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	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
2	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
3	Robot-Based High-Throughput Screening of Antisolvents for Lead Halide Perovskites. Joule, 2020, 4, 1806-1822.	24.0	65
4	Beyond Ternary OPV: Highâ€Throughput Experimentation and Selfâ€Driving Laboratories Optimize Multicomponent Systems. Advanced Materials, 2020, 32, e1907801.	21.0	138
5	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
6	Exploring the Stability of Novel Wide Bandgap Perovskites by a Robot Based High Throughput Approach. Advanced Energy Materials, 2018, 8, 1701543.	19.5	75
7	A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. Science, 2017, 358, 1192-1197.	12.6	554
8	Overcoming Interfacial Losses in Solutionâ€Processed Organic Multiâ€Junction Solar Cells. Advanced Energy Materials, 2017, 7, 1601959.	19.5	39
9	Overcoming the Interface Losses in Planar Heterojunction Perovskiteâ€Based Solar Cells. Advanced Materials, 2016, 28, 5112-5120.	21.0	188
10	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
11	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
12	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
13	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
14	Printing high performance reflective electrodes for organic solar cells. Organic Electronics, 2015, 17, 334-339.	2.6	23
15	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
16	Patterning of organic photovoltaic modules by ultrafast laser. Progress in Photovoltaics: Research and Applications, 2015, 23, 238-246.	8.1	62
17	Solution-Processed Parallel Tandem Polymer Solar Cells Using Silver Nanowires as Intermediate Electrode. ACS Nano, 2014, 8, 12632-12640.	14.6	34
18	Accelerated degradation of Al3+ doped ZnO thin films using damp heat test. Organic Electronics, 2014, 15, 569-576.	2.6	16

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Fully Solution-Processing Route toward Highly Transparent Polymer Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 18251-18257.	8.0	68
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	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
24	ITOâ€Free and Fully Solutionâ€Processed Semitransparent Organic Solar Cells with High Fill Factors. Advanced Energy Materials, 2013, 3, 1062-1067.	19.5	172
25	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
26	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
27	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
28	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
29	Inverted structure organic photovoltaic devices employing a low temperature solution processed WO3 anode buffer layer. Organic Electronics, 2012, 13, 2479-2484.	2.6	57
30	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
31	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
32	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
33	Inverted organic solar cells using a solution processed aluminum-doped zinc oxide buffer layer. Organic Electronics, 2011, 12, 1539-1543.	2.6	139
34	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