Camila Barreneche

List of Publications by Year in Descending Order

275 papers	17,296 citations	60 h-index	126 g-index
280 ext. papers	20,107 ext. citations	7.3 avg, IF	7.26 L-index

#	Paper	IF	Citations
275	A detailed energy analysis of a novel evaporator with latent thermal energy storage ability. *Applied Thermal Engineering*, **2022**, 201, 117844	5.8	4
274	Novel sampling procedure and statistical analysis for the thermal characterization of ionic nanofluids. *Journal of Molecular Liquids*, **2022**, 347, 118316	6	
273	Thermal energy storage for electric vehicles at low temperatures: Concepts, systems, devices and materials. *Renewable and Sustainable Energy Reviews*, **2022**, 160, 112263	16.2	3
272	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	7.9	2
271	The relevance of thermochemical energy storage in the last two decades: The analysis of research evolution. *Journal of Energy Storage*, **2022**, 51, 104377	7.8	1
270	Thermo-mechanical stability of concrete containing steel slag as aggregate after high temperature thermal cycles. *Solar Energy*, **2022**, 239, 59-73	6.8	1
269	Bayesian optimization for effective thermal conductivity measurement of thermal energy storage: An experimental and numerical approach. *Journal of Energy Storage*, **2022**, 52, 104795	7.8	2
268	Heat Transfer Enhancement for Latent Heat Storage Components **2022**, 675-693		
267	Effect of Nanoparticles on the Thermal Stability and Reaction Kinetics in Ionic Nanofluids. *Nanomaterials*, **2022**, 12, 1777	5.4	0
266	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*, **2021**, 47, 103615	7.8	1
265	Introduction to the Section on Thermodynamics of Energy Storage **2021**,		
264	Introduction to Thermal Energy Storage and Technologies Definition **2021**,		
263	Thermal Energy Storage Materials (TESMs)—What Does It Take to Make Them Fly?. *Crystals*, **2021**, 11, 1276	2.3	5
262	Understanding the abnormal thermal behavior of nanofluids through infrared thermography and thermo-physical characterization. *Scientific Reports*, **2021**, 11, 4879	4.9	2
261	Thermal cycling test of solid particles to be used in concentrating solar power plants. *Solar Energy Materials and Solar Cells*, **2021**, 222, 110936	6.4	3
260	Viscoelastic characterization of seven laminated glass interlayer materials from static tests. *Construction and Building Materials*, **2021**, 279, 122503	6.7	5
259	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	7.8	6

258	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	10.7	21
257	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	2.6	1
256	Novel Shape-Stabilized Phase Change Material with Cascade Character: Synthesis, Performance and Shaping Evaluation. *Energies*, **2021**, 14, 2621	3.1	1
255	Recent developments of thermal energy storage applications in the built environment: A bibliometric analysis and systematic review. *Applied Thermal Engineering*, **2021**, 189, 116666	5.8	28
254	Trends and future perspectives on the integration of phase change materials in heat exchangers. *Journal of Energy Storage*, **2021**, 38, 102544	7.8	5
253	Research progress and trends on the use of concrete as thermal energy storage material through bibliometric analysis. *Journal of Energy Storage*, **2021**, 38, 102562	7.8	4
252	Advanced Concrete Steam Accumulation Tanks for Energy Storage for Solar Thermal Electricity. *Energies*, **2021**, 14, 3896	3.1	1
251	Long-term loading and recovery of a laminated glass slab with three different interlayers. *Construction and Building Materials*, **2021**, 287, 122991	6.7	3
250	Comparative study between heat pipe and shell-and-tube thermal energy storage. *Applied Thermal Engineering*, **2021**, 192, 116974	5.8	5
249	Concentrating Solar Power Technologies: A Bibliometric Study of Past, Present and Future Trends in Concentrating Solar Power Research. *Frontiers in Mechanical Engineering*, **2021**, 7,	2.6	3
248	Experimental Study on Two PCM Macro-Encapsulation Designs in a Thermal Energy Storage Tank. *Applied Sciences (Switzerland)*, **2021**, 11, 6171	2.6	4
247	Biobased phase change materials for cooling in buildings **2021**, 291-302		
246	Embodied energy and embodied carbon of structural building materials: Worldwide progress and barriers through literature map analysis. *Energy and Buildings*, **2021**, 231, 110612	7	28
245	Introduction to thermal energy storage systems **2021**, 1-33		3
244	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	6.4	13
243	Waste heat recovery using thermal energy storage **2021**, 639-653		0
242	Active Thermal Energy Storage (TES) With Phase Change Materials (PCM) for High Temperature **2021**,		
241	Components. Thermal Energy Storage **2021**,		

240	Thermal energy storage systems for cooling in residential buildings **2021**, 595-623		
239	Improvement of Phase Change Materials (PCM) Used for Solar Process Heat Applications. *Molecules* , **2021**, 26,	4.8	7
238	Degradation of Fatty Acid Phase-Change Materials (PCM): New Approach for Its Characterization. *Molecules*, **2021**, 26,	4.8	2
237	Thermal reliability of organic-organic phase change materials and their shape-stabilized composites. *Journal of Energy Storage*, **2021**, 40, 102661	7.8	4
236	A framework for sustainable evaluation of thermal energy storage in circular economy. *Renewable Energy*, **2021**, 175, 686-701	8.1	4
235	Experimental determination of thermal conductivity of fatty acid binary mixtures and their shape-stabilized composites. *Renewable Energy*, **2021**, 175, 1167-1173	8.1	1
234	Experimental analysis of a latent thermal energy storage system enhanced with metal foam. *Journal of Energy Storage*, **2021**, 41, 102860	7.8	5
233	Perspectives on thermal energy storage research. *Energy*, **2021**, 231, 120943	7.9	13
232	Systematic review on model predictive control strategies applied to active thermal energy storage systems. *Renewable and Sustainable Energy Reviews*, **2021**, 149, 111385	16.2	10
231	Thermal energy storage with phase change materials in solar power plants. Economic analysis. *Journal of Energy Storage*, **2021**, 43, 103184	7.8	4
230	Double-lap shear test on laminated glass specimens under diverse ageing conditions. *Construction and Building Materials*, **2020**, 249, 118784	6.7	3
229	Hybrid 3 in 1 thermal energy storage system Outlook for a novel storage strategy. *Applied Energy*, **2020**, 274, 115024	10.7	12
228	Experimental and Computational Study of the Implementation of mPCM-Modified Gypsum Boards in a Test Enclosure. *Buildings*, **2020**, 10, 15	3.2	5
227	Selection of the Appropriate Phase Change Material for Two Innovative Compact Energy Storage Systems in Residential Buildings. *Applied Sciences (Switzerland)*, **2020**, 10, 2116	2.6	20
226	Evaluation of volume change in phase change materials during their phase transition. *Journal of Energy Storage*, **2020**, 28, 101206	7.8	16
225	Effect of nanoparticles in molten salts MD simulations and experimental study. *Renewable Energy*, **2020**, 152, 208-216	8.1	17
224	New coloured coatings to enhance silica sand absorbance for direct particle solar receiver applications. *Renewable Energy*, **2020**, 152, 1-8	8.1	9
223	Tensile test on interlayer materials for laminated glass under diverse ageing conditions and strain rates. *Construction and Building Materials*, **2020**, 243, 118230	6.7	10

222	Novel geopolymer for use as a sensible storage option in high temperature thermal energy storage systems **2020**,		3
221	Thermal energy storage technologies for concentrated solar power □A review from a materials perspective. *Renewable Energy*, **2020**, 156, 1244-1265	8.1	77
220	Corrosion assessment of promising hydrated salts as sorption materials for thermal energy storage systems. *Renewable Energy*, **2020**, 150, 428-434	8.1	10
219	Sustainable adobe bricks with seagrass fibres. Mechanical and thermal properties characterization. *Construction and Building Materials*, **2020**, 239, 117669	6.7	20
218	Building thermal storage technology: Compensating renewable energy fluctuations. *Journal of Energy Storage*, **2020**, 27, 101147	7.8	12
217	Behaviour of a concrete wall containing micro-encapsulated PCM after a decade of its construction. *Solar Energy*, **2020**, 200, 108-113	6.8	35
216	Dynamic Corrosion Test Using LiNO3 Containing Molten Salt for CSP Applications. *Applied Sciences (Switzerland)*, **2020**, 10, 4305	2.6	3
215	Experimental Devices to Investigate the Long-Term Stability of Phase Change Materials under Application Conditions. *Applied Sciences (Switzerland)*, **2020**, 10, 7968	2.6	5
214	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	2.6	6
213	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	2.6	12
212	Assessing corrosive behaviour of commercial phase change materials in the 21□25 □C temperature range. *Journal of Energy Storage*, **2020**, 32, 101711	7.8	1
211	Bibliometric analysis of smart control applications in thermal energy storage systems. A model predictive control approach. *Journal of Energy Storage*, **2020**, 32, 101704	7.8	25
210	Systematic review on the use of heat pipes in latent heat thermal energy storage tanks. *Journal of Energy Storage*, **2020**, 32, 101733	7.8	18
209	Advances Toward a Net-Zero Global Building Sector. *Annual Review of Environment and Resources*, **2020**, 45, 227-269	17.2	37
208	Where is Thermal Energy Storage (TES) research going? □A bibliometric analysis. *Solar Energy*, **2020** , 200, 37-50	6.8	32
207	Polymeric interlayer materials for laminated glass: A review. *Construction and Building Materials*, **2020**, 230, 116897	6.7	38
206	Technological options and strategies towards zero energy buildings contributing to climate change mitigation: A systematic review. *Energy and Buildings*, **2020**, 219, 110009	7	62
205	Synthesis and Thermophysical Characterization of Fatty Amides for Thermal Energy Storage. *Molecules*, **2019**, 24,	4.8	4

204	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	7.8	4
203	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	6.4	20
202	Corrosion Assessment of Myo-Inositol Sugar Alcohol as a Phase Change Material in Storage Systems Connected to Fresnel Solar Plants. *Molecules*, **2019**, 24,	4.8	5
201	Review of solid particle materials for heat transfer fluid and thermal energy storage in solar thermal power plants. *Energy Storage*, **2019**, 1, e63	2.8	21
200	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	15
199	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	7	26
198	Thermal conductivity measurement techniques for characterizing thermal energy storage materials □A review. *Renewable and Sustainable Energy Reviews*, **2019**, 108, 32-52	16.2	60
197	Mainstreaming commercial CSP systems: A technology review. *Renewable Energy*, **2019**, 140, 152-176	8.1	103
196	Own-Synthetize Nanoparticles to Develop Nano-Enhanced Phase Change Materials (NEPCM) to Improve the Energy Efficiency in Buildings. *Molecules*, **2019**, 24,	4.8	7
195	Asphalt emulsion formulation: State of the art of formulation, properties and results of HIPR emulsions. *Construction and Building Materials*, **2019**, 212, 19-26	6.7	11
194	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	10.6	43
193	Effect of the impurity magnesium nitrate in the thermal decomposition of the solar salt. *Solar Energy*, **2019**, 192, 186-192	6.8	8
192	Latent thermal energy storage for solar process heat applications at medium-high temperatures □ A review. *Solar Energy*, **2019**, 192, 3-34	6.8	66
191	Thermal energy storage (TES) with phase change materials (PCM) in solar power plants (CSP). Concept and plant performance. *Applied Energy*, **2019**, 254, 113646	10.7	77
190	Alkali-Activated Cements for TES Materials in BuildingsTEnvelops Formulated With Glass Cullet Recycling Waste and Microencapsulated Phase Change Materials. *Materials*, **2019**, 12,	3.5	5
189	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	6.4	10
188	Comparative Analysis of Energy Demand and CO2 Emissions on Different Typologies of Residential Buildings in Europe. *Energies*, **2019**, 12, 2436	3.1	7
187	Innovative composite sorbent for thermal energy storage based on a SrBr2□6H2O filled silicone composite foam. *Journal of Energy Storage*, **2019**, 26, 100954	7.8	11

186	Thermal energy storage in solar energy systems: editorial. *Solar Energy*, **2019**, 192, 1-2	6.8	5
185	Experimental Characterization of Latent Thermal Energy Storage Systems. *Green Energy and Technology*, **2019**, 173-200	0.6	
184	Corrosion Characterization in Components for Thermal Energy Storage Applications. *Green Energy and Technology*, **2019**, 139-169	0.6	1
183	Materials Selection for Thermal Energy Storage Applications□ase Studies. *Green Energy and Technology*, **2019**, 55-66	0.6	1
182	Experimental Methods for the Characterization of Materials for Latent Thermal Energy Storage. *Green Energy and Technology*, **2019**, 89-101	0.6	1
181	Experimental results of mechanical, adhesive, and laminated connections for laminated glass elements □A review. *Engineering Structures*, **2019**, 180, 192-204	4.7	17
180	Evaluation of energy density as performance indicator for thermal energy storage at material and system levels. *Applied Energy*, **2019**, 235, 954-962	10.7	29
179	Corrosion monitoring and mitigation techniques on advanced thermal energy storage materials for CSP plants. *Solar Energy Materials and Solar Cells*, **2019**, 192, 179-187	6.4	29
178	Benchmarking of useful phase change materials for a building application. *Energy and Buildings*, **2019**, 182, 45-50	7	35
177	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	6.8	26
176	Use of partial load operating conditions for latent thermal energy storage management. *Applied Energy*, **2018**, 216, 234-242	10.7	23
175	New formulation and characterization of enhanced bulk-organic phase change materials. *Energy and Buildings*, **2018**, 167, 38-48	7	14
174	Multifunctional smart concretes with novel phase change materials: Mechanical and thermo-energy investigation. *Applied Energy*, **2018**, 212, 1448-1461	10.7	69
173	High temperature systems using solid particles as TES and HTF material: A review. *Applied Energy*, **2018**, 213, 100-111	10.7	41
172	Thermal stress reduction in cool roof membranes using phase change materials (PCM). *Energy and Buildings*, **2018**, 158, 1097-1105	7	41
171	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	16.2	22
170	Thermomechanical testing under operating conditions of A516Gr70 used for CSP storage tanks. *Solar Energy Materials and Solar Cells*, **2018**, 174, 509-514	6.4	5
169	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	5.8	21

168	Phase Change Material Selection for Thermal Energy Storage at High Temperature Range between 210 ºC and 270 ºC. *Energies*, **2018**, 11, 861	3.1	21
167	Static Concept at University of Lleida **2018**, 131-156		
166	Study of the Thermal Properties and the Fire Performance of Flame Retardant-Organic PCM in Bulk Form. *Materials*, **2018**, 11,	3.5	13
165	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	6.4	8
164	Combining biocatalysts to achieve new phase change materials. Application to non-edible animal fat. *Molecular Catalysis*, **2018**, 444, 76-83	3.3	5
163	Enthalpy-temperature plots to compare calorimetric measurements of phase change materials at different sample scales. *Journal of Energy Storage*, **2018**, 15, 32-38	7.8	22
162	Trends in penetration and ownership of household appliances. *Renewable and Sustainable Energy Reviews*, **2018**, 82, 4044-4059	16.2	10
161	Household appliances penetration and ownership trends in residential buildings. *Renewable and Sustainable Energy Reviews*, **2018**, 98, 1-8	16.2	6
160	Review of Reactors with Potential Use in Thermochemical Energy Storage in Concentrated Solar Power Plants. *Energies*, **2018**, 11, 2358	3.1	41
159	Process integration of thermal energy storage systems Evaluation methodology and case studies. *Applied Energy*, **2018**, 230, 750-760	10.7	33
158	Multi-objective optimisation of bio-based thermal insulation materials in building envelopes considering condensation risk. *Applied Energy*, **2018**, 224, 602-614	10.7	42
157	Heating and cooling energy trends and drivers in Europe. *Energy*, **2017**, 119, 425-434	7.9	43
156	Empirical equations for viscosity and specific heat capacity determination of fatty acids. *Journal of Energy Storage*, **2017**, 10, 20-27	7.8	11
155	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	6.4	23
154	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	7.8	60
153	Critical analysis of the T-history method: A fundamental approach. *Thermochimica Acta*, **2017**, 650, 95-105	2.9	27
152	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	7.8	27
151	Simulation-based optimization of PCM melting temperature to improve the energy performance in buildings. *Applied Energy*, **2017**, 202, 420-434	10.7	153

150	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	16.2	128
149	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	6.4	39
148	Fatty acid eutectic mixtures and derivatives from non-edible animal fat as phase change materials. *RSC Advances*, **2017**, 7, 24133-24139	3.7	26
147	Influence of the heat transfer fluid in a CSP plant molten salts charging process. *Renewable Energy*, **2017**, 113, 148-158	8.1	19
146	Empirical equation to estimate viscosity of paraffin. *Journal of Energy Storage*, **2017**, 11, 154-161	7.8	11
145	Thermal characterization of different substrates under dried conditions for extensive green roofs. *Energy and Buildings*, **2017**, 144, 175-180	7	17
144	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	16.2	82
143	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	0.4	2
142	Buildings Life Cycle Assessment **2017**, 275-290		4
141	PCM/wood composite to store thermal energy in passive building envelopes. *IOP Conference Series: Materials Science and Engineering*, **2017**, 251, 012111	0.4	15
140	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	7.8	37
139	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	6.4	72
138	Ionic compounds derived from crude glycerol: Thermal energy storage capability evaluation. *Renewable Energy*, **2017**, 114, 629-637	8.1	7
137	Experimental validation of the exact analytical solution to the steady periodic heat transfer problem in a PCM layer. *Energy*, **2017**, 140, 1131-1147	7.9	27
136	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	5.1	12
135	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	6.4	21
134	Thermochemical energy storage by consecutive reactions for higher efficient concentrated solar power plants (CSP): Proof of concept. *Applied Energy*, **2017**, 185, 836-845	10.7	37
133	Review on sorption materials and technologies for heat pumps and thermal energy storage. *Renewable Energy*, **2017**, 110, 3-39	8.1	126

132	Phase Change Material Selection for Thermal Processes Working under Partial Load Operating Conditions in the Temperature Range between 120 and 200 °C. *Applied Sciences (Switzerland)*, **2017**, 7, 722	2.6	25
131	Storage Stability of Bimodal Emulsions vs. Monomodal Emulsions. *Applied Sciences (Switzerland)*, **2017**, 7, 1267	2.6	7
130	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	8.1	35
129	Thermal energy storage in building integrated thermal systems: A review. Part 2. Integration as passive system. *Renewable Energy*, **2016**, 85, 1334-1356	8.1	155
128	MSWI bottom ash for thermal energy storage: An innovative and sustainable approach for its reutilization. *Renewable Energy*, **2016**, 99, 431-436	8.1	9
127	Characterization of granular phase change materials for thermal energy storage applications in fluidized beds. *Applied Energy*, **2016**, 181, 310-321	10.7	9
126	Thermal storage in a MW scale. Molten salt solar thermal pilot facility: Plant description and commissioning experiences. *Renewable Energy*, **2016**, 99, 852-866	8.1	32
125	Influence of alkaline chlorides on thermal energy storage properties of bischofite. *International Journal of Energy Research*, **2016**, 40, 1556-1563	4.5	7
124	Use of multi-layered PCM gypsums to improve fire response. Physical, thermal and mechanical characterization. *Energy and Buildings*, **2016**, 127, 1-9	7	21
123	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	6.4	51
122	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	16.2	83
121	Experimental evaluation of a concrete core slab with phase change materials for cooling purposes. *Energy and Buildings*, **2016**, 116, 411-419	7	23
120	The State of the Art for Technologies Used to Decrease Demand in Buildings: Thermal Energy Storage **2016**, 319-348		1
119	Types, methods, techniques, and applications for microencapsulated phase change materials (MPCM): A review. *Renewable and Sustainable Energy Reviews*, **2016**, 53, 1059-1075	16.2	286
118	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	16.2	48
117	Thermal energy storage for renewable heating and cooling systems **2016**, 139-179		6
116	Use of by-products as additives in adobe bricks: Mechanical properties characterisation. *Construction and Building Materials*, **2016**, 108, 105-111	6.7	20
115	Review of technology: Thermochemical energy storage for concentrated solar power plants. *Renewable and Sustainable Energy Reviews*, **2016**, 60, 909-929	16.2	218

114	Health hazard, cycling and thermal stability as key parameters when selecting a suitable phase change material (PCM). *Thermochimica Acta*, **2016**, 627-629, 39-47	2.9	41
113	Economic impact of integrating PCM as passive system in buildings using Fanger comfort model. *Energy and Buildings*, **2016**, 112, 159-172	7	109
112	Corrosion evaluation and prevention of reactor materials to contain thermochemical material for thermal energy storage. *Applied Thermal Engineering*, **2016**, 94, 355-363	5.8	10
111	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	7	26
110	Thermal energy storage in building integrated thermal systems: A review. Part 1. active storage systems. *Renewable Energy*, **2016**, 88, 526-547	8.1	178
109	Mechanical response evaluation of microcapsules from different slurries. *Renewable Energy*, **2016**, 85, 732-739	8.1	13
108	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	2.6	33
107	Preparation and Characterization of Inorganic PCM Microcapsules by Fluidized Bed Method. *Materials*, **2016**, 9,	3.5	27
106	Compatibility of materials for macroencapsulation of inorganic phase change materials: Experimental corrosion study. *Applied Thermal Engineering*, **2016**, 107, 410-419	5.8	25
105	Industrial waste materials and by-products as thermal energy storage (TES) materials: A review **2016**,		3
104	Acoustic insulation capacity of Vertical Greenery Systems for buildings. *Applied Acoustics*, **2016**, 110, 218-226	3.1	59
103	Molten salt facilities, lessons learnt at pilot plant scale to guarantee commercial plants; heat losses evaluation and correction. *Renewable Energy*, **2016**, 94, 175-185	8.1	28
102	Reduction of the subcooling of bischofite with the use of nucleatings agents. *Solar Energy Materials and Solar Cells*, **2016**, 157, 1011-1018	6.4	28
101	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	6.4	21
100	IEA SHC Task 42 / ECES Annex 29 WG A1: Engineering and Processing of PCMs, TCMs and Sorption Materials. *Energy Procedia*, **2016**, 91, 207-217	2.3	13
99	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	7	115
98	Thermal behaviour of insulation and phase change materials in buildings with internal heat loads: experimental study. *Energy Efficiency*, **2015**, 8, 895-904	3	14
97	Experimental evaluation at pilot plant scale of multiple PCMs (cascaded) vs. single PCM configuration for thermal energy storage. *Renewable Energy*, **2015**, 83, 729-736	8.1	116

96	Thermal performance evaluation of bischofite at pilot plant scale. *Applied Energy*, **2015**, 155, 826-833	10.7	12
95	Use of polyethylene glycol for the improvement of the cycling stability of bischofite as thermal energy storage material. *Applied Energy*, **2015**, 154, 616-621	10.7	23
94	Phase change materials and thermal energy storage for buildings. *Energy and Buildings*, **2015**, 103, 414-419	7	361
93	Review on the methodology used in thermal stability characterization of phase change materials. *Renewable and Sustainable Energy Reviews*, **2015**, 50, 665-685	16.2	82
92	PCM incorporation in a concrete core slab as a thermal storage and supply system: Proof of concept. *Energy and Buildings*, **2015**, 103, 70-82	7	58
91	Key performance indicators in thermal energy storage: Survey and assessment. *Renewable Energy*, **2015**, 83, 820-827	8.1	48
90	CO 2 mitigation accounting for Thermal Energy Storage (TES) case studies. *Applied Energy*, **2015**, 155, 365-377	10.7	41
89	Phase-change materials for reducing building cooling needs **2015**, 381-399		4
88	State of the art on gas□solid thermochemical energy storage systems and reactors for building applications. *Renewable and Sustainable Energy Reviews*, **2015**, 47, 386-398	16.2	126
87	New database to select phase change materials: Chemical nature, properties, and applications. *Journal of Energy Storage*, **2015**, 3, 18-24	7.8	39
86	Unconventional experimental technologies available for phase change materials (PCM) characterization. Part 1. Thermophysical properties. *Renewable and Sustainable Energy Reviews*, **2015**, 43, 1399-1414	16.2	65
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