Camila Barreneche

List of Publications by Year
in descending order

271 papers	23,154 citations	13099 68 h-index	9103 144 g-index
280 all docs	280 docs citations	280 times ranked	11548 citing authors

#	Article	IF	Citations
1	Active Thermal Energy Storage (TES) With Phase Change Materials (PCM) for High Temperature. , 2022, , 470-478.		1
2	Characterisation of commercial phase change materials with potential application in gypsum boards for buildings. International Journal of Energy Research, 2022, 46, 860-875.	4.5	5
3	A detailed energy analysis of a novel evaporator with latent thermal energy storage ability. Applied Thermal Engineering, 2022, 201, 117844.	6.0	12
4	Simulated performance of a solar-assisted heat pump system including a phase-change storage tank for residential heating applications: A case study in Madrid, Spain. Journal of Energy Storage, 2022, 47, 103615.	8.1	16
5	Novel sampling procedure and statistical analysis for the thermal characterization of ionic nanofluids. Journal of Molecular Liquids, 2022, 347, 118316.	4.9	3
6	Assessment of Solid Wastes and Byâ€Products as Solid Particle Materials for Concentrated Solar Power Plants. Solar Rrl, 2022, 6, .	5.8	1
7	Thermal energy storage for electric vehicles at low temperatures: Concepts, systems, devices and materials. Renewable and Sustainable Energy Reviews, 2022, 160, 112263.	16.4	28
8	Experimental steady-state and transient thermal performance of materials for thermal energy storage in building applications: From powder SS-PCMs to SS-PCM-based acrylic plaster. Energy, 2022, 250, 123768.	8.8	16
9	The relevance of thermochemical energy storage in the last two decades: The analysis of research evolution. Journal of Energy Storage, 2022, 51, 104377.	8.1	13
10	Thermo-mechanical stability of concrete containing steel slag as aggregate after high temperature thermal cycles. Solar Energy, 2022, 239, 59-73.	6.1	8
11	Bayesian optimization for effective thermal conductivity measurement of thermal energy storage: An experimental and numerical approach. Journal of Energy Storage, 2022, 52, 104795.	8.1	6
12	Effect of Nanoparticles on the Thermal Stability and Reaction Kinetics in Ionic Nanofluids. Nanomaterials, 2022, 12, 1777.	4.1	2
13	Key Challenges for High Temperature Thermal Energy Storage in Concreteâ€"First Steps towards a Novel Storage Design. Energies, 2022, 15, 4544.	3.1	11
14	Biobased phase change materials for cooling in buildings. , 2021, , 291-302.		0
15	Embodied energy and embodied carbon of structural building materials: Worldwide progress and barriers through literature map analysis. Energy and Buildings, 2021, 231, 110612.	6.7	73
16	Introduction to thermal energy storage systems. , 2021, , 1-33.		8
17	Characterization and testing of solid particles to be used in CSP plants: Aging and fluidization tests. Solar Energy Materials and Solar Cells, 2021, 219, 110793.	6.2	27
18	Waste heat recovery using thermal energy storage. , 2021, , 639-653.		5

#	Article	IF	Citations
19	Components. Thermal Energy Storage. , 2021, , .		0
20	Thermal energy storage systems for cooling in residential buildings. , 2021, , 595-623.		1
21	Improvement of Phase Change Materials (PCM) Used for Solar Process Heat Applications. Molecules, 2021, 26, 1260.	3.8	12
22	Degradation of Fatty Acid Phase-Change Materials (PCM): New Approach for Its Characterization. Molecules, 2021, 26, 982.	3.8	7
23	Understanding the abnormal thermal behavior of nanofluids through infrared thermography and thermo-physical characterization. Scientific Reports, 2021, 11, 4879.	3.3	4
24	Thermal cycling test of solid particles to be used in concentrating solar power plants. Solar Energy Materials and Solar Cells, 2021, 222, 110936.	6.2	12
25	Viscoelastic characterization of seven laminated glass interlayer materials from static tests. Construction and Building Materials, 2021, 279, 122503.	7.2	20
26	Influence of thermal treatments on the absorption and thermal properties of a clay mineral support used for shape-stabilization of fatty acids.. Journal of Energy Storage, 2021, 36, 102427.	8.1	13
27	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.	10.1	72
28	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.	2.5	10
29	Novel Shape-Stabilized Phase Change Material with Cascade Character: Synthesis, Performance and Shaping Evaluation. Energies, 2021, 14, 2621.	3.1	11
30	Recent developments of thermal energy storage applications in the built environment: A bibliometric analysis and systematic review. Applied Thermal Engineering, 2021, 189, 116666.	6.0	72
31	Trends and future perspectives on the integration of phase change materials in heat exchangers. Journal of Energy Storage, 2021, 38, 102544.	8.1	12
32	Research progress and trends on the use of concrete as thermal energy storage material through bibliometric analysis. Journal of Energy Storage, 2021, 38, 102562.	8.1	17
33	Advanced Concrete Steam Accumulation Tanks for Energy Storage for Solar Thermal Electricity. Energies, 2021, 14, 3896.	3.1	4
34	Long-term loading and recovery of a laminated glass slab with three different interlayers. Construction and Building Materials, 2021, 287, 122991.	7.2	14
35	Comparative study between heat pipe and shell-and-tube thermal energy storage. Applied Thermal Engineering, 2021, 192, 116974.	6.0	10
36	Concentrating Solar Power Technologies: A Bibliometric Study of Past, Present and Future Trends in Concentrating Solar Power Research. Frontiers in Mechanical Engineering, 2021, 7, .	1.8	11

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37	Experimental Study on Two PCM Macro-Encapsulation Designs in a Thermal Energy Storage Tank. Applied Sciences (Switzerland), 2021, 11, 6171.	2.5	16
38	Thermal reliability of organic-organic phase change materials and their shape-stabilized composites. Journal of Energy Storage, 2021, 40, 102661.	8.1	14
39	New shapeâ€stabilized phase change materials obtained by singleâ€screw extruder. Energy Storage, 2021, 3, e268.	4.3	6
40	A framework for sustainable evaluation of thermal energy storage in circular economy. Renewable Energy, 2021, 175, 686-701.	8.9	13
41	Experimental determination of thermal conductivity of fatty acid binary mixtures and their shape-stabilized composites. Renewable Energy, 2021, 175, 1167-1173.	8.9	5
42	Experimental study and comparison of different fully transparent laminated glass beam designs. Glass Structures and Engineering, 2021, 6, 463-486.	1.7	1
43	Experimental analysis of a latent thermal energy storage system enhanced with metal foam. Journal of Energy Storage, 2021, 41, 102860.	8.1	22
44	Perspectives on thermal energy storage research. Energy, 2021, 231, 120943.	8.8	47
45	Systematic review on model predictive control strategies applied to active thermal energy storage systems. Renewable and Sustainable Energy Reviews, 2021, 149, 111385.	16.4	39
46	Thermal energy storage with phase change materials in solar power plants. Economic analysis. Journal of Energy Storage, 2021, 43, 103184.	8.1	24
47	Thermal Energy Storage Materials (TESMs)â€”What Does It Take to Make Them Fly?. Crystals, 2021, 11, 1276.	2.2	18
48	Introduction to the Section on Thermodynamics of Energy Storage. , 2021, , .		0
49	Introduction to Thermal Energy Storage and Technologies Definition. , 2021, , .		1
50	Where is Thermal Energy Storage (TES) research going? â€“ A bibliometric analysis. Solar Energy, 2020, 200, 37-50.	6.1	56
51	Polymeric interlayer materials for laminated glass: A review. Construction and Building Materials, 2020, 230, 116897.	7.2	83
52	Thermal energy storage technologies for concentrated solar power â€“ A review from a materials perspective. Renewable Energy, 2020, 156, 1244-1265.	8.9	204
53	Corrosion assessment of promising hydrated salts as sorption materials for thermal energy storage systems. Renewable Energy, 2020, 150, 428-434.	8.9	17
54	Sustainable adobe bricks with seagrass fibres. Mechanical and thermal properties characterization. Construction and Building Materials, 2020, 239, 117669.	7.2	48

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55	Building thermal storage technology: Compensating renewable energy fluctuations. Journal of Energy Storage, 2020, 27, 101147.	8.1	15
56	Behaviour of a concrete wall containing microâ€encapsulated PCM after a decade of its construction. Solar Energy, 2020, 200, 108-113.	6.1	57
57	Dynamic Corrosion Test Using LiNO3 Containing Molten Salt for CSP Applications. Applied Sciences (Switzerland), 2020, 10, 4305.	2.5	3
58	Experimental Devices to Investigate the Long-Term Stability of Phase Change Materials under Application Conditions. Applied Sciences (Switzerland), 2020, 10, 7968.	2.5	11
59	Techno-Economic Analysis of a Heat Pump Cycle Including a Three-Media Refrigerant/Phase Change Material/Water Heat Exchanger in the Hot Superheated Section for Efficient Domestic Hot Water Generation. Applied Sciences (Switzerland), 2020, 10, 7873.	2.5	8
60	Performance Study of Direct Integration of Phase Change Material into an Innovative Evaporator of a Simple Vapour Compression System. Applied Sciences (Switzerland), 2020, 10, 4649.	2.5	18
61	Assessing corrosive behaviour of commercial phase change materials in the 21â€“25 ÂºC temperature range. Journal of Energy Storage, 2020, 32, 101711.	8.1	14
62	Bibliometric analysis of smart control applications in thermal energy storage systems. A model predictive control approach. Journal of Energy Storage, 2020, 32, 101704.	8.1	41
63	Systematic review on the use of heat pipes in latent heat thermal energy storage tanks. Journal of Energy Storage, 2020, 32, 101733.	8.1	34
64	Advances Toward a Net-Zero Global Building Sector. Annual Review of Environment and Resources, 2020, 45, 227-269.	13.4	86
65	Double-lap shear test on laminated glass specimens under diverse ageing conditions. Construction and Building Materials, 2020, 249, 118784.	7.2	7
66	Hybrid 3 in 1 thermal energy storage system â€“ Outlook for a novel storage strategy. Applied Energy, 2020, 274, 115024.	10.1	20
67	Experimental and Computational Study of the Implementation of mPCM-Modified Gypsum Boards in a Test Enclosure. Buildings, 2020, 10, 15.	3.1	9
68	Selection of the Appropriate Phase Change Material for Two Innovative Compact Energy Storage Systems in Residential Buildings. Applied Sciences (Switzerland), 2020, 10, 2116.	2.5	35
69	Evaluation of volume change in phase change materials during their phase transition. Journal of Energy Storage, 2020, 28, 101206.	8.1	31
70	Effect of nanoparticles in molten salts â€“ MD simulations and experimental study. Renewable Energy, 2020, 152, 208-216.	8.9	32
71	New coloured coatings to enhance silica sand absorbance for direct particle solar receiver applications. Renewable Energy, 2020, 152, 1-8.	8.9	20
72	Tensile test on interlayer materials for laminated glass under diverse ageing conditions and strain rates. Construction and Building Materials, 2020, 243, 118230.	7.2	23

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73	Technological options and strategies towards zero energy buildings contributing to climate change mitigation: A systematic review. Energy and Buildings, 2020, 219, 110009.	6.7	116
74	Novel geopolymer for use as a sensible storage option in high temperature thermal energy storage systems. AIP Conference Proceedings, 2020, , .	0.4	11
75	Effect of the impurity magnesium nitrate in the thermal decomposition of the solar salt. Solar Energy, 2019, 192, 186-192.	6.1	18
76	Latent thermal energy storage for solar process heat applications at medium-high temperatures â€“ A review. Solar Energy, 2019, 192, 3-34.	6.1	115
77	Thermal energy storage (TES) with phase change materials (PCM) in solar power plants (CSP). Concept and plant performance. Applied Energy, 2019, 254, 113646.	10.1	138
78	Alkali-Activated Cements for TES Materials in Buildingsâ€™ Envelops Formulated With Glass Cullet Recycling Waste and Microencapsulated Phase Change Materials. Materials, 2019, 12, 2144.	2.9	9
79	Study on solar absorptance and thermal stability of solid particles materials used as TES at high temperature on different aging stages for CSP applications. Solar Energy Materials and Solar Cells, 2019, 201, 110088.	6.2	22
80	Comparative Analysis of Energy Demand and CO2 Emissions on Different Typologies of Residential Buildings in Europe. Energies, 2019, 12, 2436.	3.1	14
81	Innovative composite sorbent for thermal energy storage based on a SrBr2Â·6H2O filled silicone composite foam. Journal of Energy Storage, 2019, 26, 100954.	8.1	20
82	Thermal energy storage in solar energy systems: editorial. Solar Energy, 2019, 192, 1-2.	6.1	6
83	Synthesis and Thermophysical Characterization of Fatty Amides for Thermal Energy Storage. Molecules, 2019, 24, 3777.	3.8	11
84	TES-PS10 postmortem tests: Carbon steel corrosion performance exposed to molten salts under relevant operation conditions and lessons learnt for commercial scale-up. Journal of Energy Storage, 2019, 26, 100922.	8.1	6
85	Magnesium sulphate-silicone foam composites for thermochemical energy storage: Assessment of dehydration behaviour and mechanical stability. Solar Energy Materials and Solar Cells, 2019, 200, 109992.	6.2	28
86	Corrosion Assessment of Myo-Inositol Sugar Alcohol as a Phase Change Material in Storage Systems Connected to Fresnel Solar Plants. Molecules, 2019, 24, 1383.	3.8	13
87	Review of solid particle materials for heat transfer fluid and thermal energy storage in solar thermal power plants. Energy Storage, 2019, 1, e63.	4.3	42
88	Assessing the Potentiality of Animal Fat Based-Bio Phase Change Materials (PCM) for Building Applications: An Innovative Multipurpose Thermal Investigation. Energies, 2019, 12, 1111.	3.1	25
89	Development of new nano-enhanced phase change materials (NEPCM) to improve energy efficiency in buildings: Lab-scale characterization. Energy and Buildings, 2019, 192, 75-83.	6.7	54
90	Thermal conductivity measurement techniques for characterizing thermal energy storage materials â€“ A review. Renewable and Sustainable Energy Reviews, 2019, 108, 32-52.	16.4	120

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91	Mainstreaming commercial CSP systems: A technology review. Renewable Energy, 2019, 140, 152-176.	8.9	191
92	Own-Synthetize Nanoparticles to Develop Nano-Enhanced Phase Change Materials (NEPCM) to Improve the Energy Efficiency in Buildings. Molecules, 2019, 24, 1232.	3.8	18
93	Asphalt emulsion formulation: State of the art of formulation, properties and results of HIPR emulsions. Construction and Building Materials, 2019, 212, 19-26.	7.2	16
94	Experimental evaluation of the use of fins and metal wool as heat transfer enhancement techniques in a latent heat thermal energy storage system. Energy Conversion and Management, 2019, 184, 530-538.	9.2	66
95	Materials Selection for Thermal Energy Storage Applicationsâ€"Case Studies. Green Energy and Technology, 2019, , 55-66.	0.6	1
96	Experimental Methods for the Characterization of Materials for Latent Thermal Energy Storage. Green Energy and Technology, 2019, , 89-101.	0.6	2
97	Experimental results of mechanical, adhesive, and laminated connections for laminated glass elements â€“ A review. Engineering Structures, 2019, 180, 192-204.	5.3	29
98	Evaluation of energy density as performance indicator for thermal energy storage at material and system levels. Applied Energy, 2019, 235, 954-962.	10.1	40
99	Corrosion monitoring and mitigation techniques on advanced thermal energy storage materials for CSP plants. Solar Energy Materials and Solar Cells, 2019, 192, 179-187.	6.2	46
100	Benchmarking of useful phase change materials for a building application. Energy and Buildings, 2019, 182, 45-50.	6.7	51
101	Life cycle costing as a bottom line for the life cycle sustainability assessment in the solar energy sector: A review. Solar Energy, 2019, 192, 238-262.	6.1	42
102	Use of partial load operating conditions for latent thermal energy storage management. Applied Energy, 2018, 216, 234-242.	10.1	29
103	New formulation and characterization of enhanced bulk-organic phase change materials. Energy and Buildings, 2018, 167, 38-48.	6.7	21
104	Multifunctional smart concretes with novel phase change materials: Mechanical and thermo-energy investigation. Applied Energy, 2018, 212, 1448-1461.	10.1	107
105	High temperature systems using solid particles as TES and HTF material: A review. Applied Energy, 2018, 213, 100-111.	10.1	72
106	Thermal stress reduction in cool roof membranes using phase change materials (PCM). Energy and Buildings, 2018, 158, 1097-1105.	6.7	57
107	Comparison of past projections of global and regional primary and final energy consumption with historical data. Renewable and Sustainable Energy Reviews, 2018, 82, 681-688.	16.4	30
108	Thermomechanical testing under operating conditions of A516Gr70 used for CSP storage tanks. Solar Energy Materials and Solar Cells, 2018, 174, 509-514.	6.2	7

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109	Influence of nanoparticle morphology and its dispersion ability regarding thermal properties of water used as phase change material. Applied Thermal Engineering, 2018, 128, 121-126.	6.0	29
110	Combining biocatalysts to achieve new phase change materials. Application to non-edible animal fat. Molecular Catalysis, 2018, 444, 76-83.	2.0	11
111	Enthalpy-temperature plots to compare calorimetric measurements of phase change materials at different sample scales. Journal of Energy Storage, 2018, 15, 32-38.	8.1	26
112	Trends in penetration and ownership of household appliances. Renewable and Sustainable Energy Reviews, 2018, 82, 4044-4059.	16.4	14
113	Household appliances penetration and ownership trends in residential buildings. Renewable and Sustainable Energy Reviews, 2018, 98, 1-8.	16.4	18
114	Review of Reactors with Potential Use in Thermochemical Energy Storage in Concentrated Solar Power Plants. Energies, 2018, 11, 2358.	3.1	62
115	Process integration of thermal energy storage systems â€“ Evaluation methodology and case studies. Applied Energy, 2018, 230, 750-760.	10.1	47
116	Multi-objective optimisation of bio-based thermal insulation materials in building envelopes considering condensation risk. Applied Energy, 2018, 224, 602-614.	10.1	60
117	Phase Change Material Selection for Thermal Energy Storage at High Temperature Range between 210 Â°C and 270 Â°C. Energies, 2018, 11, 861.	3.1	35
118	Static Concept at University of Lleida. , 2018, , 131-156.		0
119	Study of the Thermal Properties and the Fire Performance of Flame Retardant-Organic PCM in Bulk Form. Materials, 2018, 11, 117.	2.9	25
120	Corrosion of AISI316 as containment material for latent heat thermal energy storage systems based on carbonates. Solar Energy Materials and Solar Cells, 2018, 186, 1-8.	6.2	17
121	Heating and cooling energy trends and drivers in Europe. Energy, 2017, 119, 425-434.	8.8	51
122	Empirical equations for viscosity and specific heat capacity determination of fatty acids. Journal of Energy Storage, 2017, 10, 20-27.	8.1	12
123	Materials selection for thermal energy storage systems in parabolic trough collector solar facilities using high chloride content nitrate salts. Solar Energy Materials and Solar Cells, 2017, 163, 134-147.	6.2	38
124	New proposed methodology for specific heat capacity determination of materials for thermal energy storage (TES) by DSC. Journal of Energy Storage, 2017, 11, 1-6.	8.1	88
125	Critical analysis of the T-history method: A fundamental approach. Thermochimica Acta, 2017, 650, 95-105.	2.7	34
126	The connection between the heat storage capability of PCM as a material property and their performance in real scale applications. Journal of Energy Storage, 2017, 13, 35-39.	8.1	39

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127	Simulation-based optimization of PCM melting temperature to improve the energy performance in buildings. Applied Energy, 2017, 202, 420-434.	10.1	226
128	Passive cooling of buildings with phase change materials using whole-building energy simulation tools: A review. Renewable and Sustainable Energy Reviews, 2017, 80, 1239-1255.	16.4	158
129	Characterization of wastes based on inorganic double salt hydrates as potential thermal energy storage materials. Solar Energy Materials and Solar Cells, 2017, 170, 149-159.	6.2	49
130	Fatty acid eutectic mixtures and derivatives from non-edible animal fat as phase change materials. RSC Advances, 2017, 7, 24133-24139.	3.6	40
131	Influence of the heat transfer fluid in a CSP plant molten salts charging process. Renewable Energy, 2017, 113, 148-158.	8.9	36
132	Empirical equation to estimate viscosity of paraffin. Journal of Energy Storage, 2017, 11, 154-161.	8.1	16
133	Thermal characterization of different substrates under dried conditions for extensive green roofs. Energy and Buildings, 2017, 144, 175-180.	6.7	33
134	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.	16.4	107
135	High density polyethylene spheres with PCM for domestic hot water applications: Water tank and laboratory scale study. Journal of Energy Storage, 2017, 13, 262-267.	8.1	50
136	Considerations for the use of metal alloys as phase change materials for high temperature applications. Solar Energy Materials and Solar Cells, 2017, 171, 275-281.	6.2	99
137	Ionic compounds derived from crude glycerol: Thermal energy storage capability evaluation. Renewable Energy, 2017, 114, 629-637.	8.9	9
138	Experimental validation of the exact analytical solution to the steady periodic heat transfer problem in a PCM layer. Energy, 2017, 140, 1131-1147.	8.8	34
139	Method for controlling mean droplet size in the manufacture of phase inversion bituminous emulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 527, 49-54.	4.7	15
140	Materials selection of steam-phase change material (PCM) heat exchanger for thermal energy storage systems in direct steam generation facilities. Solar Energy Materials and Solar Cells, 2017, 159, 526-535.	6.2	28
141	Thermochemical energy storage by consecutive reactions for higher efficient concentrated solar power plants (CSP): Proof of concept. Applied Energy, 2017, 185, 836-845.	10.1	45
142	Review on sorption materials and technologies for heat pumps and thermal energy storage. Renewable Energy, 2017, 110, 3-39.	8.9	160
143	Phase Change Material Selection for Thermal Processes Working under Partial Load Operating Conditions in the Temperature Range between 120 and 200 Â°C. Applied Sciences (Switzerland), 2017, 7, 722.	2.5	39
144	Storage Stability of Bimodal Emulsions vs. Monomodal Emulsions. Applied Sciences (Switzerland), 2017, 7, 1267.	2.5	18

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145	Empirical equations for viscosity and specific heat capacity determination of paraffin PCM and fatty acid PCM. IOP Conference Series: Materials Science and Engineering, 2017, 251, 012114.	0.6	2
146	Buildings Life Cycle Assessment. , 2017, , 275-290.		4
147	PCM/wood composite to store thermal energy in passive building envelopes. IOP Conference Series: Materials Science and Engineering, 2017, 251, 012111.	0.6	23
148	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.	2.5	43
149	Preparation and Characterization of Inorganic PCM Microcapsules by Fluidized Bed Method. Materials, 2016, 9, 24.	2.9	33
150	Compatibility of materials for macroencapsulation of inorganic phase change materials: Experimental corrosion study. Applied Thermal Engineering, 2016, 107, 410-419.	6.0	44
151	Industrial waste materials and by-products as thermal energy storage (TES) materials: A review. AIP Conference Proceedings, 2016, , .	0.4	4
152	Acoustic insulation capacity of Vertical Greenery Systems for buildings. Applied Acoustics, 2016, 110, 218-226.	3.3	76
153	Molten salt facilities, lessons learnt at pilot plant scale to guarantee commercial plants; heat losses evaluation and correction. Renewable Energy, 2016, 94, 175-185.	8.9	33
154	Reduction of the subcooling of bischofite with the use of nucleatings agents. Solar Energy Materials and Solar Cells, 2016, 157, 1011-1018.	6.2	39
155	Study of corrosion by Dynamic Gravimetric Analysis (DGA) methodology. Influence of chloride content in solar salt. Solar Energy Materials and Solar Cells, 2016, 157, 526-532.	6.2	31
156	IEA SHC Task 42 / ECES Annex 29 WG A1: Engineering and Processing of PCMs, TCMs and Sorption Materials. Energy Procedia, 2016, 91, 207-217.	1.8	14
157	Energy savings due to the use of PCM for relocatable lightweight buildings passive heating and cooling in different weather conditions. Energy and Buildings, 2016, 129, 274-283.	6.7	158
158	MSWI bottom ash for thermal energy storage: An innovative and sustainable approach for its reutilization. Renewable Energy, 2016, 99, 431-436.	8.9	14
159	Characterization of granular phase change materials for thermal energy storage applications in fluidized beds. Applied Energy, 2016, 181, 310-321.	10.1	14
160	Thermal storage in a MW scale. Molten salt solar thermal pilot facility: Plant description and commissioning experiences. Renewable Energy, 2016, 99, 852-866.	8.9	48
161	Influence of alkaline chlorides on thermal energy storage properties of bischofite. International Journal of Energy Research, 2016, 40, 1556-1563.	4.5	8
162	Use of multi-layered PCM gypsums to improve fire response. Physical, thermal and mechanical characterization. Energy and Buildings, 2016, 127, 1-9.	6.7	29

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163	Corrosion testing device for in-situ corrosion characterization in operational molten salts storage tanks: A516 Gr70 carbon steel performance under molten salts exposure. Solar Energy Materials and Solar Cells, 2016, 157, 383-392.	6.2	63
164	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.	16.4	109
165	Experimental evaluation of a concrete core slab with phase change materials for cooling purposes. Energy and Buildings, 2016, 116, 411-419.	6.7	28
166	Types, methods, techniques, and applications for microencapsulated phase change materials (MPCM): A review. Renewable and Sustainable Energy Reviews, 2016, 53, 1059-1075.	16.4	411
167	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.	16.4	59
168	Thermal energy storage forÂrenewable heating and cooling systems. , 2016, , 139-179.		7
169	Use of by-products as additives in adobe bricks: Mechanical properties characterisation. Construction and Building Materials, 2016, 108, 105-111.	7.2	30
170	Review of technology: Thermochemical energy storage for concentrated solar power plants. Renewable and Sustainable Energy Reviews, 2016, 60, 909-929.	16.4	297
171	Health hazard, cycling and thermal stability as key parameters when selecting a suitable phase change material (PCM). Thermochimica Acta, 2016, 627-629, 39-47.	2.7	53
172	Economic impact of integrating PCM as passive system in buildings using Fanger comfort model. Energy and Buildings, 2016, 112, 159-172.	6.7	143
173	Corrosion evaluation and prevention of reactor materials to contain thermochemical material for thermal energy storage. Applied Thermal Engineering, 2016, 94, 355-363.	6.0	12
174	Innovative cool roofing membrane with integrated phase change materials: Experimental characterization of morphological, thermal and optic-energy behavior. Energy and Buildings, 2016, 112, 40-48.	6.7	31
175	Thermal energy storage in building integrated thermal systems: AÂreview. Part 1. active storage systems. Renewable Energy, 2016, 88, 526-547.	8.9	230
176	Mechanical response evaluation of microcapsules from different slurries. Renewable Energy, 2016, 85, 732-739.	8.9	16
177	In situ thermal and acoustic performance and environmental impact of the introduction of a shape-stabilized PCM layer for building applications. Renewable Energy, 2016, 85, 281-286.	8.9	51
178	Thermal energy storage in building integrated thermal systems: A review. Part 2. Integration as passive system. Renewable Energy, 2016, 85, 1334-1356.	8.9	208
179	Energy Efficiency Indicators for Assessing Construction Systems Storing Renewable Energy: Application to Phase Change Material-Bearing FaÃ§ades. Energies, 2015, 8, 8630-8649.	3.1	6
180	Study of Fresh and Hardening Process Properties of Gypsum with Three Different PCM Inclusion Methods. Materials, 2015, 8, 6589-6596.	2.9	6

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181	Industrial waste heat recovery technologies: An economic analysis of heat transformation technologies. Applied Energy, 2015, 151, 157-167.	10.1	371
182	Comparison of phase change slurries: Physicochemical and thermal properties. Energy, 2015, 87, 223-227.	8.8	28
183	Thermophysical characterization and thermal cycling stability of two TCM: CaCl 2 and zeolite. Applied Energy, 2015, 137, 726-730.	10.1	55
184	Embodied energy in thermal energy storage (TES) systems for high temperature applications. Applied Energy, 2015, 137, 793-799.	10.1	56
185	Thermal behaviour of insulation and phase change materials in buildings with internal heat loads: experimental study. Energy Efficiency, 2015, 8, 895-904.	2.8	15
186	Experimental evaluation at pilot plant scale of multiple PCMs (cascaded) vs. single PCM configuration for thermal energy storage. Renewable Energy, 2015, 83, 729-736.	8.9	154
187	Thermal performance evaluation of bischofite at pilot plant scale. Applied Energy, 2015, 155, 826-833.	10.1	14
188	Use of polyethylene glycol for the improvement of the cycling stability of bischofite as thermal energy storage material. Applied Energy, 2015, 154, 616-621.	10.1	33
189	Phase change materials and thermal energy storage for buildings. Energy and Buildings, 2015, 103, 414-419.	6.7	486
190	Review on the methodology used in thermal stability characterization of phase change materials. Renewable and Sustainable Energy Reviews, 2015, 50, 665-685.	16.4	110
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