Andreas Hinsch

List of Publications by Year
in descending order

40 papers	1,306 citations	331670 21 h-index	454955 30 g-index
42 all docs	42 docs citations	42 times ranked	1715 citing authors

#	Article	IF	Citations
1	Stability assessment of alternative platinum free counter electrodes for dye-sensitized solar cells. Energy and Environmental Science, 2015, 8, 3495-3514.	30.8	225
2	Low-temperature carbon-based electrodes in perovskite solar cells. Energy and Environmental Science, 2020, 13, 3880-3916.	30.8	149
3	Interfacial Passivation Engineering of Perovskite Solar Cells with Fill Factor over 82% and Outstanding Operational Stability on n-i-p Architecture. ACS Energy Letters, 2021, 6, 3916-3923.	17.4	115
4	Characterization of perovskite solar cells: Towards a reliable measurement protocol. APL Materials, 2016, 4, .	5.1	94
5	Worldwide first fully upâ€scaled fabrication of 60â€‰Ã—â€‰100â€‰cm² dye solar module prototypes. Progress in Photovoltaics: Research and Applications, 2012, 20, 698-710.	8.1	61
6	Employing 2Dâ€Perovskite as an Electron Blocking Layer in Highly Efficient (18.5%) Perovskite Solar Cells with Printable Low Temperature Carbon Electrode. Advanced Energy Materials, 2022, 12, .	19.5	60
7	Role of the Platinum Nanoclusters in the Iodide/Triiodide Redox System of Dye Solar Cells. Journal of Cluster Science, 2007, 18, 141-155.	3.3	59
8	High Photovoltage of 1 V on a Steady-State Certified Hole Transport Layer-Free Perovskite Solar Cell by a Molten-Salt Approach. ACS Energy Letters, 2018, 3, 1122-1127.	17.4	47
9	Status of Dye Solar Cell Technology as a Guideline for Further Research. ChemPhysChem, 2014, 15, 1076-1087.	2.1	40
10	Novel Low-Temperature Process for Perovskite Solar Cells with a Mesoporous TiO₂ Scaffold. ACS Applied Materials & Interfaces, 2017, 9, 30567-30574.	8.0	36
11	Perovskite Photovoltaic Devices with Carbonâ€Based Electrodes Withstanding Reverseâ€Bias Voltages up to â€"9â€‰V and Surpassing IEC 61215:2016 International Standard. Solar Rrl, 2022, 6, 2100527.	5.8	35
12	Comparison of highly conductive natural and synthetic graphites for electrodes in perovskite solar cells. Carbon, 2021, 178, 10-18.	10.3	33
13	Catalytic materials manufactured by the polyol process for monolithic dyeâ€sensitized solar cells. Progress in Photovoltaics: Research and Applications, 2009, 17, 67-73.	8.1	29
14	Perovskite Solar Cells with Carbonâ€Based Electrodes â€" Quantification of Losses and Strategies to Overcome Them. Advanced Energy Materials, 2022, 12, .	19.5	29
15	The nature of the methylamineâ€"MAPbI₃ complex: fundamentals of gas-induced perovskite liquefaction and crystallization. Journal of Materials Chemistry A, 2020, 8, 9788-9796.	10.3	28
16	Preparation and characterization of low platinum loaded Pt:SnO2 electrocatalytic films for screen printed dye solar cell counter electrode. Thin Solid Films, 2007, 515, 4074-4079.	1.8	27
17	Distinguishing crystallization stages and their influence on quantum efficiency during perovskite solar cell formation in real-time. Scientific Reports, 2017, 7, 14899.	3.3	27
18	Preparation and characterization of quasi-solid-state electrolytes using a brominated poly(2,6-dimethyl-1,4-phenylene oxide) electrospun nanofiber mat for dye-sensitized solar cells. Electrochemistry Communications, 2011, 13, 1391-1394.	4.7	25

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19	Light-induced performance increase of carbon-based perovskite solar module for 20-year stability. Cell Reports Physical Science, 2021, 2, 100648.	5.6	25
20	Reverse Manufacturing Enables Perovskite Photovoltaics to Reach the Carbon Footprint Limit of a Glass Substrate. Joule, 2020, 4, 882-901.	24.0	23
21	Double-Mesoscopic Hole-Transport-Material-Free Perovskite Solar Cells: Overcoming Charge-Transport Limitation by Sputtered Ultrathin Al₂O₃ Isolating Layer. ACS Applied Nano Materials, 2020, 3, 2463-2471.	5.0	23
22	Low temperature perovskite solar cells with an evaporated TiO2 compact layer for perovskite silicon tandem solar cells. Energy Procedia, 2017, 124, 567-576.	1.8	21
23	Improving the Stability of Ambient Processed, SnO₂â€Based, Perovskite Solar Cells by the UVâ€Treatment of Subâ€Cells. Solar Rrl, 2020, 4, 2000262.	5.8	21
24	A 2D Model for Interfacial Recombination in Mesoscopic Perovskite Solar Cells with Printed Back Contact. Solar Rrl, 2021, 5, 2000595.	5.8	19
25	Fill Factor Assessment in Hole Selective Layer Free Carbon Electrodeâ€Based Perovskite Solar Cells with 15.5% Certified Power Conversion Efficiency. Solar Rrl, 2022, 6, .	5.8	14
26	Function of Porous Carbon Electrode during the Fabrication of Multiporous-Layered-Electrode Perovskite Solar Cells. Photonics, 2020, 7, 133.	2.0	11
27	Activation of Weak Monochromic Photocurrents by White Light Irradiation for Accurate IPCE Measurements of Carbon-Based Multi-Porous-Layered-Electrode Perovskite Solar Cells. Electrochemistry, 2020, 88, 418-422.	1.4	9
28	Gelation of solvent-free electrolyte using siliceous materials with different size and porosity for applications in dye sensitized solar cells. Solar Energy, 2016, 124, 101-113.	6.1	8
29	Parameter Study on UV-induced Degradation of Dye-sensitized Solar Cells. Materials Research Society Symposia Proceedings, 2013, 1537, 1.	0.1	6
30	In-situ analyses of triiodide formation in an iodine-free electrolyte for dye-sensitized solar cells using electro-diffuse-reflection spectroscopy (EDRS). Journal of Power Sources, 2015, 275, 675-680.	7.8	4
31	Constraints and Opportunities for Co2-Neutral Photovoltaics: In-Situ Perovskite Solar Cell Manufacturing Enables Reaching the Ultimate Carbon Footprint Limit of the Glass Substrate. SSRN Electronic Journal, 0, , .	0.4	1
32	A novel recycling method for encapsulated perovskite mesoscopic photovoltaic devices with minimal performance loss. , 0, , .		1
33	Macroporosity Enhancement of Scaffold Oxide Layers Using Selfâ€Assembled Polymer Beads for Photovoltaic Applications. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700946.	1.8	0
34	Quantifying Losses of Perovskite Solar Cells with Carbon-based Back-contacts and Outlining a Roadmap for Boosting Their Power Conversion Efficiencies. , 0, , .		0
35	Optimization of electron selective layer and perovskite crystallization for efficient outdoor and indoor light harvesting in graphite-based perovskite solar cells. , 0, , .		0
36	Towards a Sustainable Energy Future: Fully Printable Carbon-Based Perovskite Solar Cells with Overcome Charge Transport Limitation and Improved Light-Harvesting Efficiency. , 0, , .		0

#	Article	IF	Citations
37	Stable, cost-effective, sustainable and recyclable perovskite photovoltaics using carbon-based electrodes. , 0, , .		0
38	Low Dimentional 2D Perovskite As An Effective Electron Blocking Layer In Efficient (18.5%) And Stable Hole-Selective Layer-Free Carbon Electrode Based Perovskite Solar Cells. , 0, , .		0
39	How to make perovskite photovoltaic devices stable under reverse bias. , 0, , .		0
40	Electron Blocking 2D Perovskite In Highly Efficient (18.5%) Hole-Selective Layer-Free Perovskite Solar Cells Using Low-Temperature Processed Carbon Electrode. , 0, , .		0