



*energies*



an Open Access Journal by MDPI

## Advanced Studies for Latent Heat Thermal Energy Storage System

Guest Editors:

**Dr. Saeed Tiari**

Biomedical Engineering  
Department, Widener University,  
One University Pl, Chester, PA  
19013, USA

**Dr. Mahboobe Mahdavi**

Mechanical Engineering  
Department, Gannon University,  
109 University Square, Erie, PA  
16541, USA

Deadline for manuscript  
submissions:

**closed (30 November 2021)**

### Message from the Guest Editors

Latent heat storage stores heat in a storage medium in the form of potential energy between the particles of the substance. The conversion between the heat and the potential energy within the substance involves a phase change; thus, heat storage occurs without significant temperature changes in the storage medium. Since the latent heat of a substance is much greater than the specific heat of the same substance, latent heat storage can store the same amount of heat in a much smaller volume. This is a significant advantage of latent heat storage systems. Latent heat storage relies on the phase changes of the medium (e.g., from solid to liquid) that use latent heat to store energy. These materials normally include: organic materials, paraffin- or non-paraffin-compounds, inorganic phase-changing materials, and eutectic mixtures.



[mdpi.com/si/53374](https://mdpi.com/si/53374)

**Special** Issue



# energies



an Open Access Journal by MDPI

## Editor-in-Chief

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

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** CiteScore - Q1 (Control and Optimization)

## Contact Us

---

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

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/energies](http://mdpi.com/journal/energies)  
[energies@mdpi.com](mailto:energies@mdpi.com)  
[X@energies\\_mdpi](https://twitter.com/energies_mdpi)