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List of Publications by Year
in descending order

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43 papers	3,458 citations	159358 30 h-index	301761 39 g-index
45 all docs	45 docs citations	45 times ranked	2908 citing authors

#	Article	IF	Citations
1	Thermal energy storage (TES) for industrial waste heat (IWH) recovery: A review. Applied Energy, 2016, 179, 284-301.	5.1	419
2	Industrial waste heat recovery technologies: An economic analysis of heat transformation technologies. Applied Energy, 2015, 151, 157-167.	5.1	371
3	Low carbon and low embodied energy materials in buildings: A review. Renewable and Sustainable Energy Reviews, 2013, 23, 536-542.	8.2	272
4	Review of the T -history method to determine thermophysical properties of phase change materials (PCM). Renewable and Sustainable Energy Reviews, 2013, 26, 425-436.	8.2	155
5	Experimental evaluation at pilot plant scale of multiple PCMs (cascaded) vs. single PCM configuration for thermal energy storage. Renewable Energy, 2015, 83, 729-736.	4.3	154
6	Mapping and discussing Industrial Waste Heat (IWH) potentials for different countries. Renewable and Sustainable Energy Reviews, 2015, 51, 847-855.	8.2	135
7	Study on differential scanning calorimetry analysis with two operation modes and organic and inorganic phase change material (PCM). Thermochimica Acta, 2013, 553, 23-26.	1.2	121
8	Improving thermal performance of freezers using phase change materials. International Journal of Refrigeration, 2012, 35, 984-991.	1.8	113
9	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
10	Review on system and materials requirements for high temperature thermal energy storage. Part 1: General requirements. Renewable and Sustainable Energy Reviews, 2017, 75, 1320-1338.	8.2	107
11	Methods to estimate the industrial waste heat potential of regions â€“ A categorization and literature review. Renewable and Sustainable Energy Reviews, 2014, 38, 164-171.	8.2	106
12	Corrosion of metal and metal alloy containers in contact with phase change materials (PCM) for potential heating and cooling applications. Applied Energy, 2014, 125, 238-245.	5.1	97
13	Measurement of enthalpy curves of phase change materials via DSC and T-History: When are both methods needed to estimate the behaviour of the bulk material in applications?. Thermochimica Acta, 2014, 596, 79-88.	1.2	87
14	Unconventional experimental technologies available for phase change materials (PCM) characterization. Part 1. Thermophysical properties. Renewable and Sustainable Energy Reviews, 2015, 43, 1399-1414.	8.2	85
15	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
16	Corrosion of metals and salt hydrates used for thermochemical energy storage. Renewable Energy, 2015, 75, 519-523.	4.3	82
17	Corrosion of metal and polymer containers for use in PCM cold storage. Applied Energy, 2013, 109, 449-453.	5.1	81
18	Thermal analysis of a low temperature storage unit using phase change materials without refrigeration system. International Journal of Refrigeration, 2012, 35, 1709-1714.	1.8	77

#	Article	IF	Citations
19	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
20	Energy management and CO2 mitigation using phase change materials (PCM) for thermal energy storage (TES) in cold storage and transport. International Journal of Refrigeration, 2014, 42, 26-35.	1.8	64
21	Materials and system requirements of high temperature thermal energy storage systems: A review. Part 2: Thermal conductivity enhancement techniques. Renewable and Sustainable Energy Reviews, 2016, 60, 1584-1601.	8.2	59
22	CO 2 mitigation accounting for Thermal Energy Storage (TES) case studies. Applied Energy, 2015, 155, 365-377.	5.1	58
23	Embodied energy in thermal energy storage (TES) systems for high temperature applications. Applied Energy, 2015, 137, 793-799.	5.1	56
24	Health hazard, cycling and thermal stability as key parameters when selecting a suitable phase change material (PCM). Thermochimica Acta, 2016, 627-629, 39-47.	1.2	53
25	Two-tank molten salts thermal energy storage system for solar power plants at pilot plant scale: Lessons learnt and recommendations for its design, start-up and operation. Renewable Energy, 2018, 121, 236-248.	4.3	50
26	Affordable construction towards sustainable buildings: review on embodied energy in building materials. Current Opinion in Environmental Sustainability, 2013, 5, 229-236.	3.1	47
27	Thermal Energy Storage Implementation Using Phase Change Materials for Solar Cooling and Refrigeration Applications. Energy Procedia, 2012, 30, 947-956.	1.8	43
28	Experimental Evaluation of a Paraffin as Phase Change Material for Thermal Energy Storage in Laboratory Equipment and in a Shell-and-Tube Heat Exchanger. Applied Sciences (Switzerland), 2016, 6, 112.	1.3	43
29	Temperature distribution and heat losses in molten salts tanks for CSP plants. Solar Energy, 2016, 135, 518-526.	2.9	39
30	Influence of the heat transfer fluid in a CSP plant molten salts charging process. Renewable Energy, 2017, 113, 148-158.	4.3	36
31	Methodologies to estimate industrial waste heat potential by transferring key figures: A case study for Spain. Applied Energy, 2016, 169, 866-873.	5.1	31
32	Enthalpy-temperature plots to compare calorimetric measurements of phase change materials at different sample scales. Journal of Energy Storage, 2018, 15, 32-38.	3.9	26
33	Experimental analysis of charging and discharging processes, with parallel and counter flow arrangements, in a molten salts high temperature pilot plant scale setup. Applied Energy, 2016, 178, 394-403.	5.1	22
34	New methodology developed for the differential scanning calorimetry analysis of polymeric matrixes incorporating phase change materials. Measurement Science and Technology, 2012, 23, 085606.	1.4	21
35	Corrosion Test of Salt Hydrates and Vessel Metals for Thermochemical Energy Storage. Energy Procedia, 2014, 48, 431-435.	1.8	18
36	Estimating the industrial waste heat recovery potential based on CO2 emissions in the European non-metallic mineral industry. Energy Efficiency, 2018, 11, 427-443.	1.3	16

#	Article	IF	Citations
37	IEA SHC Task 42 / ECES Annex 29 â€“ A Simple Tool for the Economic Evaluation of Thermal Energy Storages. Energy Procedia, 2016, 91, 197-206.	1.8	15
38	Thermal performance evaluation of bischofite at pilot plant scale. Applied Energy, 2015, 155, 826-833.	5.1	14
39	Introduction to thermal energy storage systems. , 2021, , 1-33.		8
40	Waste heat recovery using thermal energy storage. , 2021, , 639-653.		5
41	Industrial waste materials and by-products as thermal energy storage (TES) materials: A review. AIP Conference Proceedings, 2016, , .	0.3	4
42	Environmental Approach. , 2018, , 277-295.		3
43	Static Concept at University of Lleida. , 2018, , 131-156.		0