Stephen Askins

List of Publications by Year
in descending order

49 papers	558 citations	759233 12 h-index	642732 23 g-index
50 all docs	50 docs citations	50 times ranked	331 citing authors

#	Article	IF	Citations
1	Array of micro multijunction solar cells interconnected by conductive inks. Solar Energy Materials and Solar Cells, 2022, 240, 111693.	6.2	2
2	Demonstration of molded glass primary optics for high-efficiency micro-concentrator photovoltaics. Solar Energy Materials and Solar Cells, 2022, 245, 111882.	6.2	3
3	Novel Interconnection Method for Micro-CPV Solar Cells. , 2021, , .		0
4	Comparison of achromatic doublet on glass Fresnel lenses for concentrator photovoltaics. Optics Express, 2021, 29, 20601.	3.4	3
5	Roll-to-roll nanoimprint lithography of high efficiency Fresnel lenses for micro-concentrator photovoltaics. Optics Express, 2021, 29, 34135.	3.4	10
6	Industrialization of hybrid Si/IIIâ€"V and translucent planar microâ€tracking modules. Progress in Photovoltaics: Research and Applications, 2021, 29, 819-834.	8.1	17
7	Molded glass arrays for micro-CPV applications with very good performance. AIP Conference Proceedings, 2020, , .	0.4	3
8	Towards industrialization of planar microtracking photovoltaic panels. AIP Conference Proceedings, 2019, , .	0.4	4
9	Standardization of the CPV technology in 2019 â€" The path to new CPV technologies. AIP Conference Proceedings, 2019, , .	0.4	4
10	Low-cost solar-encapsulant-on-glass Fresnel lenses for CPV applications. AIP Conference Proceedings, 2019, , .	0.4	1
11	Outdoor experimental characterization of novel high-efficiency high-concentrator photovoltaic (HCPV) modules using achromatic doublet on glass (ADG) Fresnel lenses as primary optics. AIP Conference Proceedings, 2019, , .	0.4	1
12	Spectral Impact on Multijunction Solar Cells Obtained by Means of Component Cells of a Different Technology. IEEE Journal of Photovoltaics, 2018, 8, 646-653.	2.5	8
13	Technical specification IEC TS 62989:2018 â€" Primary optics for concentrator photovoltaic systems. AIP Conference Proceedings, 2018, , .	0.4	0
14	From component to multi-junction solar cells for spectral monitoring. AIP Conference Proceedings, 2018, , .	0.4	1
15	Impact of the temperature dependence of CPV optics transmittance on the current mismatch of multi-junction solar cells. AIP Conference Proceedings, 2018, , .	0.4	2
16	Improvements in the manufacturing process of achromatic doublet on glass (ADG) Fresnel lens. AIP Conference Proceedings, 2018, , .	0.4	3
17	Experimental analysis and simulation of a production line for <scp>CPV</scp> modules: impact of defects, misalignments, and binning of receivers. Energy Science and Engineering, 2017, 5, 257-269.	4.0	12
18	A review of the promises and challenges of micro-concentrator photovoltaics. AIP Conference Proceedings, 2017, , .	0.4	55

#	ARTICLE	IF	CITATIONS
19	Indoor Experimental Assessment of the Efficiency and Irradiance Spot of the Achromatic Doublet on Glass (ADG) Fresnel Lens for Concentrating Photovoltaics. Journal of Visualized Experiments, 2017, , .	0.3	3
20	Experimental characterization of achromatic doublet on glass (ADG) Fresnel lenses. AIP Conference Proceedings, 2017, , .	0.4	9
21	Determination of spectral variations by means of component cells useful for CPV rating and design. Progress in Photovoltaics: Research and Applications, 2016, 24, 663-679.	8.1	23
22	Rating of CPV modules: Results of module round robins. AIP Conference Proceedings, 2016, , .	0.4	4
23	Hybrid dome with total internal reflector as a secondary optical element for CPV. AIP Conference Proceedings, 2016, , .	0.4	5
24	Measuring primary lens efficiency: A proposal for standardization. AIP Conference Proceedings, 2016, , .	0.4	4
25	A novel achromatic Fresnel lens for high concentrating photovoltaic systems. AIP Conference Proceedings, 2016, , .	0.4	7
26	A manufacturable achromatic fresnel lens for CPV. , 2016, , .		0
27	Using a multi-junction cell receiver as self-detector for spectrally-resolved optical efficiency measurement of concentrators. , 2016, , .		0
28	Assessment of the optical efficiency of a primary lens to be used in a CPV system. Solar Energy, 2016, 134, 406-415.	6.1	33
29	Design and modeling of a cost-effective achromatic Fresnel lens for concentrating photovoltaics. Optics Express, 2016, 24, A1245.	3.4	35
30	Tuning the assembling process of modules by the use of proper equipment. AIP Conference Proceedings, 2016, , .	0.4	1
31	Spectral study and classification of worldwide locations considering several multijunction solar cell technologies. Progress in Photovoltaics: Research and Applications, 2016, 24, 1214-1228.	8.1	15
32	Evaluation of misalignments within a concentrator photovoltaic module by the module optical analyzer: A case of study concerning temperature effects on the module performance. Japanese Journal of Applied Physics, 2015, 54, 08KE08.	1.5	8
33	Understanding causes and effects of non-uniform light distributions on multi-junction solar cells: Procedures for estimating efficiency losses. AIP Conference Proceedings, 2015, , .	0.4	14
34	Spectral network based on component cells under the SOPHIA European project. AIP Conference Proceedings, 2015, , .	0.4	3
35	Temperature effects on two-stage optics made of silicone. AIP Conference Proceedings, 2014, , .	0.4	2
36	Atmospheric parameters, spectral indexes and their relation to CPV spectral performance. AIP Conference Proceedings, 2014, , .	0.4	2

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37	Characterization of CPV arrays based on differences on their thermal resistances. AIP Conference Proceedings, 2014, , .	0.4	13
38	Module optical analyzer: Identification of defects on the production line. AIP Conference Proceedings, 2014, , .	0.4	12
39	Experimental analysis of a photovoltaic concentrator based on a single reflective stage immersed in an optical fluid. Progress in Photovoltaics: Research and Applications, 2014, 22, 1213-1225.	8.1	8
40	Currentâ€matching estimation for multijunction cells within a CPV module by means of component cells. Progress in Photovoltaics: Research and Applications, 2013, 21, 1478-1488.	8.1	106
41	Characterizing FluidReflex Optical Transfer Function. Japanese Journal of Applied Physics, 2012, 51, 10ND06.	1.5	2
42	Characterization Capabilities of Solar Simulators for Concentrator Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10ND12.	1.5	4
43	Probing the effects of non-uniform light beams and chromatic aberration on the performance of concentrators using multijunction cells. , 2012, , .		3
44	Indoor characterization at production scale: 200 kWp of CPV solar simulator measurements. , 2012, , .		5
45	Concentration photovoltaic optical system irradiance distribution measurements and its effect on multiâ€junction solar cells. Progress in Photovoltaics: Research and Applications, 2012, 20, 423-430.	8.1	65
46	Characterizing FluidReflex Optical Transfer Function. Japanese Journal of Applied Physics, 2012, 51, 10ND06.	1.5	2
47	Characterization Capabilities of Solar Simulators for Concentrator Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10ND12.	1.5	6
48	Quantifying the Solar Simulator Requirements for Indoor Testing of CPV Modules. , 2011, , .		1
49	Effects of Temperature on Hybrid Lens Performance. AIP Conference Proceedings, 2011, , .	0.4	31