Markus HÃ¶sel

List of Publications by Year
in descending order

47 papers	6,877 citations	109321 35 h-index	214800 47 g-index
50 all docs	50 docs citations	50 times ranked	7660 citing authors

#	Article	IF	Citations
1	Roll-to-roll fabrication of polymer solar cells. Materials Today, 2012, 15, 36-49.	14.2	1,254
2	Rollâ€toâ€Roll fabrication of large area functional organic materials. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 16-34.	2.1	890
3	25th Anniversary Article: Rise to Power â€“ OPVâ€Based Solar Parks. Advanced Materials, 2014, 26, 29-39.	21.0	739
4	Solar cells with one-day energy payback for the factories of the future. Energy and Environmental Science, 2012, 5, 5117-5132.	30.8	454
5	Scalable, ambient atmosphere roll-to-roll manufacture of encapsulated large area, flexible organic tandem solar cell modules. Energy and Environmental Science, 2014, 7, 2925.	30.8	255
6	Development and Manufacture of Polymerâ€Based Electrochromic Devices. Advanced Functional Materials, 2015, 25, 2073-2090.	14.9	232
7	Silver front electrode grids for ITO-free all printed polymer solar cells with embedded and raised topographies, prepared by thermal imprint, flexographic and inkjet roll-to-roll processes. Nanoscale, 2012, 4, 6032.	5.6	222
8	Fast Inline Rollâ€toâ€Roll Printing for Indiumâ€Tinâ€Oxideâ€Free Polymer Solar Cells Using Automatic Registration. Energy Technology, 2013, 1, 102-107.	3.8	212
9	Cost analysis of roll-to-roll fabricated ITO free single and tandem organic solar modules based on data from manufacture. Energy and Environmental Science, 2014, 7, 2792.	30.8	170
10	Large scale deployment of polymer solar cells on land, on sea and in the air. Energy and Environmental Science, 2014, 7, 855.	30.8	167
11	Large-scale roll-to-roll photonic sintering of flexo printed silver nanoparticle electrodes. Journal of Materials Chemistry, 2012, 22, 15683.	6.7	146
12	Investigation of the degradation mechanisms of a variety of organic photovoltaic devices by combination of imaging techniquesâ€"the ISOS-3 inter-laboratory collaboration. Energy and Environmental Science, 2012, 5, 6521.	30.8	134
13	Scalability and stability of very thin, roll-to-roll processed, large area, indium-tin-oxide free polymer solar cell modules. Organic Electronics, 2013, 14, 984-994.	2.6	131
14	Freely available OPVâ€"The fast way to progress. Energy Technology, 2013, 1, 378-381.	3.8	122
15	Practical evaluation of organic polymer thermoelectrics by largeâ€area R2R processing on flexible substrates. Energy Science and Engineering, 2013, 1, 81-88.	4.0	122
16	Lifetime of Organic Photovoltaics: Status and Predictions. Advanced Energy Materials, 2016, 6, 1501208.	19.5	119
17	The ISOS-3 inter-laboratory collaboration focused on the stability of a variety of organic photovoltaic devices. RSC Advances, 2012, 2, 882-893.	3.6	108
18	Fast Switching ITO Free Electrochromic Devices. Advanced Functional Materials, 2014, 24, 1228-1233.	14.9	102

#	Article	IF	Citations
19	Overcoming the Scaling Lag for Polymer Solar Cells. Joule, 2017, 1, 274-289.	24.0	100
20	Comparison of <scp>UV</scp>â€Curing, Hotmelt, and Pressure Sensitive Adhesive as Rollâ€toâ€<scp>R</scp>oll Encapsulation Methods for Polymer Solar Cells. Advanced Engineering Materials, 2013, 15, 1068-1075.	3.5	86
21	It is all in the Patternâ€"Highâ€Efficiency Power Extraction from Polymer Solar Cells through Highâ€Voltage Serial Connection. Energy Technology, 2013, 1, 15-19.	3.8	85
22	OPV for mobile applications: an evaluation of roll-to-roll processed indium and silver free polymer solar cells through analysis of life cycle, cost and layer quality using inline optical and functional inspection tools. Journal of Materials Chemistry A, 2013, 1, 7037.	10.3	83
23	All solution processing of ITO-free organic solar cell modules directly on barrier foil. Solar Energy Materials and Solar Cells, 2012, 107, 329-336.	6.2	81
24	Solution processed large area fabrication of Ag patterns as electrodes for flexible heaters, electrochromics and organic solar cells. Journal of Materials Chemistry A, 2014, 2, 10930.	10.3	73
25	A rational method for developing and testing stable flexible indium- and vacuum-free multilayer tandem polymer solar cells comprising up to twelve roll processed layers. Solar Energy Materials and Solar Cells, 2014, 120, 735-743.	6.2	72
26	Highâ€Volume Processed, ITOâ€Free Superstrates and Substrates for Rollâ€toâ€Roll Development of Organic Electronics. Advanced Science, 2014, 1, 1400002.	11.2	69
27	Development of Labâ€toâ€Fab Production Equipment Across Several Length Scales for Printed Energy Technologies, Including Solar Cells. Energy Technology, 2015, 3, 293-304.	3.8	64
28	In-situ, long-term operational stability of organic photovoltaics for off-grid applications in Africa. Solar Energy Materials and Solar Cells, 2016, 149, 284-293.	6.2	51
29	Improving, characterizing and predicting the lifetime of organic photovoltaics. Journal Physics D: Applied Physics, 2017, 50, 103001.	2.8	48
30	Outdoor Operational Stability of Indiumâ€Free Flexible Polymer Solar Modules Over 1 Year Studied in India, Holland, and Denmark. Advanced Engineering Materials, 2014, 16, 976-987.	3.5	46
31	Fast printing of thin, large area, ITO free electrochromics on flexible barrier foil. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 132-136.	2.1	43
32	Comparison of Fast Rollâ€toâ€<scp>R</scp>oll Flexographic, Inkjet, Flatbed, and Rotary Screen Printing of Metal Back Electrodes for Polymer Solar Cells. Advanced Engineering Materials, 2013, 15, 995-1001.	3.5	42
33	Baselines for Lifetime of Organic Solar Cells. Advanced Energy Materials, 2016, 6, 1600910.	19.5	42
34	On the stability of a variety of organic photovoltaic devices by IPCE and in situ IPCE analyses â€" the ISOS-3 inter-laboratory collaboration. Physical Chemistry Chemical Physics, 2012, 14, 11824.	2.8	38
35	Carbon: The Ultimate Electrode Choice for Widely Distributed Polymer Solar Cells. Advanced Energy Materials, 2014, 4, 1400732.	19.5	36
36	The Organic Power Transistor: Rollâ€toâ€Roll Manufacture, Thermal Behavior, and Power Handling When Driving Printed Electronics. Advanced Engineering Materials, 2016, 18, 51-55.	3.5	35

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37	Rapid flash annealing of thermally reactive copolymers in a roll-to-roll process for polymer solar cells. Polymer Chemistry, 2012, 3, 2649.	3.9	33
38	TOF-SIMS investigation of degradation pathways occurring in a variety of organic photovoltaic devices â€“ the ISOS-3 inter-laboratory collaboration. Physical Chemistry Chemical Physics, 2012, 14, 11780.	2.8	32
39	Scalable single point power extraction for compact mobile and stand-alone solar harvesting power sources based on fully printed organic photovoltaic modules and efficient high voltage DC/DC conversion. Solar Energy Materials and Solar Cells, 2016, 144, 48-54.	6.2	23
40	Failure Modes and Fast Repair Procedures in High Voltage Organic Solar Cell Installations. Advanced Energy Materials, 2014, 4, 1301625.	19.5	22
41	Portable and wireless IV-curve tracer for >5kV organic photovoltaic modules. Solar Energy Materials and Solar Cells, 2016, 151, 60-65.	6.2	21
42	The Solar Textile Challenge: How It Will Not Work and Where It Might. ChemSusChem, 2015, 8, 966-969.	6.8	18
43	Which Electrode Materials to Select for More Environmentally Friendly Organic Photovoltaics?. Advanced Engineering Materials, 2016, 18, 490-495.	3.5	18
44	Digital grayscale printing for patterned transparent conducting Ag electrodes and their applications in flexible electronics. Journal of Materials Chemistry C, 2014, 2, 2112.	5.5	15
45	A round robin study of polymer solar cells and small modules across China. Solar Energy Materials and Solar Cells, 2013, 117, 382-389.	6.2	10
46	Combined characterization techniques to understand the stability of a variety of organic photovoltaic devices: the ISOS-3 inter-laboratory collaboration. , 2012, , .		3
47	Stability and degradation of organic photovoltaics fabricated, aged, and characterized by the ISOS 3 inter-laboratory collaboration. , 2012, , .		2