



Advances in Thermal Energy Storage and Applications

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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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Message from the Editor-in-Chief

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