

Jens Hauch

List of Publications by Year in descending order

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Version: 2024-02-01

32
papers

2,810
citations

430843

18
h-index

414395

32
g-index

33
all docs

33
docs citations

33
times ranked

4142
citing authors

#	ARTICLE	IF	CITATIONS
1	Solarâ€NIRT: Identification of PVâ€module backsheets in the field with natural sunlight. Progress in Photovoltaics: Research and Applications, 2022, 30, 851-858.	8.1	1
2	Distinguishing between different types of multiâ€layered PETâ€based backsheets of PV modules with nearâ€infrared spectroscopy. Progress in Photovoltaics: Research and Applications, 2022, 30, 859-868.	8.1	8
3	A bilayer conducting polymer structure for planar perovskite solar cells with over 1,400â€%hours operational stability at elevated temperatures. Nature Energy, 2022, 7, 144-152.	39.5	123
4	â€œGreenâ€ synthesis of highly luminescent lead-free Cs₂Ag_xNa_{1-x}Bi_yIn_{1-y}Cl₃ perovskites. Journal of Materials Chemistry C, 2022, 10, 9938-9944.	13.6	13
5	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	19.5	93
6	Elucidating the Full Potential of OPV Materials Utilizing a High-Throughput Robot-Based Platform and Machine Learning. Joule, 2021, 5, 495-506.	24.0	86
7	Discovery of temperature-induced stability reversal in perovskites using high-throughput robotic learning. Nature Communications, 2021, 12, 2191.	12.8	77
8	Building process design rules for microstructure control in wide-bandgap mixed halide perovskite solar cells by a high-throughput approach. Applied Physics Letters, 2021, 118, .	3.3	8
9	Computer vision tool for detection, mapping, and fault classification of photovoltaics modules in aerial IR videos. Progress in Photovoltaics: Research and Applications, 2021, 29, 1236-1251.	8.1	39
10	Understanding the Microstructure Formation of Polymer Films by Spontaneous Solution Spreading Coating with a Highâ€Throughput Engineering Platform. ChemSusChem, 2021, 14, 3590-3598.	6.8	14
11	Highâ€Throughput Robotic Synthesis and Photoluminescence Characterization of Aqueous Multinary Copperâ€Silver Indium Chalcogenide Quantum Dots. Particle and Particle Systems Characterization, 2021, 38, 2100169.	2.3	12
12	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	19.5	66
13	Material Strategies to Accelerate OPV Technology Toward a GW Technology. Advanced Energy Materials, 2020, 10, 2001864.	19.5	93
14	Robot-Based High-Throughput Screening of Antisolvents for Lead Halide Perovskites. Joule, 2020, 4, 1806-1822.	24.0	65
15	Nondestructive characterization of polymeric components of silicon solar modules by near-infrared absorption spectroscopy (NIRA). Solar Energy Materials and Solar Cells, 2020, 216, 110702.	6.2	14
16	Standardization as an Instrument to Accelerate the Development of Stable Emerging Photovoltaic Technologiesâ€The IEC TS 62876â€2â€1:2018â€ Technical Specification for the Stability Testing of Photovoltaic Devices Enabled by Nanomaterials. Energy Technology, 2020, 8, 2000487.	3.8	3
17	The Impact of COVID-19-Related Measures on the Solar Resource in Areas with High Levels of Air Pollution. Joule, 2020, 4, 1681-1687.	24.0	17
18	Beyond Ternary OPV: Highâ€Throughput Experimentation and Selfâ€Driving Laboratories Optimize Multicomponent Systems. Advanced Materials, 2020, 32, e1907801.	21.0	138

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19	Film Fabrication Techniques: Beyond Ternary OPV: High-Throughput Experimentation and Self-Driving Laboratories Optimize Multicomponent Systems (Adv. Mater. 14/2020). Advanced Materials, 2020, 32, 2070110.	21.0	2
20	Quantitative assessment of the power loss of silicon PV modules by IR thermography and its dependence on data-filtering criteria. Progress in Photovoltaics: Research and Applications, 2019, 27, 856-868.	8.1	18
21	Site-specific assessment of mechanical loads on photovoltaic modules from meteorological reanalysis data. Solar Energy, 2019, 188, 1134-1145.	6.1	6
22	Evolution of cell cracks in PV-modules under field and laboratory conditions. Progress in Photovoltaics: Research and Applications, 2018, 26, 261-272.	8.1	42
23	Verifying defective PV-modules by IR-imaging and controlling with module optimizers. Progress in Photovoltaics: Research and Applications, 2018, 26, 622-630.	8.1	16
24	Comparison of Drone-based IR-imaging with Module Resolved Monitoring Power Data. Energy Procedia, 2017, 124, 560-566.	1.8	19
25	Analysis of inhomogeneous local distribution of potential induced degradation at a rooftop photovoltaic installation. IET Renewable Power Generation, 2017, 11, 1253-1260.	3.1	9
26	The Effect of Ageing on Exciton Dynamics, Charge Separation, and Recombination in P3HT/PCBM Photovoltaic Blends. Advanced Functional Materials, 2012, 22, 1461-1469.	14.9	44
27	Photodegradation of P3HT - A Systematic Study of Environmental Factors. Chemistry of Materials, 2011, 23, 145-154.	6.7	206
28	Consensus stability testing protocols for organic photovoltaic materials and devices. Solar Energy Materials and Solar Cells, 2011, 95, 1253-1267.	6.2	812
29	Reversible and irreversible degradation of organic solar cell performance by oxygen. Solar Energy, 2011, 85, 1238-1249.	6.1	174
30	Nanomorphology and Charge Generation in Bulk Heterojunctions Based on Low-Bandgap Dithiophene Polymers with Different Bridging Atoms. Advanced Functional Materials, 2010, 20, 1180-1188.	14.9	173
31	Fabrication, Optical Modeling, and Color Characterization of Semitransparent Bulk Heterojunction Organic Solar Cells in an Inverted Structure. Advanced Functional Materials, 2010, 20, 1592-1598.	14.9	182
32	Simulation of light intensity dependent current characteristics of polymer solar cells. Journal of Applied Physics, 2004, 95, 2816-2819.	2.5	237