Antoni Gil

List of Publications by Year
in descending order

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37	3,396	304368	395343
papers	citations	22 h-index	33 g-index

37	37	37	2458
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	State of the art on high temperature thermal energy storage for power generation. Part 1â€"Concepts, materials and modellization. Renewable and Sustainable Energy Reviews, 2010, 14, 31-55.	8.2	1,379
2	State of the art on high-temperature thermal energy storage for power generation. Part 2â€"Case studies. Renewable and Sustainable Energy Reviews, 2010, 14, 56-72.	8.2	553
3	Overview of thermal energy storage (TES) potential energy savings and climate change mitigation in Spain and Europe. Applied Energy, 2011, 88, 2764-2774.	5.1	154
4	Comparative life cycle assessment of thermal energy storage systems for solar power plants. Renewable Energy, 2012, 44, 166-173.	4.3	134
5	Advances in the valorization of waste and by-product materials as thermal energy storage (TES) materials. Renewable and Sustainable Energy Reviews, 2016, 59, 763-783.	8.2	109
6	Thermophysical characterization of a by-product from the steel industry to be used as a sustainable and low-cost thermal energy storage material. Energy, 2015, 89, 601-609.	4.5	108
7	Experimental characterization of a solid industrial by-product as material for high temperature sensible thermal energy storage (TES). Applied Energy, 2014, 113, 1261-1268.	5.1	84
8	A comprehensive review on sub-zero temperature cold thermal energy storage materials, technologies, and applications: State of the art and recent developments. Applied Energy, 2021, 288, 116555.	5.1	72
9	Experimental analysis of hydroquinone used as phase change material (PCM) to be applied in solar cooling refrigeration. International Journal of Refrigeration, 2014, 39, 95-103.	1.8	71
10	Review of Solar Thermal Storage Techniques and Associated Heat Transfer Technologies. Proceedings of the IEEE, 2012, 100, 525-538.	16.4	70
11	Material selection and testing for thermal energy storage in solar cooling. Renewable Energy, 2013, 57, 366-371.	4.3	69
12	Thermal behaviour of d-mannitol when used as PCM: Comparison of results obtained by DSC and in a thermal energy storage unit at pilot plant scale. Applied Energy, 2013, 111, 1107-1113.	5.1	62
13	Effect of d-mannitol polymorphism in its thermal energy storage capacity when it is used as PCM. Solar Energy, 2013, 94, 344-351.	2.9	62
14	Experimental analysis of the effective thermal conductivity enhancement of PCM using finned tubes in high temperature bulk tanks. Applied Thermal Engineering, 2018, 142, 736-744.	3.0	62
15	Experimental analysis of the effectiveness of a high temperature thermal storage tank for solar cooling applications. Applied Thermal Engineering, 2013, 54, 521-527.	3.0	51
16	Mg-Zn-Al Eutectic Alloys as Phase Change Material for Latent Heat Thermal Energy Storage. Energy Procedia, 2015, 69, 1006-1013.	1.8	50
17	Thermal Energy Storage Implementation Using Phase Change Materials for Solar Cooling and Refrigeration Applications. Energy Procedia, 2012, 30, 947-956.	1.8	43
18	Temperature distribution and heat losses in molten salts tanks for CSP plants. Solar Energy, 2016, 135, 518-526.	2.9	39

#	Article	IF	Citations
19	Zinc-rich eutectic alloys for high energy density latent heat storage applications. Journal of Alloys and Compounds, 2017, 705, 714-721.	2.8	36
20	Preliminary Optical, Thermal and Structural Design of a 100 kWth CSPonD Beam-down On-sun Demonstration Plant. Energy Procedia, 2015, 75, 2163-2168.	1.8	28
21	Thermo-physical Properties of a Steel-making by-product to be used as Thermal Energy Storage Material in a Packed-bed System. Energy Procedia, 2015, 69, 968-977.	1.8	27
22	Experimental investigation of Mg-Zn-Al metal alloys for latent heat storage application. Journal of Alloys and Compounds, 2016, 685, 724-732.	2.8	25
23	Experiments on a Lab Scale TES Unit using Eutectic Metal Alloy as PCM. Energy Procedia, 2015, 69, 769-778.	1.8	21
24	Dispatchable solar power using molten salt directly irradiated from above. Solar Energy, 2021, 220, 217-229.	2.9	15
25	Shell-and-Tube Latent Heat Thermal Energy Storage Design Methodology with Material Selection, Storage Performance Evaluation, and Cost Minimization. Applied Sciences (Switzerland), 2021, 11, 4180.	1.3	10
26	Performance enhancement of horizontal extension and thermal energy storage to an abandoned exploitation well and satellite LNG station integrated ORC system. Applied Thermal Engineering, 2022, 214, 118736.	3.0	10
27	Concentrated solar power on demand demonstration: Construction and operation of a 25 kW prototype. AIP Conference Proceedings, 2016, , .	0.3	9
28	CSPonD demonstrative project: Start-up process of a 25 kW prototype. AIP Conference Proceedings, 2017, , .	0.3	9
29	Concentrating Solar Power (CSP)â€"Thermal Energy Storage (TES) Advanced Concept Development and Demonstrations. Current Sustainable/Renewable Energy Reports, 2020, 7, 17-27.	1.2	8
30	Bayesian optimization for effective thermal conductivity measurement of thermal energy storage: An experimental and numerical approach. Journal of Energy Storage, 2022, 52, 104795.	3.9	6
31	Design of a 100 kW Concentrated Solar Power on Demand Volumetric Receiver With Integral Thermal Energy Storage Prototype. , 2015, , .		5
32	Optical property characterization of molten salt mixtures for thermal modeling of volumetrically absorbing solar receiver applications. AIP Conference Proceedings, 2017, , .	0.3	5
33	New Thermal Energy Storage Materials From Industrial Wastes: Compatibility of Steel Slag With the Most Common Heat Transfer Fluids. Journal of Solar Energy Engineering, Transactions of the ASME, 2015, 137, .	1.1	4
34	Industrial waste materials and by-products as thermal energy storage (TES) materials: A review. AIP Conference Proceedings, 2016, , .	0.3	4
35	New Thermal Energy Storage Materials From Industrial Wastes: Compatibility of Steel Slags With the Most Common Heat Transfer Fluids. , 2014, , .		1
36	Selection and Characterization of Recycled Materials for Sensible Thermal Energy Storage. , 2011, , .		1

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37	Parametric and Thermal Management Optimization of a Steel Slag Based Packed Bed Heat Storage. , 2015, , .		0