

Roar R SÃ¸ndergaard

List of Publications by Year in descending order

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Version: 2024-02-01

36
papers

3,626
citations

185998

28
h-index

344852

36
g-index

38
all docs

38
docs citations

38
times ranked

5158
citing authors

#	ARTICLE	IF	CITATIONS
1	Roll-to-roll fabrication of large area functional organic materials. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 16-34.	2.4	890
2	Scalable, ambient atmosphere roll-to-roll manufacture of encapsulated large area, flexible organic tandem solar cell modules. Energy and Environmental Science, 2014, 7, 2925.	15.6	255
3	Roll-to-roll Inkjet Printing and Photonic Sintering of Electrodes for ITO Free Polymer Solar Cell Modules and Facile Product Integration. Advanced Energy Materials, 2013, 3, 172-175.	10.2	223
4	Fast Inline Roll-to-roll Printing for Indium-Tin-Oxide-Free Polymer Solar Cells Using Automatic Registration. Energy Technology, 2013, 1, 102-107.	1.8	212
5	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.	15.6	170
6	Mechanical Properties of a Library of Low-Band-Gap Polymers. Chemistry of Materials, 2016, 28, 2363-2373.	3.2	125
7	Freely available OPV – The fast way to progress. Energy Technology, 2013, 1, 378-381.	1.8	122
8	Practical evaluation of organic polymer thermoelectrics by large area R2R processing on flexible substrates. Energy Science and Engineering, 2013, 1, 81-88.	1.9	122
9	Lifetime of Organic Photovoltaics: Status and Predictions. Advanced Energy Materials, 2016, 6, 1501208.	10.2	119
10	Overcoming the Scaling Lag for Polymer Solar Cells. Joule, 2017, 1, 274-289.	11.7	100
11	Roll-to-roll Printed Silver Nanowire Semitransparent Electrodes for Fully Ambient Solution-Processed Tandem Polymer Solar Cells. Advanced Functional Materials, 2015, 25, 4539-4547.	7.8	97
12	All printed transparent electrodes through an electrical switching mechanism: A convincing alternative to indium-tin-oxide, silver and vacuum. Energy and Environmental Science, 2012, 5, 9467.	15.6	94
13	Roll-to-roll printed silver nanowires for increased stability of flexible ITO-free organic solar cell modules. Nanoscale, 2016, 8, 318-326.	2.8	90
14	Comparison of UV-Curing, Hotmelt, and Pressure Sensitive Adhesive as Roll-to-roll Encapsulation Methods for Polymer Solar Cells. Advanced Engineering Materials, 2013, 15, 1068-1075.	1.6	86
15	It is all in the Pattern – High Efficiency Power Extraction from Polymer Solar Cells through High Voltage Serial Connection. Energy Technology, 2013, 1, 15-19.	1.8	85
16	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.	5.2	83
17	All polymer photovoltaics: From small inverted devices to large roll-to-roll coated and printed solar cells. Solar Energy Materials and Solar Cells, 2013, 112, 157-162.	3.0	80
18	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.	3.0	72

#	ARTICLE	IF	CITATIONS
19	Scalable fabrication of organic solar cells based on non-fullerene acceptors. Flexible and Printed Electronics, 2020, 5, 014004.	1.5	68
20	The Critical Choice of PEDOT:PSS Additives for Long Term Stability of Roll-to-Roll Processed OPVs. Advanced Energy Materials, 2015, 5, 1401912.	10.2	66
21	Making Ends Meet: Flow Synthesis as the Answer to Reproducible High-Performance Conjugated Polymers on the Scale that Roll-to-Roll Processing Demands. Advanced Energy Materials, 2015, 5, 1401996.	10.2	55
22	Enabling Flexible Polymer Tandem Solar Cells by 3D Ptychographic Imaging. Advanced Energy Materials, 2015, 5, 1400736.	10.2	52
23	Efficient decommissioning and recycling of polymer solar cells: justification for use of silver. Energy and Environmental Science, 2014, 7, 1006-1012.	15.6	51
24	Matrix Organization and Merit Factor Evaluation as a Method to Address the Challenge of Finding a Polymer Material for Roll Coated Polymer Solar Cells. Advanced Energy Materials, 2015, 5, 1402186.	10.2	51
25	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.	2.4	43
26	Comparison of Fast Roll-to-Roll Flexographic, Inkjet, Flatbed, and Rotary Screen Printing of Metal Back Electrodes for Polymer Solar Cells. Advanced Engineering Materials, 2013, 15, 995-1001.	1.6	42
27	Carbon: The Ultimate Electrode Choice for Widely Distributed Polymer Solar Cells. Advanced Energy Materials, 2014, 4, 1400732.	10.2	36
28	The Organic Power Transistor: Roll-to-Roll Manufacture, Thermal Behavior, and Power Handling When Driving Printed Electronics. Advanced Engineering Materials, 2016, 18, 51-55.	1.6	35
29	Failure Modes and Fast Repair Procedures in High Voltage Organic Solar Cell Installations. Advanced Energy Materials, 2014, 4, 1301625.	10.2	22
30	Improving the Operational Stability of PBDTTTzC4 Polymer Solar Cells Modules by Electrode Modification. Advanced Engineering Materials, 2016, 18, 511-517.	1.6	17
31	Flow Synthesis of Silver Nanowires for Semitransparent Solar Cell Electrodes: A Life Cycle Perspective. ChemSusChem, 2016, 9, 893-899.	3.6	15
32	Low-temperature side-chain cleavage and decarboxylation of polythiophene esters by acid catalysis. Journal of Polymer Science Part A, 2012, 50, 1127-1132.	2.5	14
33	Incineration of organic solar cells: efficient end of life management by quantitative silver recovery. Energy and Environmental Science, 2016, 9, 857-861.	15.6	14
34	A round robin study of polymer solar cells and small modules across China. Solar Energy Materials and Solar Cells, 2013, 117, 382-389.	3.0	10
35	Round-Robin Studies on Roll-Processed ITO-free Organic Tandem Solar Cells Combined with Inter-Laboratory Stability Studies. Energy Technology, 2015, 3, 423-427.	1.8	7
36	X-Ray Nanovision: Enabling Flexible Polymer Tandem Solar Cells by 3D Ptychographic Imaging (Adv.) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 5	10.2	