

In order to solve the problems of insufficient utilization of compression heat in compressed air energy storage (CAES) system and the need for supplementary heat in methanol cracking ...

Ice storage enhanced by biomimetic fins in spherical capsules is studied numerically based on enthalpy-porosity method. The evolution of water/ice interface, the temperature variation, and ...

The applicability of packed bed latent thermal energy storage devices is restricted by the limited thermal conductivity of phase change materials (PCMs). As a cheap and simple heat transfer ...

1. Introduction Even though the problem of thermal energy storage within a capsule has been extensively studied, very little information is available on its performance in the case of latent ...

Quantifying the impact of operating temperature on cracking in battery electrodes, using super-resolution of microscopy images and stereology Energy Storage Materials ( IF 20.2 ) Pub Date ...

This study provides a comprehensive literature-based analysis of the long-term thermal and mechanical performance of dynamic phase change materials (DFMs), which play a critical role ...

The temperature variation, charging and discharging efficiencies, and energy and exergy efficiencies were studied to investigate thermal performances, and detailed thermal energy ...

Request PDF | On Nov 1, 2024, Hui Yuan and others published Analytical models for crack-hitting probability and crack-healing efficiency by linear capsules in a material with a crack network ...

The thermal energy storage systems can be sensitive to either heat storage or latent heat storage, or a combination of both and the storage capacity of the material depends ...

