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Optimized Thermal Energy Storage Technology Based on Phase Change Material

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Message from the Guest Editors

This Special Issue aims to demonstrate the advancements and applications of optimized thermal-energy storage (TES) technology centered around phase change materials (PCMs). TES systems are crucial for efficiently managing and utilizing thermal energy across various sectors, including buildings, industrial processes, and renewable energy systems. PCMs, with their ability to store and release large amounts of latent heat during phase transitions, have emerged as promising candidates for enhancing TES performance.

Contributions to this Special Issue cover a wide range of topics, including the following:

1. Novel PCM Development;
2. Enhanced TES-System Design;
3. Modeling and Simulation;
4. Applications and Case Studies;
5. Integration with Renewable Energy Sources.

Overall, this Special Issue provides valuable insights into the latest developments, challenges, and opportunities in optimized thermal-energy storage technology based on phase change materials, contributing to the advancement of sustainable energy solutions and the transition towards a low-carbon future.



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Special Issue



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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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