Stephen Askins

List of Publications by Year
in descending order

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Version: 2024-02-01

49	558	759233 12	642732 23
papers	citations	h-index	g-index

50	50	50	331
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	A review of the promises and challenges of micro-concentrator photovoltaics. AIP Conference Proceedings, 2017, , .	0.4	55
4	Design and modeling of a cost-effective achromatic Fresnel lens for concentrating photovoltaics. Optics Express, 2016, 24, A1245.	3.4	35
5	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
6	Effects of Temperature on Hybrid Lens Performance. AIP Conference Proceedings, 2011, , .	0.4	31
7	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
8	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
9	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
10	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
11	Characterization of CPV arrays based on differences on their thermal resistances. AIP Conference Proceedings, 2014, , .	0.4	13
12	Module optical analyzer: Identification of defects on the production line. AIP Conference Proceedings, 2014, , .	0.4	12
13	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
14	Roll-to-roll nanoimprint lithography of high efficiency Fresnel lenses for micro-concentrator photovoltaics. Optics Express, 2021, 29, 34135.	3.4	10
15	Experimental characterization of achromatic doublet on glass (ADG) Fresnel lenses. AIP Conference Proceedings, 2017, , .	0.4	9
16	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
17	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
18	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

#	Article	IF	Citations
19	A novel achromatic Fresnel lens for high concentrating photovoltaic systems. AIP Conference Proceedings, 2016, , .	0.4	7
20	Characterization Capabilities of Solar Simulators for Concentrator Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10ND12.	1.5	6
21	Indoor characterization at production scale: 200 kWp of CPV solar simulator measurements. , 2012, , .		5
22	Hybrid dome with total internal reflector as a secondary optical element for CPV. AIP Conference Proceedings, 2016, , .	0.4	5
23	Characterization Capabilities of Solar Simulators for Concentrator Photovoltaic Modules. Japanese Journal of Applied Physics, 2012, 51, 10ND12.	1.5	4
24	Rating of CPV modules: Results of module round robins. AIP Conference Proceedings, 2016, , .	0.4	4
25	Measuring primary lens efficiency: A proposal for standardization. AIP Conference Proceedings, 2016, , .	0.4	4
26	Towards industrialization of planar microtracking photovoltaic panels. AIP Conference Proceedings, 2019, , .	0.4	4
27	Standardization of the CPV technology in 2019 â€“ The path to new CPV technologies. AIP Conference Proceedings, 2019, , .	0.4	4
28	Probing the effects of non-uniform light beams and chromatic aberration on the performance of concentrators using multijunction cells. , 2012, , .		3
29	Spectral network based on component cells under the SOPHIA European project. AIP Conference Proceedings, 2015, , .	0.4	3
30	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
31	Improvements in the manufacturing process of achromatic doublet on glass (ADG) Fresnel lens. AIP Conference Proceedings, 2018, , .	0.4	3
32	Comparison of achromatic doublet on glass Fresnel lenses for concentrator photovoltaics. Optics Express, 2021, 29, 20601.	3.4	3
33	Molded glass arrays for micro-CPV applications with very good performance. AIP Conference Proceedings, 2020, , .	0.4	3
34	Demonstration of molded glass primary optics for high-efficiency micro-concentrator photovoltaics. Solar Energy Materials and Solar Cells, 2022, 245, 111882.	6.2	3
35	Characterizing FluidReflex Optical Transfer Function. Japanese Journal of Applied Physics, 2012, 51, 10ND06.	1.5	2
36	Temperature effects on two-stage optics made of silicone. AIP Conference Proceedings, 2014, , .	0.4	2

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37	Atmospheric parameters, spectral indexes and their relation to CPV spectral performance. AIP Conference Proceedings, 2014, , .	0.4	2
38	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
39	Characterizing FluidReflex Optical Transfer Function. Japanese Journal of Applied Physics, 2012, 51, 10ND06.	1.5	2
40	Array of micro multijunction solar cells interconnected by conductive inks. Solar Energy Materials and Solar Cells, 2022, 240, 111693.	6.2	2
41	Quantifying the Solar Simulator Requirements for Indoor Testing of CPV Modules. , 2011, , .		1
42	Tuning the assembling process of modules by the use of proper equipment. AIP Conference Proceedings, 2016, , .	0.4	1
43	From component to multi-junction solar cells for spectral monitoring. AIP Conference Proceedings, 2018, , .	0.4	1
44	Low-cost solar-encapsulant-on-glass Fresnel lenses for CPV applications. AIP Conference Proceedings, 2019, , .	0.4	1
45	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
46	A manufacturable achromatic fresnel lens for CPV. , 2016, , .		0
47	Using a multi-junction cell receiver as self-detector for spectrally-resolved optical efficiency measurement of concentrators. , 2016, , .		0
48	Technical specification IEC TS 62989:2018 â€“ Primary optics for concentrator photovoltaic systems. AIP Conference Proceedings, 2018, , .	0.4	0
49	Novel Interconnection Method for Micro-CPV Solar Cells. , 2021, , .		0