

# Aran Sol

## List of Publications by Citations

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34  
papers

1,672  
citations

23  
h-index

35  
g-index

35  
ext. papers

1,960  
ext. citations

7.2  
avg, IF

4.97  
L-index

#	Paper	IF	Citations
34	Stability of sugar alcohols as PCM for thermal energy storage. <i>Solar Energy Materials and Solar Cells</i> , <b>2014</b> , 126, 125-134	6.4	143
33	State of the art on gas/solid thermochemical energy storage systems and reactors for building applications. <i>Renewable and Sustainable Energy Reviews</i> , <b>2015</b> , 47, 386-398	16.2	126
32	Review on sorption materials and technologies for heat pumps and thermal energy storage. <i>Renewable Energy</i> , <b>2017</b> , 110, 3-39	8.1	126
31	Review of the T-history method to determine thermophysical properties of phase change materials (PCM). <i>Renewable and Sustainable Energy Reviews</i> , <b>2013</b> , 26, 425-436	16.2	113
30	Intercomparative tests on phase change materials characterisation with differential scanning calorimeter. <i>Applied Energy</i> , <b>2013</b> , 109, 415-420	10.7	104
29	Mainstreaming commercial CSP systems: A technology review. <i>Renewable Energy</i> , <b>2019</b> , 140, 152-176	8.1	103
28	Study on differential scanning calorimetry analysis with two operation modes and organic and inorganic phase change material (PCM). <i>Thermochimica Acta</i> , <b>2013</b> , 553, 23-26	2.9	103
27	Review on the methodology used in thermal stability characterization of phase change materials. <i>Renewable and Sustainable Energy Reviews</i> , <b>2015</b> , 50, 665-685	16.2	82
26	Corrosion of metal and metal alloy containers in contact with phase change materials (PCM) for potential heating and cooling applications. <i>Applied Energy</i> , <b>2014</b> , 125, 238-245	10.7	74
25	Corrosion of metal containers for use in PCM energy storage. <i>Renewable Energy</i> , <b>2015</b> , 76, 465-469	8.1	68
24	Corrosion of metals and salt hydrates used for thermochemical energy storage. <i>Renewable Energy</i> , <b>2015</b> , 75, 519-523	8.1	64
23	New proposed methodology for specific heat capacity determination of materials for thermal energy storage (TES) by DSC. <i>Journal of Energy Storage</i> , <b>2017</b> , 11, 1-6	7.8	60
22	Health hazard, cycling and thermal stability as key parameters when selecting a suitable phase change material (PCM). <i>Thermochimica Acta</i> , <b>2016</b> , 627-629, 39-47	2.9	41
21	Review of Reactors with Potential Use in Thermochemical Energy Storage in Concentrated Solar Power Plants. <i>Energies</i> , <b>2018</b> , 11, 2358	3.1	41
20	Requirements to consider when choosing a thermochemical material for solar energy storage. <i>Solar Energy</i> , <b>2013</b> , 97, 398-404	6.8	39
19	Thermochemical energy storage by consecutive reactions for higher efficient concentrated solar power plants (CSP): Proof of concept. <i>Applied Energy</i> , <b>2017</b> , 185, 836-845	10.7	37
18	MgSO <sub>4</sub> ·7H <sub>2</sub> O filled macro cellular foams: An innovative composite sorbent for thermo-chemical energy storage applications for solar buildings. <i>Solar Energy</i> , <b>2018</b> , 173, 1278-1286	6.8	37

17	Benchmarking of useful phase change materials for a building application. <i>Energy and Buildings</i> , <b>2019</b> , 182, 45-50	7	35
16	The connection between the heat storage capability of PCM as a material property and their performance in real scale applications. <i>Journal of Energy Storage</i> , <b>2017</b> , 13, 35-39	7.8	27
15	Experimental validation of the exact analytical solution to the steady periodic heat transfer problem in a PCM layer. <i>Energy</i> , <b>2017</b> , 140, 1131-1147	7.9	27
14	Fatty acid eutectic mixtures and derivatives from non-edible animal fat as phase change materials. <i>RSC Advances</i> , <b>2017</b> , 7, 24133-24139	3.7	26
13	Thermal Stability Test of Sugar Alcohols as Phase Change Materials for Medium Temperature Energy Storage Application. <i>Energy Procedia</i> , <b>2014</b> , 48, 436-439	2.3	26
12	Phase Change Material Selection for Thermal Processes Working under Partial Load Operating Conditions in the Temperature Range between 120 and 200 °C. <i>Applied Sciences (Switzerland)</i> , <b>2017</b> , 7, 722	2.6	25
11	Unconventional experimental technologies used for phase change materials (PCM) characterization: part 2 [Morphological and structural characterization, physico-chemical stability and mechanical properties. <i>Renewable and Sustainable Energy Reviews</i> , <b>2015</b> , 43, 1415-1426	16.2	22
10	Phase Change Material Selection for Thermal Energy Storage at High Temperature Range between 210 °C and 270 °C. <i>Energies</i> , <b>2018</b> , 11, 861	3.1	21
9	New methodology developed for the differential scanning calorimetry analysis of polymeric matrixes incorporating phase change materials. <i>Measurement Science and Technology</i> , <b>2012</b> , 23, 085606	2	20
8	Parameters to take into account when developing a new thermochemical energy storage system. <i>Energy Procedia</i> , <b>2012</b> , 30, 380-387	2.3	19
7	Corrosion Test of Salt Hydrates and Vessel Metals for Thermochemical Energy Storage. <i>Energy Procedia</i> , <b>2014</b> , 48, 431-435	2.3	16
6	Empirical equations for viscosity and specific heat capacity determination of fatty acids. <i>Journal of Energy Storage</i> , <b>2017</b> , 10, 20-27	7.8	11
5	Empirical equation to estimate viscosity of paraffin. <i>Journal of Energy Storage</i> , <b>2017</b> , 11, 154-161	7.8	11
4	Corrosion evaluation and prevention of reactor materials to contain thermochemical material for thermal energy storage. <i>Applied Thermal Engineering</i> , <b>2016</b> , 94, 355-363	5.8	10
3	Ionic compounds derived from crude glycerol: Thermal energy storage capability evaluation. <i>Renewable Energy</i> , <b>2017</b> , 114, 629-637	8.1	7
2	Combining biocatalysts to achieve new phase change materials. Application to non-edible animal fat. <i>Molecular Catalysis</i> , <b>2018</b> , 444, 76-83	3.3	5
1	Novel geopolymer for use as a sensible storage option in high temperature thermal energy storage systems <b>2020</b> ,		3