Special Issue

Advanced Thermal Energy Storage and Control Strategies for Integrated Energy Systems

Message from the Guest Editor

The global transition towards sustainable energy systems has highlighted the critical importance of thermal energy storage (TES) technologies and their integration with various energy systems. This Special Issue aims to address the cutting-edge developments in both thermal energy storage technologies and the advanced control strategies necessary for their optimal integration into modern energy systems. As energy systems become increasingly complex and interconnected, the role of thermal energy storage extends beyond simple heat conservation. Modern TES systems must operate in harmony with various energy sources, respond to dynamic demand patterns, and optimize energy efficiency across integrated systems. This necessitates sophisticated control strategies that can manage multiple objectives while ensuring system stability and reliability.

Guest Editor

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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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