# Phase change latent heat energy storage system



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Generated on: 2026-03-07 10:08:25


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Wu, Y. et al. Recyclable solid-solid phase change materials with superior latent heat via reversible anhydride-alcohol crosslinking for efficient thermal storage.

Primary among these is maximizing latent heat storage capacity per unit mass and volume, which directly impacts system efficiency and economic viability. Researchers aim to identify and ...

Among the numerous methods of thermal energy storage (TES), latent heat TES technology based on phase change materials has gained renewed attention in recent years owing to ...

Phase change materials (PCMs) play a pivotal role in LHTES systems. PCMs have the ability to absorb and release significant amounts of latent heat during their phase transitions, typically ...

Short term storage of only a few hours is essential in most applications. The agenda is to use phase change materials (PCM) for storing the thermal (Heat/Cold) energy and to make use of the latent ...

The advantages of latent heat thermal energy storage systems with solid-liquid phase-change material (SLPCM-LHTES) for energy storage are highlighted. A new perspective of a three ...

Advancements in thermal energy storage (TES) technology are contributing to the sustainable development of human society by enhancing thermal utilization efficiency, addressing ...

Storing thermal energy by changing the aggregate state of matter, usually from solid to liquid (e.g., ice bank and most conventional PCMs), is the most common method. Such a phase ...

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