Preparation, characterization and thermal properties of form-stable composite phase change material

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Citation Report

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Phase change materials integrated in building walls: A state of the art review. Renewable and Sustainable Energy Reviews, 2014, 31, 870-906. | 16.4 | 525 |
| 2 | Lauric–palmitic–stearic acid/expanded perlite composite as form-stable phase change material: Preparation and thermal properties. Energy and Buildings, 2014, 82, 505-511. | 6.7 | 123 |
| 3 | Diatomite/Palm Wax Composite as a Phase Change Material for Latent Heat Storage. Advanced Materials Research, 2015, 1126, 33-38. | 0.3 | 1 |
| 4 | Influence of Ultrafine 2CaO·SiO2 Powder on Hydration Properties of Reactive Powder Concrete. Materials, 2015, 8, 6195-6207. | 2.9 | 14 |
| 5 | Preparation and thermal characterization ofÂcomposite "Paraffin/Red Brick―as a novel form-stable of phase change material for thermal energy storage. International Journal of Hydrogen Energy, 2015, 40, 13771-13776. | 7.1 | 23 |
| 6 | Preparation and properties of shape-stabilized phase change materials based on fatty acid eutectics and cellulose composites for thermal energy storage. Energy, 2015, 80, 98-103. | 8.8 | 79 |
| 7 | Synthesis and thermal properties of fatty acid eutectics and diatomite composites as shape-stabilized phase change materials with enhanced thermal conductivity. Solar Energy Materials and Solar Cells, 2015, 141, 218-224. | 6.2 | 138 |
| 8 | Properties evaluation and applications of thermal energystorage materials in buildings. Renewable and Sustainable Energy Reviews, 2015, 48, 500-522. | 16.4 | 50 |
| 9 | Development of structural–functional integrated concrete with macro-encapsulated PCM for thermal energy storage. Applied Energy, 2015, 150, 245-257. | 10.1 | 127 |
| 10 | Fabrication and thermal characterization of kaolin-based composite phase change materials for latent heat storage in buildings. Energy and Buildings, 2015, 96, 193-200. | 6.7 | 102 |
| 11 | Utilization of macro encapsulated phase change materials for the development of thermal energy storage and structural lightweight aggregate concrete. Applied Energy, 2015, 139, 43-55. | 10.1 | 150 |
| 12 | Preparation and Characterization of Urea-Formaldehyde Resin Microcapsules Containing Dodecanol as Phase Change Material. Journal of Chemical Engineering of Japan, 2016, 49, 987-994. | 0.6 | 5 |
| 13 | A Study on a Novel Phase Change Material Panel Based on Tetradecanol/Lauric Acid/Expanded Perlite/Aluminium Powder for Building Heat Storage. Materials, 2016, 9, 896. | 2.9 | 16 |
| 14 | Preparation of fine powdered composite for latent heat storage. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 15 | Preparation and properties of a formâ€stable phaseâ€change hydrogel for thermal energy storage. Journal of Applied Polymer Science, 2016, 133, . | 2.6 | 24 |
| 16 | Thermal regulating performance of gypsum/(C18–C24) composite phase change material (CPCM) for building energy storage applications. Applied Thermal Engineering, 2016, 107, 55-62. | 6.0 | 62 |
| 17 | Development and thermal performance of pumice/organic PCM/gypsum composite plasters for thermal energy storage in buildings. Solar Energy Materials and Solar Cells, 2016, 149, 19-28. | 6.2 | 154 |
| 18 | Thermal energy storage characteristics of bentonite-based composite PCMs with enhanced thermal conductivity as novel thermal storage building materials. Energy Conversion and Management, 2016, 117, 132-141. | 9.2 | 156 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Development and optimisation of phase change material-impregnated lightweight aggregates for geopolymer composites made from aluminosilicate rich mud and milled glass powder. Construction and Building Materials, 2016, 110, 201-210. | 7.2 | 75 |
| 20 | Influence of intumescent flame retardant on thermal and flame retardancy of eutectic mixed paraffin/polypropylene form-stable phase change materials. Applied Energy, 2016, 162, 428-434. | 10.1 | 103 |
| 21 | 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 |
| 22 | Thermal Energy Storage Properties and Laboratory-Scale Thermoregulation Performance of Bentonite/Paraffin Composite Phase Change Material for Energy-Efficient Buildings. Journal of Materials in Civil Engineering, 2017, 29, . | 2.9 | 23 |
| 23 | Development of heat storage gypsum board with paraffin-based mixed SSPCM for application to buildings. Journal of Adhesion Science and Technology, 2017, 31, 297-309. | 2.6 | 20 |
| 24 | Preparation, characterization and thermal regulation performance of cement based-composite phase change material. Solar Energy Materials and Solar Cells, 2018, 174, 523-529. | 6.2 | 94 |
| 25 | Numerical and experimental research of cold storage for a novel expanded perlite-based shape-stabilized phase change material wallboard used in building. Energy Conversion and Management, 2018, 155, 20-31. | 9.2 | 139 |
| 26 | Thermal and Mechanical Properties of Expanded Graphite/Paraffin Gypsum-Based Composite Material Reinforced by Carbon Fiber. Materials, 2018, 11, 2205. | 2.9 | 49 |
| 27 | Study on a PEG/epoxy shape-stabilized phase change material: Preparation, thermal properties and thermal storage performance. International Journal of Heat and Mass Transfer, 2018, 126, 1134-1142. | 4.8 | 57 |
| 28 | Nanoclay and polymer-based nanocomposites: Materials for energy efficiency. , 2018, , 75-103. | | 7 |
| 29 | A practical ranking system for evaluation of industry viable phase change materials for use in concrete. Construction and Building Materials, 2018, 177, 272-286. | 7.2 | 21 |
| 30 | Optimization of preparation and analysis of Paraffin/SiO2 composite PCMs via sol-gel method. IOP Conference Series: Earth and Environmental Science, 0, 242, 032005. | 0.3 | 4 |
| 31 | General Synthesis of Lead-Free Metal Halide Perovskite Colloidal Nanocrystals in 1-Dodecanol. Inorganic Chemistry, 2019, 58, 11807-11818. | 4.0 | 34 |
| 32 | Porous geopolymer as a possible template for a phase change material. Materials Chemistry and Physics, 2019, 236, 121785. | 4.0 | 15 |
| 33 | Development of structural thermal energy storage concrete using paraffin intruded lightweight aggregate with nano-refined modified encapsulation paste layer. Construction and Building Materials, 2019, 228, 116768. | 7.2 | 21 |
| 34 | Capric acid phase change microcapsules modified with graphene oxide for energy storage. Journal of Materials Science, 2019, 54, 14834-14844. | 3.7 | 39 |
| 35 | A review of microencapsulated and composite phase change materials: Alteration of strength and thermal properties of cement-based materials. Renewable and Sustainable Energy Reviews, 2019, 110, 467-484. | 16.4 | 135 |
| 36 | Development of high performance PCM cement composites for passive solar buildings. Energy and Buildings, 2019, 194, 33-45. | 6.7 | 52 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 37 | An experimental study on applying organic PCMs to gypsum-cement board for improving thermal performance of buildings in different climates. Energy and Buildings, 2019, 190, 183-194. | 6.7 | 56 |
| 38 | A Taguchi approach for optimizing the mixture design of cold-bonded PCM aggregates. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, , 1-21. | 2.3 | 1 |
| 39 | Investigation on interfacial interaction and thermal properties of flame retarded wood-plastic form-stable phase change material. Composite Interfaces, 2019, 26, 597-610. | 2.3 | 11 |
| 40 | Evaluation of carbonized waste tire for development of novel shape stabilized composite phase change material for thermal energy storage. Waste Management, 2020, 103, 352-360. | 7.4 | 44 |
| 41 | Applications of ESEM on Materials Science: Recent Updates and a Look Forward. Small Methods, 2020, 4, 1900588. | 8.6 | 12 |
| 42 | Thermal energy storage and thermal conductivity properties of Octadecanol-MWCNT composite PCMs as promising organic heat storage materials. Scientific Reports, 2020, 10, 9168. | 3.3 | 29 |
| 43 | Tuning surface functionality of standard biochars and the resulting uplift capacity of loading/energy storage for organic phase change materials. Chemical Engineering Journal, 2020, 394, 125049. | 12.7 | 55 |
| 44 | Waste materials as the potential phase change material substitute in thermal energy storage system: a review. Chemical Engineering Communications, 2021, 208, 687-707. | 2.6 | 31 |
| 45 | Mechanical and Thermo-Physical Performances of Gypsum-Based PCM Composite Materials Reinforced with Carbon Fiber. Applied Sciences (Switzerland), 2021, 11, 468. | 2.5 | 12 |
| 46 | Experimental investigation for the development of superior structural integrated thermocrete via incorporation of novel non-encapsulated paraffin aggregate. Construction and Building Materials, 2021, 271, 121883. | 7.2 | 11 |
| 47 | Energy performance evaluation of heat storage of calcium sulfate hemihydrate composite with fine aggregate based on paraffinic phase change material. Journal of Building Engineering, 2021, 42, 103075. | 3.4 | 3 |
| 48 | Performance of energy storage system containing cement mortar and PCM/epoxy/SiC composite fine aggregate. Applied Thermal Engineering, 2021, 198, 117445. | 6.0 | 18 |
| 49 | PREPARATION OF PUZZOLANA ACTIVE TWO COMPONENT COMPOSITE FOR LATENT HEAT STORAGE. Ceramics - Silikaty, 2016, , 291-298. | 0.3 | 5 |
| 50 | The porous composite BN@SHS made of boron nitride, silica hollow spheres and Si–O–B interface. Journal of Porous Materials, 2022, 29, 651-662. | 2.6 | 1 |
| 51 | A novel dodecanol/tepexil PCM composite for thermal energy storage in buildings. Materials Chemistry and Physics, 2022, 284, 126067. | 4.0 | 6 |
| 52 | Preparation of Composite Microencapsulated Phase Change Material Based on Phosphogypsum for Passive Building Applications. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 53 | Characteristics, energy saving and carbon emission reduction potential of gypsum wallboard containing phase change material. Journal of Energy Storage, 2022, 55, 105685. | 8.1 | 20 |
| 54 | Preparation of composite microencapsulated phase change material based on phosphogypsum for passive building applications. Construction and Building Materials, 2023, 378, 131068. | 7.2 | 3 |

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| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Review on application of phase change materials in asphalt pavement. Journal of Traffic and Transportation Engineering (English Edition), 2023, 10, 185-229. | 4.2 | 1 |
| 56 | Shielding Encapsulation to Enhance Fire Endurance of Phase Change Materials in Energy-Efficient Concrete. Fire Technology, 2023, 59, 1697-1723. | 3.0 | 2 |
| 57 | Fuel, cost, energy efficiency and CO2 emission performance of PCM integrated wood fiber composite phase change material at different climates. Scientific Reports, 2023, 13, . | 3.3 | 6 |
| 58 | Preparation, microstructure, performance and mortar application of paraffin/titanium-bearing blast furnace slag phase change aggregate. Case Studies in Construction Materials, 2023, 19, e02262. | 1.7 | Ο |
| 59 | Thermal-mechanical behaviors of concrete with innovative salt hydrate PCM-based thermal energy storage aggregate. Energy Conversion and Management, 2023, 293, 117477. | 9.2 | 1 |
| 60 | Phase change materials embedded in expanded clay aggregates to develop energy storage concrete: A review. Science and Technology for the Built Environment, 2023, 29, 1050-1071. | 1.7 | Ο |
| 61 | Advances in phase change building materials: An overview. Nanotechnology Reviews, 2023, 12, . | 5.8 | 0 |
| 62 | Enhancement of the thermal properties of the phase change composite of acid-base modified biochar/paraffin wax. Solar Energy Materials and Solar Cells, 2024, 269, 112802. | 6.2 | 0 |