Special Issue

Thermal Energy Storage for Concentrated Solar Thermal Applications

Message from the Guest Editors

A cost-effective thermal energy storage technology is critical to increase the utilization of intermittent renewable energy sources such as concentrated solar thermal and make it dispatchable for power generation and industrial process heat applications. Thermal storage systems adopt different energy storage modes, including well-studied sensible and latent energy storage, as well as thermochemical storage, which is in a relatively nascent stage. A successful development of a thermal storage system involves scientific and technological developments in several research areas, including materials characterization, thermodynamics, heat transfer study, system demonstration, and technoeconomic analysis. In this Special Issue, we cordially invite you to submit reviews and original articles related to aforementioned topics that will broaden our understanding of the scientific principles governing the dynamic performance of thermal storage systems for concentrated solar–thermal applications. With the inclusion of a wide range of topics related to thermal storage technology development, this SI will serve as a guide for the scientific and industrial community.

Guest Editors

Dr. Karthik Nithyanandam
Element 16 Technologies, Arcadia, CA, USA

Dr. Amey Barde
Department of Mechanical Engineering, Michigan State University, East Lansing, MI 48824, USA

Deadline for manuscript submissions

closed (30 April 2022)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/69911

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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)