Jorge Aguilera

List of Publications by Year
in descending order

53 papers	1,943 citations	257450 24 h-index	254184 43 g-index
54 all docs	54 docs citations	54 times ranked	1747 citing authors

#	Article	IF	Citations
1	Forecasting photovoltaic array power production subject to mismatch losses. Solar Energy, 2010, 84, 1301-1309.	6.1	203
2	Application and validation of algebraic methods to predict the behaviour of crystalline silicon PV modules in Mediterranean climates. Solar Energy, 2007, 81, 1396-1408.	6.1	144
3	Design of an accurate, low-cost autonomous data logger for PV system monitoring using Arduinoâ„¢ that complies with IEC standards. Solar Energy Materials and Solar Cells, 2014, 130, 529-543.	6.2	126
4	A new estimation method of irradiance on a partially shaded PV generator in grid-connected photovoltaic systems. Renewable Energy, 2008, 33, 2048-2056.	8.9	115
5	Generation of hourly irradiation synthetic series using the neural network multilayer perceptron. Solar Energy, 2002, 72, 441-446.	6.1	107
6	Univer Project. A grid connected photovoltaic system of 200kWp at JaÃ©n University. Overview and performance analysis. Solar Energy Materials and Solar Cells, 2007, 91, 670-683.	6.2	101
7	A new approach for sizing stand alone photovoltaic systems based in neural networks. Solar Energy, 2005, 78, 313-319.	6.1	76
8	An application of the multilayer perceptron: Solar radiation maps in Spain. Solar Energy, 2005, 79, 523-530.	6.1	67
9	The internal rate of return of photovoltaic grid-connected systems: A comprehensive sensitivity analysis. Renewable Energy, 2010, 35, 101-111.	8.9	66
10	Comparative assessment of the spectral impact on the energy yield of high concentrator and conventional photovoltaic technology. Solar Energy Materials and Solar Cells, 2016, 147, 185-197.	6.2	60
11	Changing photovoltaic array interconnections to reduce mismatch losses: a case study. , 2010, , .		58
12	An experimental comparison between commercial hybrid PV-T and simple PV systems intended for BIPV. Renewable and Sustainable Energy Reviews, 2018, 93, 110-120.	16.4	51
13	Tables for the estimation of the internal rate of return of photovoltaic grid-connected systems. Renewable and Sustainable Energy Reviews, 2007, 11, 447-466.	16.4	50
14	Economics of seasonal photovoltaic soiling and cleaning optimization scenarios. Energy, 2021, 215, 119018.	8.8	48
15	Video-sharing educational tool applied to the teaching in renewable energy subjects. Computers and Education, 2014, 73, 160-177.	8.3	45
16	A bankable method of assessing the performance of a CPV plant. Applied Energy, 2014, 118, 1-11.	10.1	45
17	Modelling the influence of atmospheric conditions on the outdoor real performance of a CPV (Concentrated Photovoltaic) module. Energy, 2014, 70, 239-250.	8.8	44
18	Recurrent Neural Supervised Models for Generating Solar Radiation Synthetic Series. Journal of Intelligent and Robotic Systems: Theory and Applications, 2001, 31, 201-221.	3.4	43

#	Article	IF	Citations
19	Is the average photon energy a unique characteristic of the spectral distribution of global irradiance?. Solar Energy, 2017, 149, 32-43.	6.1	41
20	A comprehensive method for estimating energy losses due to shading of GC-BIPV systems using monitoring data. Solar Energy, 2012, 86, 2397-2404.	6.1	34
21	Cradle-to-cradle approach in the life cycle of silicon solar photovoltaic panels. Journal of Cleaner Production, 2017, 168, 51-59.	9.3	33
22	CPV standardization: An overview. Renewable and Sustainable Energy Reviews, 2010, 14, 518-523.	16.4	29
23	Tools for the profitability analysis of grid-connected photovoltaics. Progress in Photovoltaics: Research and Applications, 2002, 10, 555-570.	8.1	28
24	Characterization of Concentrating Photovoltaic modules by cooperative competitive Radial Basis Function Networks. Expert Systems With Applications, 2013, 40, 1599-1608.	7.6	25
25	Feasibility evaluation of residential photovoltaic self-consumption projects in Peru. Renewable Energy, 2019, 136, 414-427.	8.9	25
26	Lessons learned from the field analysis of PV installations in the Saharawi refugee camps after 10 years of operation. Renewable and Sustainable Energy Reviews, 2018, 93, 100-109.	16.4	24
27	CPV module electric characterisation by artificial neural networks. Renewable Energy, 2015, 78, 173-181.	8.9	23
28	Influence of Operation and Maintenance expenditures in the feasibility of photovoltaic projects: The case of a tracking pv plant in Spain. Energy Policy, 2018, 121, 506-518.	8.8	22
29	MEFES: An evolutionary proposal for the detection of exceptions in subgroup discovery. An application to Concentrating Photovoltaic Technology. Knowledge-Based Systems, 2013, 54, 73-85.	7.1	18
30	A set of principles for applying Circular Economy to the PV industry: Modeling a closed-loop material cycle system for crystalline photovoltaic panels. Sustainable Production and Consumption, 2021, 28, 164-179.	11.0	17
31	Estimation of the potential array output charge in the performance analysis of stand-alone photovoltaic systems without MPPT (Case study: Mediterranean climate). Solar Energy, 2009, 83, 1985-1997.	6.1	16
32	Procedure to carry out quality checks in photovoltaic grid-connected systems: Six cases of study. Applied Energy, 2011, 88, 2863-2870.	10.1	16
33	DC energy yield prediction in large monocrystalline and polycrystalline PV plants: Time-domain integration of Osterwald's model. Energy, 2016, 114, 951-960.	8.8	16
34	A reference-module-based procedure for outdoor estimation of crystalline silicon PV module peak power. Progress in Photovoltaics: Research and Applications, 2006, 14, 77-87.	8.1	15
35	Measures used to protect people exposed to a PV generator: 'univer project'. Progress in Photovoltaics: Research and Applications, 2001, 9, 57-67.	8.1	13
36	RMS Current of a Photovoltaic Generator in Grid-Connectedcmd="newline"PV Systems: Definition and Application. International Journal of Photoenergy, 2008, 2008, 1-7.	2.5	13

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37	A differential evolution proposal for estimating the maximum power delivered by CPV modules under real outdoor conditions. Expert Systems With Applications, 2015, 42, 5452-5462.	7.6	13
38	An Assessment on Simple Modeling Approaches to the Electric Behavior of Two CIS PV Modules in a Sunny Climate. Journal of Solar Energy Engineering, Transactions of the ASME, 2009, 131, .	1.8	12
39	Rural photovoltaic electrification programme on the Bolivian high plateau. Progress in Photovoltaics: Research and Applications, 1996, 4, 77-84.	8.1	10
40	Sensitivity Analysis on Some Profitability Indices for Photovoltaic Grid–Connected Systems on Buildings: The Case of Two Top Photovoltaic European Areas. Journal of Solar Energy Engineering, Transactions of the ASME, 2013, 135, .	1.8	10
41	Design of the back-up system in Patio 2.12 photovoltaic installation. Energy and Buildings, 2014, 83, 130-139.	6.7	10
42	Analysing Concentrating Photovoltaics Technology Through the Use of Emerging Pattern Mining. Advances in Intelligent Systems and Computing, 2017, , 334-344.	0.6	9
43	A neural network approach for generating solar irradiation artificial series. Lecture Notes in Computer Science, 1999, , 874-883.	1.3	7
44	Spectral characterization of the solar resource of a sunny inland site for flat plate and concentrating PV systems. Renewable Energy, 2017, 101, 1169-1179.	8.9	6
45	Experimental Evaluation of a Spectral Index to Characterize Temporal Variations in the Direct Normal Irradiance Spectrum. Applied Sciences (Switzerland), 2021, 11, 897.	2.5	4
46	Characterisation of charge voltage of lead-acid batteries: application to the charge control strategy in photovoltaic systems. Progress in Photovoltaics: Research and Applications, 2006, 14, 721-732.	8.1	2
47	Analysis and characterization of an outdoor CPV system comparative with other PV technologies. , 2012, , .		2
48	A method for evaluating shading losses involved in a GC-BIPV using real data. , 2012, , .		1
49	Universidad Verde-200 kWp grid connected PV system. , 0, , .		0
50	An evolutionary fuzzy system for the detection of exceptions in subgroup discovery. , 2013, , .		0
51	Estimating the Maximum Power Delivered by Concentrating Photovoltaics Technology Through Atmospheric Conditions Using a Differential Evolution Approach. Lecture Notes in Computer Science, 2016, , 273-282.	1.3	0
52	A Performance Study of Concentrating Photovoltaic Modules Using Neural Networks: An Application with CO2RBFN. Advances in Intelligent Systems and Computing, 2013, , 439-448.	0.6	0
53	Rural photovoltaic electrification programme on the Bolivian high plateau. Progress in Photovoltaics: Research and Applications, 1996, 4, 77-84.	8.1	0