Kati E Miettunen

List of Publications by Year
in descending order

51 papers	2,313 citations	236612 25 h-index	205818 48 g-index
52 all docs	52 docs citations	52 times ranked	2773 citing authors

#	Article	IF	Citations
1	Device Physics of Dye Solar Cells. Advanced Materials, 2010, 22, E210-34.	11.1	371
2	Interpretation of Optoelectronic Transient and Charge Extraction Measurements in Dyeâ€Sensitized Solar Cells. Advanced Materials, 2013, 25, 1881-1922.	11.1	262
3	Review of stability for advanced dye solar cells. Energy and Environmental Science, 2010, 3, 418.	15.6	260
4	Review of materials and manufacturing options for large area flexible dye solar cells. Renewable and Sustainable Energy Reviews, 2011, 15, 3717-3732.	8.2	185
5	Nanostructured dye solar cells on flexible substrates-Review. International Journal of Energy Research, 2009, 33, 1145-1160.	2.2	109
6	Initial Performance of Dye Solar Cells on Stainless Steel Substrates. Journal of Physical Chemistry C, 2008, 112, 4011-4017.	1.5	54
7	Dye Solar Cells on ITO-PET Substrate with TiO[sub 2] Recombination Blocking Layers. Journal of the Electrochemical Society, 2009, 156, B876.	1.3	54
8	Nanocellulose aerogel membranes for optimal electrolyte filling in dye solar cells. Nano Energy, 2014, 8, 95-102.	8.2	51
9	Effect of electrolyte bleaching on the stability and performance of dye solar cells. Physical Chemistry Chemical Physics, 2014, 16, 6092.	1.3	50
10	Plantâ€Based Structures as an Opportunity to Engineer Optical Functions in Nextâ€Generation Light Management. Advanced Materials, 2022, 34, e2104473.	11.1	48
11	In situ image processing method to investigate performance and stability of dye solar cells. Solar Energy, 2012, 86, 331-338.	2.9	47
12	Effect of Nonuniform Generation and Inefficient Collection of Electrons on the Dynamic Photocurrent and Photovoltage Response of Nanostructured Photoelectrodes. Journal of Physical Chemistry C, 2008, 112, 20491-20504.	1.5	45
13	Metallic and plastic dye solar cells. Wiley Interdisciplinary Reviews: Energy and Environment, 2013, 2, 104-120.	1.9	45
14	Asymmetrical coffee rings from cellulose nanocrystals and prospects in art and design. Cellulose, 2019, 26, 491-506.	2.4	45
15	Stability of Dye Solar Cells with Photoelectrode on Metal Substrates. Journal of the Electrochemical Society, 2010, 157, B814.	1.3	39
16	Charge Transport and Photocurrent Generation Characteristics in Dye Solar Cells Containing Thermally Degraded N719 Dye Molecules. Journal of Physical Chemistry C, 2011, 115, 15598-15606.	1.5	39
17	A carbon gel catalyst layer for the roll-to-roll production of dye solar cells. Carbon, 2011, 49, 528-532.	5.4	36
18	Critical analysis on the quality of stability studies of perovskite and dye solar cells. Energy and Environmental Science, 2018, 11, 730-738.	15.6	35

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19	Encapsulation of commercial and emerging solar cells with focus on perovskite solar cells. Solar Energy, 2022, 237, 264-283.	2.9	35
20	Stabilization of metal counter electrodes for dye solar cells. Journal of Electroanalytical Chemistry, 2011, 653, 93-99.	1.9	32
21	Do Counter Electrodes on Metal Substrates Work with Cobalt Complex Based Electrolyte in Dye Sensitized Solar Cells?. Journal of the Electrochemical Society, 2013, 160, H132-H137.	1.3	32
22	Benefits of bifacial solar cells combined with low voltage power grids at high latitudes. Renewable and Sustainable Energy Reviews, 2022, 161, 112354.	8.2	32
23	Two-Dimensional Time-Dependent Numerical Modeling of Edge Effects in Dye Solar Cells. Journal of Physical Chemistry C, 2011, 115, 7019-7031.	1.5	31
24	Cellulose Nanocrystal Aerogels as Electrolyte Scaffolds for Glass and Plastic Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2019, 2, 5635-5642.	2.5	29
25	Long-Term Stability of Dye-Sensitized Solar Cells Assembled with Cobalt Polymer Gel Electrolyte. Journal of Physical Chemistry C, 2017, 121, 17577-17585.	1.5	28
26	Spatial distribution and decrease of dye solar cell performance induced by electrolyte filling. Electrochemistry Communications, 2009, 11, 25-27.	2.3	21
27	Effect of molecular filtering and electrolyte composition on the spatial variation in performance of dye solar cells. Journal of Electroanalytical Chemistry, 2012, 664, 63-72.	1.9	19
28	The Effect of Electrolyte Purification on the Performance and Long-Term Stability of Dye-Sensitized Solar Cells. Journal of the Electrochemical Society, 2015, 162, H661-H670.	1.3	18
29	Recent progress in flexible dye solar cells. Wiley Interdisciplinary Reviews: Energy and Environment, 2018, 7, e302.	1.9	18
30	Nanocellulose and Nanochitin Cryogels Improve the Efficiency of Dye Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 10257-10265.	3.2	18
31	Segmented Cell Design for Improved Factoring of Aging Effects in Dye Solar Cells. Journal of Physical Chemistry C, 2009, 113, 10297-10302.	1.5	17
32	Biobased aerogels with different surface charge as electrolyte carrierÂmembranes in quantum dot-sensitized solar cell. Cellulose, 2018, 25, 3363-3375.	2.4	17
33	Stability of cobalt complex based dye solar cells with PEDOT and Pt catalysts and different electrolyte concentrations. Electrochimica Acta, 2020, 335, 135652.	2.6	16
34	Testing dyeâ€sensitized solar cells in harsh northern outdoor conditions. Energy Science and Engineering, 2018, 6, 187-200.	1.9	15
35	Thin Film Nano Solar Cellsâ€"From Device Optimization to Upscaling. Journal of Nanoscience and Nanotechnology, 2010, 10, 1078-1084.	0.9	14
36	Application of dye-sensitized and perovskite solar cells on flexible substrates. Flexible and Printed Electronics, 2018, 3, 013002.	1.5	14

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37	Electrolyte membranes based on ultrafine fibers of acetylated cellulose for improved and long-lasting dye-sensitized solar cells. Cellulose, 2019, 26, 6151-6163.	2.4	14
38	Eco-design for dye solar cells: From hazardous waste to profitable recovery. Journal of Cleaner Production, 2021, 320, 128743.	4.6	14
39	The effect of electrolyte filling method on the performance of dye-sensitized solar cells. Journal of Electroanalytical Chemistry, 2012, 677-680, 41-49.	1.9	13
40	Comparison of Plastic Based Counter Electrodes for Dye Sensitized Solar Cells. Journal of the Electrochemical Society, 2012, 159, H656-H661.	1.3	12
41	Extreme sensitivity of dye solar cells to UVâ€induced degradation. Energy Science and Engineering, 2021, 9, 19-26.	1.9	11
42	Biocarbon from brewery residues as a counter electrode catalyst in dye solar cells. Electrochimica Acta, 2021, 368, 137583.	2.6	10
43	Insights into corrosion in dye solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 1045-1056.	4.4	9
44	Quasi-solid electrolyte with polyamidoamine dendron modified-talc applied to dye-sensitized solar cells. Journal of Power Sources, 2016, 325, 161-170.	4.0	9
45	Low Cost Ferritic Stainless Steel in Dye Sensitized Solar Cells with Cobalt Complex Electrolyte. Journal of the Electrochemical Society, 2014, 161, H138-H143.	1.3	8
46	Analysis of dye degradation products and assessment of the dye purity in dye-sensitized solar cells. Rapid Communications in Mass Spectrometry, 2015, 29, 2245-2251.	0.7	8
47	Gel Electrolytes with Polyamidopyridine Dendron Modified Talc for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 20454-20466.	4.0	8
48	Stabilizing Dendron-Modified Talc-Based Electrolyte for Quasi-Solid Dye-Sensitized Solar Cell. Electrochimica Acta, 2017, 228, 413-421.	2.6	7
49	The state of external circuit affects the stability of dye-sensitized solar cells. Electrochimica Acta, 2018, 275, 59-66.	2.6	5
50	From identification of electrolyte degradation rates to lifetime estimations in dye solar cells with iodine and cobalt redox couples. , 0, , .		2
51	Predictive Modeling of Dye Solar Cell Degradation. Solar Rrl, 2022, 6, .	3.1	2