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Highly Efficient Thermal Energy Storage (TES) Technologies

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Deadline for manuscript
submissions:

30 September 2024

Message from the Guest Editors

In recent years, the quest for sustainable and efficient energy storage solutions has gained significant momentum. Thermal energy storage (TES) technologies play a crucial role in enhancing the efficiency and reliability of energy systems. This Special Issue aims to collate cutting-edge research and advancements in the field of highly efficient TES technologies.

This Special Issue invites original research articles, reviews, and case studies that address a wide range of topics related to highly efficient TES technologies. Topics of interest include, but are not limited to, the following:

- Advanced materials for thermal energy storage;
- Phase change materials (PCMs) and their applications;
- Sensible, latent, and thermochemical storage systems;
- Novel designs and configurations of TES systems;
- Heat transfer enhancement in TES;
- The integration of TES with renewable energy sources;
- Thermal energy storage for industrial processes;
- The performance optimization and modeling of TES systems;
- Thermal energy storage for building applications;
- Thermal management and control strategies;
- Economic and environmental assessments of TES technologies.



mdpi.com/si/187943

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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