Jesus Fernandez-Reche

List of Publications by Year
in descending order

59 papers	1,148 citations	516710 16 h-index	414414 32 g-index
59 all docs	59 docs citations	59 times ranked	761 citing authors

#	Article	IF	Citations
1	Test and evaluation of a solar powered gas turbine system. Solar Energy, 2006, 80, 1225-1230.	6.1	200
2	Performance Evaluation of the 200-kWth HiTRec-II Open Volumetric Air Receiver. Journal of Solar Energy Engineering, Transactions of the ASME, 2003, 125, 87-94.	1.8	124
3	Evaluation of the potential of central receiver solar power plants: Configuration, optimization and trends. Applied Energy, 2013, 112, 274-288.	10.1	99
4	Numerical and experimental evaluation and optimization of ceramic foam as solar absorber â€“ Single-layer vs multi-layer configurations. Applied Energy, 2018, 210, 351-375.	10.1	71
5	Modelling strategies for porous structures as solar receivers in central receiver systems: A review. Renewable and Sustainable Energy Reviews, 2019, 111, 15-33.	16.4	71
6	New approach for solar tracking systems based on computer vision, low cost hardware and deep learning. Renewable Energy, 2019, 133, 1158-1166.	8.9	48
7	Experimental results of gradual porosity volumetric air receivers with wire meshes. Renewable Energy, 2018, 122, 339-353.	8.9	41
8	Experimental Results of Gradual Porosity Wire Mesh Absorber for Volumetric Receivers. Energy Procedia, 2014, 49, 275-283.	1.8	36
9	Computational fluid dynamics evaluation of the operating conditions for a volumetric receiver installed in a solar tower. Energy, 2016, 94, 844-856.	8.8	25
10	Geometrical Assessment of Solar Concentrators using Close-range Photogrammetry. Energy Procedia, 2012, 30, 84-90.	1.8	22
11	A Regenerative Heat Storage System for Central Receiver Technology Working with Atmospheric Air. Energy Procedia, 2014, 49, 705-714.	1.8	22
12	Numerical determination of the heat transfer coefficient for volumetric air receivers with wire meshes. Solar Energy, 2018, 162, 317-329.	6.1	21
13	Inverse Monte Carlo Ray-Tracing method (IMCRT) applied to line-focus reflectors. Solar Energy, 2016, 124, 184-197.	6.1	19
14	Solar extinction measurement system based on digital cameras. Application to solar tower plants. Renewable Energy, 2018, 125, 648-654.	8.9	19
15	Homogeneous equivalent model coupled with P1-approximation for dense wire meshes volumetric air receivers. Renewable Energy, 2019, 135, 908-919.	8.9	18
16	Comparison of color gamuts among several types of paper with the same printing technology. Color Research and Application, 2009, 34, 330-336.	1.6	17
17	Estimate of thermal fatigue lifetime for the INCONEL 625lCF plate while exposed to concentrated solar radiation. Revista De Metalurgia, 2011, 47, 112-125.	0.5	17
18	Reflectance measurement in solar tower heliostats fields. Solar Energy, 2006, 80, 779-786.	6.1	16

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19	Atmospheric extinction levels of solar radiation at Plataforma Solar de AlmerÃa. Application to solar thermal electric plants. Energy, 2018, 145, 400-407.	8.8	16
20	Experimental study of innovative periodic cellular structures as air volumetric absorbers. Renewable Energy, 2022, 184, 391-404.	8.9	16
21	Analysis of solar tower plant performance influenced by atmospheric attenuation at different temporal resolutions related to aerosol optical depth. Solar Energy, 2017, 157, 803-810.	6.1	15
22	One year of solar extinction measurements at Plataforma Solar de AlmerÃa. Application to solar tower plants. Renewable Energy, 2019, 136, 1002-1011.	8.9	15
23	Intra-hour energy potential forecasting in a central solar power plant receiver combining Meteosat images and atmospheric extinction. Energy, 2019, 188, 116034.	8.8	14
24	Experimental and Numerical Characterization of Ceramic and Metallic Absorbers under Lab-scale Conditions. Energy Procedia, 2015, 69, 523-531.	1.8	13
25	Design, Manufacturing and Characterization of Linear Fresnel Reflectorâ€™s Facets. Energies, 2019, 12, 2795.	3.1	13
26	Atmospheric extinction levels of solar radiation using aerosol optical thickness satellite data. Validation methodology with measurement system. Renewable Energy, 2020, 149, 1120-1132.	8.9	13
27	Modeling solar extinction using artificial neural networks. Application to solar tower plants. Energy, 2020, 199, 117432.	8.8	13
28	Experimental system for long term aging of highly irradiated tube type receivers. Solar Energy, 2014, 105, 303-313.	6.1	10
29	Numerical simulation of convective heat transfer for inline and stagger stacked plain-weave wire mesh screens and comparison with a local thermal non-equilibrium model. AIP Conference Proceedings, 2017, , .	0.4	8
30	Characterization of Solar-Aged Porous Silicon Carbide for Concentrated Solar Power Receivers. Materials, 2021, 14, 4627.	2.9	8
31	Modified geometry of line-focus collectors with round absorbers by means of the inverse MCRT method. Solar Energy, 2016, 139, 608-621.	6.1	7
32	On building-up a yearly characterization of a heliostat field: A new methodology and an application example. Solar Energy, 2018, 173, 578-589.	6.1	7
33	Machine learning for solar trackers. AIP Conference Proceedings, 2019, , .	0.4	7
34	Simplifying the measurement of high solar irradiance on receivers. Application to solar tower plants. Renewable Energy, 2019, 138, 551-561.	8.9	7
35	Airborne soiling measurements of entire solar fields with Qfly. AIP Conference Proceedings, 2020, , .	0.4	7
36	Standards for components in concentrating solar thermal power plants - status of the Spanish working group. AIP Conference Proceedings, 2016, , .	0.4	6

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37	Experimental evaluation of innovative morphological configurations for open volumetric receiver technology. AIP Conference Proceedings, 2019, , .	0.4	6
38	Experimental and numerical evaluation of a small array of ceramic foam volumetric absorbers. AIP Conference Proceedings, 2019, , .	0.4	6
39	Shadow-camera based solar nowcasting system for shortest-term forecasts. Meteorologische Zeitschrift, 2019, 28, 255-270.	1.0	6
40	Solar tower power mockup for the assessment of advanced control techniques. Renewable Energy, 2020, 149, 682-690.	8.9	5
41	A New Methodology for Building-Up a Robust Model for Heliostat Field Flux Characterization. Energies, 2017, 10, 730.	3.1	4
42	An improved methodology for heliostat testing and evaluation at the Plataforma Solar de AlmerÃa. AIP Conference Proceedings, 2017, , .	0.4	4
43	Evolution of the aerosol extinction coefficient at 100â€...m above ground during an episode of Saharan dust intrusion as derived from data registered by a ceilometer in AlmerÃa (SE Spain). AIP Conference Proceedings, 2018, , .	0.4	4
44	Scalable heliostat calibration system (SHORT) - Calibrate a whole heliostat field in a single night. AIP Conference Proceedings, 2018, , .	0.4	4
45	A way to increase parabolic trough plant yield by roughly 2% using all sky imager derived DNI maps. AIP Conference Proceedings, 2020, , .	0.4	4
46	Nowcasting System Based on Sky Camera Images to Predict the Solar Flux on the Receiver of a Concentrated Solar Plant. Remote Sensing, 2022, 14, 1602.	4.0	4
47	Inverse MCRT Method for Obtaining Solar Concentrators with Quasi-Planar Flux Distribution. Energy Procedia, 2015, 69, 208-217.	1.8	3
48	Solar aging of receivers made of nickel super alloys. AIP Conference Proceedings, 2018, , .	0.4	3
49	Modelling atmospheric attenuation at different AOD time-scales in yield performance of solar tower plants. AIP Conference Proceedings, 2018, , .	0.4	3
50	Color reproduction on inkjet printers and paper colorimetric properties. , 2003, 5293, 101.		2
51	Concentrating PV: An Alternative to Calorimeters for Measuring High Solar Flux Densities. Journal of Solar Energy Engineering, Transactions of the ASME, 2008, 130, .	1.8	2
52	Analyzing Solar Power Plant Performance Through Data Mining. Journal of Solar Energy Engineering, Transactions of the ASME, 2008, 130, .	1.8	2
53	Interannual variation of measured atmospheric solar radiation extinction levels. Sustainable Energy Technologies and Assessments, 2022, 51, 101991.	2.7	2
54	Compact system for fast on-line geometry characterization of facets for solar concentrators. AIP Conference Proceedings, 2022, , .	0.4	2

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55	Non-selective coating for porous materials used for solar thermal applications. AIP Conference Proceedings, 2019, , .	0.4	1
56	Study of cyclic thermal aging of tube type receivers as a function of the duration of the cycle. AIP Conference Proceedings, 2017, , .	0.4	0
57	Spatial distribution of microstructure of solar receivers exposed to high solar fluxes. AIP Conference Proceedings, 2018, , .	0.4	0
58	CFD numerical model for open volumetric receivers with graded porosity dense wire meshes and experimental validation. AIP Conference Proceedings, 2019, , .	0.4	0
59	Emittance of materials at high temperatures for solar receivers. Infrared Physics and Technology, 2019, 102, 103052.	2.9	0