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	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
2	Perovskite Solar Cells with Carbonâ€Based Electrodes â€“ Quantification of Losses and Strategies to Overcome Them. Advanced Energy Materials, 2022, 12, .	19.5	29
3	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
4	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
5	A 2D Model for Interfacial Recombination in Mesoscopic Perovskite Solar Cells with Printed Back Contact. Solar Rrl, 2021, 5, 2000595.	5.8	19
6	Comparison of highly conductive natural and synthetic graphites for electrodes in perovskite solar cells. Carbon, 2021, 178, 10-18.	10.3	33
7	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
8	Light-induced performance increase of carbon-based perovskite solar module for 20-year stability. Cell Reports Physical Science, 2021, 2, 100648.	5.6	25
9	Low-temperature carbon-based electrodes in perovskite solar cells. Energy and Environmental Science, 2020, 13, 3880-3916.	30.8	149
10	Function of Porous Carbon Electrode during the Fabrication of Multiporous-Layered-Electrode Perovskite Solar Cells. Photonics, 2020, 7, 133.	2.0	11
11	Reverse Manufacturing Enables Perovskite Photovoltaics to Reach the Carbon Footprint Limit of a Glass Substrate. Joule, 2020, 4, 882-901.	24.0	23
12	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
13	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
14	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
15	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
16	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
17	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
18	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

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19	Novel Low-Temperature Process for Perovskite Solar Cells with a Mesoporous TiO₂ Scaffold. ACS Applied Materials & Interfaces, 2017, 9, 30567-30574.	8.0	36
20	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
21	Characterization of perovskite solar cells: Towards a reliable measurement protocol. APL Materials, 2016, 4, .	5.1	94
22	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
23	Stability assessment of alternative platinum free counter electrodes for dye-sensitized solar cells. Energy and Environmental Science, 2015, 8, 3495-3514.	30.8	225
24	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
25	Status of Dye Solar Cell Technology as a Guideline for Further Research. ChemPhysChem, 2014, 15, 1076-1087.	2.1	40
26	Parameter Study on UV-induced Degradation of Dye-sensitized Solar Cells. Materials Research Society Symposia Proceedings, 2013, 1537, 1.	0.1	6
27	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
28	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
29	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
30	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
31	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
32	Quantifying Losses of Perovskite Solar Cells with Carbon-based Back-contacts and Outlining a Roadmap for Boosting Their Power Conversion Efficiencies. , 0, , .		0
33	Optimization of electron selective layer and perovskite crystallization for efficient outdoor and indoor light harvesting in graphite-based perovskite solar cells. , 0, , .		0
34	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
35	Towards a Sustainable Energy Future: Fully Printable Carbon-Based Perovskite Solar Cells with Overcome Charge Transport Limitation and Improved Light-Harvesting Efficiency. , 0, , .		0
36	Stable, cost-effective, sustainable and recyclable perovskite photovoltaics using carbon-based electrodes. , 0, , .		0

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37	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
38	How to make perovskite photovoltaic devices stable under reverse bias. , 0, , .		0
39	Electron Blocking 2D Perovskite In Highly Efficient (18.5%) Hole-Selective Layer-Free Perovskite Solar Cells Using Low-Temperature Processed Carbon Electrode. , 0, , .		0
40	A novel recycling method for encapsulated perovskite mesoscopic photovoltaic devices with minimal performance loss. , 0, , .		1