

Light and oxygen induced degradation limits the operation of lead triiodide perovskite solar cells

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Synergistic Effects of Water and Oxygen Molecule Co-adsorption on (001) Surfaces of Tetragonal $\text{CH}_3\text{NH}_3\text{PbI}_3$: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , 2016, 120, 28448-28455.	1.5	47
2	Research Update: Behind the high efficiency of hybrid perovskite solar cells. <i>APL Materials</i> , 2016, 4, .	2.2	47
3	Research Update: Strategies for improving the stability of perovskite solar cells. <i>APL Materials</i> , 2016, 4, .	2.2	126
4	Electro- and photoluminescence imaging as fast screening technique of the layer uniformity and device degradation in planar perovskite solar cells. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	27
5	Encapsulation for long-term stability enhancement of perovskite solar cells. <i>Nano Energy</i> , 2016, 30, 162-172.	8.2	258
6	Thermal degradation of $\text{CH}_3\text{NH}_3\text{PbI}_3$ perovskite into NH_3 and CH_3I gases observed by coupled thermogravimetry-mass spectrometry analysis. <i>Energy and Environmental Science</i> , 2016, 9, 3406-3410.	15.6	616
7	Extending the Lifetime of Perovskite Solar Cells using a Perfluorinated Dopant. <i>ChemSusChem</i> , 2016, 9, 2708-2714.	3.6	62
8	Direct Observation of Reversible Transformation of $\text{CH}_3\text{NH}_3\text{PbI}_3$ and NH_4PbI_3 Induced by Polar Gaseous Molecules. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 5068-5073.	2.1	62
9	Graphene Perovskite Solar Cells Exceed 18% Efficiency: A Stability Study. <i>ChemSusChem</i> , 2016, 9, 2609-2619.	3.6	163
10	Elemental Mapping of Perovskite Solar Cells by Using Multivariate Analysis: An Insight into Degradation Processes. <i>ChemSusChem</i> , 2016, 9, 2673-2678.	3.6	21
11	Interaction of Organic Cation with Water Molecule in Perovskite MAPbI_3 : From Dynamic Orientational Disorder to Hydrogen Bonding. <i>Chemistry of Materials</i> , 2016, 28, 7385-7393.	3.2	169
12	Photoluminescence Blinking of Single-Crystal Methylammonium Lead Iodide Perovskite Nanorods Induced by Surface Traps. <i>ACS Omega</i> , 2016, 1, 148-159.	1.6	76
13	Can Pb-Free Halide Double Perovskites Support High-Efficiency Solar Cells?. <i>ACS Energy Letters</i> , 2016, 1, 949-955.	8.8	404
14	Liquid Water- and Heat-Resistant Hybrid Perovskite Photovoltaics via an Inverted ALD Oxide Electron Extraction Layer Design. <i>Nano Letters</i> , 2016, 16, 7786-7790.	4.5	71
15	Is Cu a stable electrode material in hybrid perovskite solar cells for a 30-year lifetime?. <i>Energy and Environmental Science</i> , 2016, 9, 3650-3656.	15.6	239
16	Enhancing stability and efficiency of perovskite solar cells with crosslinkable silane-functionalized and doped fullerene. <i>Nature Communications</i> , 2016, 7, 12806.	5.8	350
17	Undesirable role of remnant PbI_2 layer on low temperature processed planar perovskite solar cells. <i>RSC Advances</i> , 2016, 6, 101250-101258.	1.7	18
18	A simple method to evaluate the effectiveness of encapsulation materials for perovskite solar cells. <i>Solar Energy</i> , 2016, 139, 426-432.	2.9	36

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22	Recent advances in perovskite solar cells: efficiency, stability and lead-free perovskite. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11462-11482.	5.2	378
23	Probing the Intrinsic Thermal and Photochemical Stability of Hybrid and Inorganic Lead Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1211-1218.	2.1	216
24	A pure and stable intermediate phase is key to growing aligned and vertically monolithic perovskite crystals for efficient PIN planar perovskite solar cells with high processibility and stability. <i>Nano Energy</i> , 2017, 34, 58-68.	8.2	151
25	Optimizing the Activity of Nanoneedle Structured WO ₃ Photoanodes for Solar Water Splitting: Direct Synthesis via Chemical Vapor Deposition. <i>Journal of Physical Chemistry C</i> , 2017, 121, 5983-5993.	1.5	71
26	Light-Induced Degradation of CH ₃ NH ₃ PbI ₃ Hybrid Perovskite Thin Film. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3904-3910.	1.5	265
27	Atomic layer deposition for perovskite solar cells: research status, opportunities and challenges. <i>Sustainable Energy and Fuels</i> , 2017, 1, 30-55.	2.5	150
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33	CuIn Halide Perovskite Solar Absorbers. <i>Journal of the American Chemical Society</i> , 2017, 139, 6718-6725.	6.6	316
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