Tobias Stubhan

List of Publications by Year
in descending order

34 papers	3,167 citations	186265 28 h-index	377865 34 g-index
34 all docs	34 docs citations	34 times ranked	5238 citing authors

#	Article	IF	Citations
1	A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. Science, 2017, 358, 1192-1197.	12.6	554
2	Sprayâ€Coated Silver Nanowires as Top Electrode Layer in Semitransparent P3HT:PCBMâ€Based Organic Solar Cell Devices. Advanced Functional Materials, 2013, 23, 1711-1717.	14.9	216
3	Overcoming the Interface Losses in Planar Heterojunction Perovskiteâ€Based Solar Cells. Advanced Materials, 2016, 28, 5112-5120.	21.0	188
4	High Fill Factor Polymer Solar Cells Incorporating a Low Temperature Solution Processed WO₃ Hole Extraction Layer. Advanced Energy Materials, 2012, 2, 1433-1438.	19.5	186
5	ITOâ€Free and Fully Solutionâ€Processed Semitransparent Organic Solar Cells with High Fill Factors. Advanced Energy Materials, 2013, 3, 1062-1067.	19.5	172
6	Comparison of various solâ€"gel derived metal oxide layers for inverted organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 2194-2199.	6.2	153
7	High shunt resistance in polymer solar cells comprising a MoO3 hole extraction layer processed from nanoparticle suspension. Applied Physics Letters, 2011, 98, .	3.3	149
8	Inverted organic solar cells using a solution processed aluminum-doped zinc oxide buffer layer. Organic Electronics, 2011, 12, 1539-1543.	2.6	139
9	Beyond Ternary OPV: Highâ€Throughput Experimentation and Selfâ€Driving Laboratories Optimize Multicomponent Systems. Advanced Materials, 2020, 32, e1907801.	21.0	138
10	Increasing the Fill Factor of Inverted P3HT:PCBM Solar Cells Through Surface Modification of Alâ€Doped ZnO via Phosphonic Acidâ€Anchored C60 SAMs. Advanced Energy Materials, 2012, 2, 532-535.	19.5	116
11	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
12	Overcoming interface losses in organic solar cells by applying low temperature, solution processed aluminum-doped zinc oxide electron extraction layers. Journal of Materials Chemistry A, 2013, 1, 6004.	10.3	79
13	High fill factor polymer solar cells comprising a transparent, low temperature solution processed doped metal oxide/metal nanowire composite electrode. Solar Energy Materials and Solar Cells, 2012, 107, 248-251.	6.2	75
14	Exploring the Stability of Novel Wide Bandgap Perovskites by a Robot Based High Throughput Approach. Advanced Energy Materials, 2018, 8, 1701543.	19.5	75
15	Exploring the Limiting Openâ€Circuit Voltage and the Voltage Loss Mechanism in Planar CH₃NH₃PbBr₃ Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1600132.	19.5	71
16	Lowâ€Temperature and Hysteresisâ€Free Electronâ€Transporting Layers for Efficient, Regular, and Planar Structure Perovskite Solar Cells. Advanced Energy Materials, 2015, 5, 1501056.	19.5	69
17	Fully Solution-Processing Route toward Highly Transparent Polymer Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 18251-18257.	8.0	68
18	Robot-Based High-Throughput Screening of Antisolvents for Lead Halide Perovskites. Joule, 2020, 4, 1806-1822.	24.0	65

#	Article	IF	Citations
19	Patterning of organic photovoltaic modules by ultrafast laser. Progress in Photovoltaics: Research and Applications, 2015, 23, 238-246.	8.1	62
20	Inverted structure organic photovoltaic devices employing a low temperature solution processed WO3 anode buffer layer. Organic Electronics, 2012, 13, 2479-2484.	2.6	57
21	Design of the Solutionâ€Processed Intermediate Layer by Engineering for Inverted Organic Multi junction Solar Cells. Advanced Energy Materials, 2013, 3, 301-307.	19.5	57
22	A combination of Al-doped ZnO and a conjugated polyelectrolyte interlayer for small molecule solution-processed solar cells with an inverted structure. Journal of Materials Chemistry A, 2013, 1, 11306.	10.3	48
23	A solution-processed barium hydroxide modified aluminum doped zinc oxide layer for highly efficient inverted organic solar cells. Journal of Materials Chemistry A, 2014, 2, 18917-18923.	10.3	47
24	Organic solar cells incorporating buffer layers from indium doped zinc oxide nanoparticles. Solar Energy Materials and Solar Cells, 2011, 95, 579-585.	6.2	44
25	Quantifying the Extent of Contact Doping at the Interface between High Work Function Electrical Contacts and Poly(3-hexylthiophene) (P3HT). Journal of Physical Chemistry Letters, 2015, 6, 1303-1309.	4.6	40
26	Overcoming Interfacial Losses in Solutionâ€Processed Organic Multiâ€Junction Solar Cells. Advanced Energy Materials, 2017, 7, 1601959.	19.5	39
27	Solution-Processed Parallel Tandem Polymer Solar Cells Using Silver Nanowires as Intermediate Electrode. ACS Nano, 2014, 8, 12632-12640.	14.6	34
28	The evolution of Materials Acceleration Platforms: toward the laboratory of the future with AMANDA. Journal of Materials Science, 2021, 56, 16422-16446.	3.7	31
29	Overcoming Electrodeâ€Induced Losses in Organic Solar Cells by Tailoring a Quasiâ€Ohmic Contact to Fullerenes via Solutionâ€Processed Alkali Hydroxide Layers. Advanced Energy Materials, 2016, 6, 1502195.	19.5	29
30	Printing high performance reflective electrodes for organic solar cells. Organic Electronics, 2015, 17, 334-339.	2.6	23
31	A universal method to form the equivalent ohmic contact for efficient solution-processed organic tandem solar cells. Journal of Materials Chemistry A, 2014, 2, 14896-14902.	10.3	20
32	Characterization of ZnO Interlayers for Organic Solar Cells: Correlation of Electrochemical Properties with Thin-Film Morphology and Device Performance. ACS Applied Materials & Interfaces, 2016, 8, 19787-19798.	8.0	19
33	Accelerated degradation of Al3+ doped ZnO thin films using damp heat test. Organic Electronics, 2014, 15, 569-576.	2.6	16
34	Film Fabrication Techniques: Beyond Ternary OPV: Highâ€Throughput Experimentation and Selfâ€Driving Laboratories Optimize Multicomponent Systems (Adv. Mater. 14/2020). Advanced Materials, 2020, 32, 2070110.	21.0	2