Eduardo Zarza

List of Publications by Year
in descending order

49 papers	3,727 citations	236925 25 h-index	254184 43 g-index
49 all docs	49 docs citations	49 times ranked	2383 citing authors

#	Article	IF	Citations
1	Parabolic-trough solar collectors and their applications. Renewable and Sustainable Energy Reviews, 2010, 14, 1695-1721.	16.4	865
2	Advances in Parabolic Trough Solar Power Technology. Journal of Solar Energy Engineering, Transactions of the ASME, 2002, 124, 109-125.	1.8	677
3	Direct steam generation in parabolic troughs: Final results and conclusions of the DISS project. Energy, 2004, 29, 635-644.	8.8	205
4	INDITEP: The first pre-commercial DSG solar power plant. Solar Energy, 2006, 80, 1270-1276.	6.1	165
5	Applied research concerning the direct steam generation in parabolic troughs. Solar Energy, 2003, 74, 341-351.	6.1	162
6	Thermal analysis of solar receiver pipes with superheated steam. Applied Energy, 2013, 103, 73-84.	10.1	119
7	Optical and thermal performance of large-size parabolic-trough solar collectors from outdoor experiments: A test method and a case study. Energy, 2014, 70, 456-464.	8.8	116
8	Analysis of the experimental behaviour of a 100ÂkWth latent heat storage system for direct steam generation in solar thermal power plants. Applied Thermal Engineering, 2010, 30, 2643-2651.	6.0	107
9	Modeling direct steam generation in solar collectors with multiphase CFD. Applied Energy, 2014, 113, 1338-1348.	10.1	91
10	Thermal analysis and design of a volumetric solar absorber depending on the porosity. Renewable Energy, 2014, 62, 116-128.	8.9	90
11	Control concepts for direct steam generation in parabolic troughs. Solar Energy, 2005, 78, 301-311.	6.1	88
12	The DISS Project: Direct Steam Generation in Parabolic Trough Systems. Operation and Maintenance Experience and Update on Project Status. Journal of Solar Energy Engineering, Transactions of the ASME, 2002, 124, 126-133.	1.8	84
13	Theoretical basis and experimental facility for parabolic trough collectors at high temperature using gas as heat transfer fluid. Applied Energy, 2014, 135, 373-381.	10.1	77
14	Development Steps for Parabolic Trough Solar Power Technologies With Maximum Impact on Cost Reduction. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 371-377.	1.8	64
15	Advanced MED solar desalination plants. Configurations, costs, future â€" seven years of experience at the Plataforma Solar de Almeria (Spain). Desalination, 1997, 108, 51-58.	8.2	63
16	Direct steam generation in solar boilers. IEEE Control Systems, 2004, 24, 15-29.	0.8	59
17	Direct steam generation in parabolic-trough collectors: A review about the technology and a thermo-economic analysis of a hybrid system. Renewable and Sustainable Energy Reviews, 2017, 74, 453-473.	16.4	58
18	Control scheme for direct steam generation in parabolic troughs under recirculation operation mode. Solar Energy, 2006, 80, 1-17.	6.1	57

#	Article	IF	Citations
19	Saturated steam process with direct steam generating parabolic troughs. Solar Energy, 2006, 80, 1424-1433.	6.1	53
20	Performance model and annual yield comparison of parabolic-trough solar thermal power plants with either nitrogen or synthetic oil as heat transfer fluid. Energy Conversion and Management, 2014, 87, 238-249.	9.2	52
21	EuroTrough Design Issues and Prototype Testing at PSA. , 2001, , .		51
22	Parabolic-trough solar thermal power plant simulation scheme, multi-objective genetic algorithm calibration and validation. Solar Energy, 2012, 86, 531-540.	6.1	47
23	Uncertainty and global sensitivity analysis in the design of parabolic-trough direct steam generation plants for process heat applications. Applied Energy, 2014, 121, 233-244.	10.1	36
24	A new concept of solar thermal power plants with large-aperture parabolic-trough collectors and sCO2 as working fluid. Energy Conversion and Management, 2019, 199, 112030.	9.2	31
25	Modelling and testing of a solar-receiver system applied to high-temperature processes. Renewable Energy, 2015, 76, 608-618.	8.9	29
26	Lessons learnt during the design, construction and start-up phase of a molten salt testing facility. Applied Thermal Engineering, 2014, 62, 520-528.	6.0	27
27	PSA Vertical Axis Solar Furnace SF5. Energy Procedia, 2014, 49, 1511-1522.	1.8	26
28	Influence of the displacement of solar receiver tubes on the performance of a parabolic-trough collector. Energy, 2018, 159, 472-481.	8.8	26
29	New PSA high concentration solar furnace SF40. AIP Conference Proceedings, 2016, , .	0.4	25
30	Development of a rugged design of a high efficiency multi-stage solar still. Desalination, 1991, 82, 145-152.	8.2	22
31	Solar thermal desalination project at the Plataforma Solar de Almeria. Solar Energy Materials and Solar Cells, 1991, 24, 608-622.	0.4	19
32	SMALL-SIZED parabolic-trough solar collectors: Development of a test loop and evaluation of testing conditions. Energy, 2018, 152, 401-415.	8.8	17
33	Sensitivity Analysis of Saturated Steam Production in Parabolic Trough Collectors. Energy Procedia, 2012, 30, 765-774.	1.8	12
34	Thermal analysis and design of a solar prototype for high-temperature processes. International Journal of Heat and Mass Transfer, 2013, 56, 309-318.	4.8	12
35	Parabolic-trough concentrating solar power systems. , 2021, , 219-266.		12
36	Review and validation of Solar Thermal Electricity potential methodologies. Energy Conversion and Management, 2016, 126, 42-50.	9.2	11

#	Article	IF	Citations
37	Development Steps for Concentrating Solar Power Technologies With Maximum Impact on Cost Reduction: Results of the European ECOSTAR Study. , 2005, , 773.		10
38	Analysis of a failure mechanism in parabolic troughs receivers due to bellows cap overirradiation. Engineering Failure Analysis, 2020, 111, 104491.	4.0	10
39	Influence of Measurement Equipment on the Uncertainty of Performance Data from Test Loops for Concentrating Solar Collectors. Journal of Solar Energy Engineering, Transactions of the ASME, 2010, 132, .	1.8	8
40	Object-oriented modelling and simulation of ACUREX solar thermal power plant. Mathematical and Computer Modelling of Dynamical Systems, 2010, 16, 211-224.	2.2	8
41	Object oriented modelling and simulation of parabolic trough collectors with modelica. Mathematical and Computer Modelling of Dynamical Systems, 2008, 14, 361-375.	2.2	7
42	Test bench HEATREC for heat loss measurement on solar receiver tubes. AIP Conference Proceedings, 2016, , .	0.4	7
43	PTTL â€“ A Life-size Test Loop for Parabolic Trough Collectors. Energy Procedia, 2014, 49, 136-144.	1.8	5
44	Liquid Crystals: A Different Approach for Storing Latent Energy in a DSG Plant. Energy Procedia, 2015, 69, 1014-1022.	1.8	4
45	Modeling and Hourly Time-Scale Characterization of the Main Energy Parameters of Parabolic-Trough Solar Thermal Power Plants Using a Simplified Quasi-Dynamic Model. Energies, 2021, 14, 221.	3.1	4
46	Solar thermal power plants for the Spanish electricity market. International Journal of Energy Technology and Policy, 2007, 5, 261.	0.2	3
47	Development of a Small-Sized Parabolic-Trough Collector. Final Results of Capsol Project. , 2011, , .		3
48	Pressure Losses in Small-Sized Parabolic-Trough Solar Fields for Industrial Process Heat. , 2011, , .		2
49	Modelling of a Small-Sized Parabolic-Trough Solar Collector Field for Process Heat in the Cork Industry. , 2011, , .		1