

# High-Efficiency Perovskite Solar Cells

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Citation Report

#	ARTICLE	IF	CITATIONS
1	A dual promotion strategy of interface modification and ion doping for efficient and stable carbon-based planar CsPbBr <sub>3</sub> perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 17211-17221.	2.7	10
2	Regulating Surface Termination for Efficient Inverted Perovskite Solar Cells with Greater Than 23% Efficiency. <i>Journal of the American Chemical Society</i> , 2020, 142, 20134-20142.	6.6	414
3	Incorporating quantum dots for high efficiency and stable perovskite photovoltaics. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25017-25027.	5.2	24
4	Unraveling the Photogenerated Electron Localization on the Defect-Free CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> (001) Surfaces: Understanding and Implications from a First-Principles Study. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8041-8047.	2.1	6
5	Varying the Concentration of Organic Acid and Amine Ligands Allows Tuning between Quantum Dots and Magic-Sized Clusters of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> Perovskite: Implications for Photonics and Energy Conversion. <i>ACS Applied Nano Materials</i> , 2020, 3, 12379-12387.	2.4	20
6	Recent Progress in 2D/3D Multidimensional Metal Halide Perovskites Solar Cells. <i>Frontiers in Materials</i> , 2020, 7, .	1.2	33
7	Three-Dimensional Lead Bromide Hybrid Ferroelectric Realized by Lattice Expansion. <i>Journal of the American Chemical Society</i> , 2020, 142, 19698-19704.	6.6	31
8	Stable and Efficient Methylammonium <sup>+</sup> , Cesium <sup>+</sup> , and Bromide <sup>-</sup> Free Perovskite Solar Cells by In <sup>-</sup> Situ Interlayer Formation. <i>Advanced Functional Materials</i> , 2021, 31, 2007520.	7.8	34
9	Highly Reproducible Fabrication of Perovskite Films with an Ultrawide Antisolvent Dripping Window for Large <sup>-</sup> Scale Flexible Solar Cells. <i>Solar Rrl</i> , 2021, 5, .	3.1	16
10	Inorganic Electron Transport Materials in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2008300.	7.8	105
11	Squaraine Dyes for Photovoltaic and Biomedical Applications. <i>Advanced Functional Materials</i> , 2021, 31, 2008201.	7.8	59
12	Recent research progress for upconversion assisted dye-sensitized solar cells. <i>Chinese Chemical Letters</i> , 2021, 32, 1834-1846.	4.8	28
13	Recent Advances in Carbon Nanotube Utilizations in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2004765.	7.8	37
14	CHAPTER 6. Atomic and Molecular Functionalization of Graphitic Carbon Nitride for Solar Cell Applications. <i>RSC Nanoscience and Nanotechnology</i> , 2021, , 221-261.	0.2	2
15	Nanometer-thick [(FPEA) <sub>2</sub> PbX <sub>4</sub> ; X = I and Br] 2D halide perovskite based thin films for pollutant detection and nonconventional photocatalytic degradation. <i>Materials Advances</i> , 2021, 2, 5712-5722.	2.6	5
16	Designing high performance conjugated materials for photovoltaic cells with the aid of intramolecular noncovalent interactions. <i>Chemical Communications</i> , 2021, 57, 302-314.	2.2	65
17	Pb in halide perovskites for photovoltaics: reasons for optimism. <i>Materials Advances</i> , 2021, 2, 6125-6135.	2.6	16
18	A low-cost and green-solvent-processable hole-transport material enabled by a traditional bidentate ligand for highly efficient inverted perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2021, 9, 8930-8938.	2.7	8

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19	Carbon-based electrodes for perovskite solar cells. <i>Materials Advances</i> , 2021, 2, 5560-5579.	2.6	49
20	Dynamic structural property of organic-inorganic metal halide perovskite. <i>IScience</i> , 2021, 24, 101959.	1.9	29
21	Perovskite photodetectors and their application in artificial photonic synapses. <i>Chemical Communications</i> , 2021, 57, 11429-11442.	2.2	27
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25	Sustainable and cost-efficient electro-synthesis of formamidine acetate from cyanamide in aqueous acidic electrolyte. <i>Green Chemistry</i> , 2021, 23, 3289-3294.	4.6	10
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27	The regulatory effect of triphenylphosphine oxide on perovskites for morphological and radiative improvement. <i>Journal of Materials Chemistry C</i> , 2021, 9, 6399-6403.	2.7	2
28	Two-dimensional halide perovskites: synthesis, optoelectronic properties, stability, and applications. <i>Nanoscale</i> , 2021, 13, 12394-12422.	2.8	38
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30	Suppressed ion migration in powder-based perovskite thick films using an ionic liquid. <i>Journal of Materials Chemistry C</i> , 2021, 9, 11827-11837.	2.7	5
31	Carbon nanodots enhanced performance of Cs <sub>0.15</sub> FA <sub>0.85</sub> PbI <sub>3</sub> perovskite solar cells. <i>Nano Research</i> , 2021, 14, 2294-2300.	5.8	15
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35	Visualization of halide perovskite crystal growth processes by <i>in situ</i> heating WAXS measurements. <i>Chemical Communications</i> , 2021, 57, 2685-2688.	2.2	1
36	Charge-transfer induced multifunctional BCP:Ag complexes for semi-transparent perovskite solar cells with a record fill factor of 80.1%. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12009-12018.	5.2	29

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37	Tetra-indole core as a dual agent: a hole selective layer that passivates defects in perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2021, 9, 7074-7082.	2.7	8
38	A dithieno[3,2- <i>a</i> :3- <i>h</i> ][5,6,11,12]chrysene diimide based polymer as an electron transport layer for efficient inverted perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2022, 10, 2703-2710.	2.7	2
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43	Spontaneous Radiation Amplification in a Microsphere-Coupled CsPbBr <sub>3</sub> Perovskite Vertical Structure. <i>Advanced Optical Materials</i> , 2021, 9, 2001932.	3.6	6
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46	Europium ions doped WO <sub>x</sub> nanorods for dual interfacial modification facilitating high efficiency and stability of perovskite solar cells. <i>Nano Energy</i> , 2021, 80, 105564.	8.2	26
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54	Suppression of hysteresis in all-inorganic perovskite solar cells by the incorporation of PCBM. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	18

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55	A Review on Encapsulation Technology from Organic Light Emitting Diodes to Organic and Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2100151.	7.8	114
56	Mesoscopic TiO <sub>2</sub> /Nb <sub>2</sub> O <sub>5</sub> Electron Transfer Layer for Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100177.	1.9	20
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73	Organic Tetrabutylammonium Cation Intercalation to Heal Inorganic CsPbI <sub>3</sub> Perovskite. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12351-12355.	7.2	94
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110	B-Site Columnar-Ordered Halide Double Perovskites: Theoretical Design and Experimental Verification. Journal of the American Chemical Society, 2021, 143, 10275-10281.	6.6	43
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126	Enhancing Defect Tolerance with Ligands at the Surface of Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2021, 12, 6299-6304.	2.1	20



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128	Modification of compact TiO <sub>2</sub> layer by TiCl <sub>4</sub> -TiCl <sub>3</sub> mixture treatment and construction of high-efficiency carbon-based CsPbI <sub>2</sub> Br perovskite solar cells. <i>Journal of Energy Chemistry</i> , 2021, 63, 442-451.	7.1	17
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