide (SCN <sup>-</sup> )-doped perovskite. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1034-1040.	2.5	24



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420	Controlled Crystal Grain Growth in Mixed Cation-Halide Perovskite by Evaporated Solvent Vapor Recycling Method for High Efficiency Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 18739-18747.	4.0	42
421	Transient absorption imaging of carrier dynamics in disordered semiconductors. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0
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444	Efficient Flexible Solar Cell based on Composition-Tailored Hybrid Perovskite. <i>Advanced Materials</i> , 2017, 29, 1605900.	11.1	184
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