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## Advances in Thermal Energy Storage and Applications

Guest Editors:

**Prof. Dr. Shuli Liu**

School of Mechanical  
Engineering, Department of  
Energy and Power Engineering,  
Beijing Institute of Technology,  
Beijing, China

**Dr. Panpan Song**

School of Mechanical  
Engineering, Beijing Institute of  
Technology, Beijing 100081,  
China

Deadline for manuscript  
submissions:

**closed (20 September 2023)**

### Message from the Guest Editors

This Special Issue aims to present the latest research on new materials, systems, devices and methods for advanced thermal energy storage, as well as the investigations into heat transfer, flow and physical and chemical mechanisms. Research scholars are invited to submit original research, review, and perspective articles on the topics of interest for publication, which include, but are not limited to, the following:

- Configuration design and optimization of high-efficiency thermal storage systems;
- Preparation and optimization of materials with high thermal energy storage density;
- Enhancement of the thermal and chemical stabilities of thermal storage material;
- Thermodynamic and economic analyses of thermal storage systems;
- Control of heat charging and discharging of thermal storage systems and devices;
- Heat transfer control and enhancement of thermal storage devices;
- Single-phase and multi-phase flow control of thermal storage devices;
- Operation strategy optimization of thermal storage systems;
- Smart fault detection and diagnosis of thermal storage systems;
- Advanced simulation and testing approaches.



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# Special Issue



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## Editor-in-Chief

### **Prof. Dr. Enrico Sciubba**

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

## 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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*Energies* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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