Special Issue

Theoretical and Experimental Analysis of Phase Change Materials for Thermal Energy Storage Applications

Message from the Guest Editors

Authors are invited to submit novel numerical and/or experimental contributions to this Special Issue aimed at providing new clear and useful indications on the operation of such systems, underlying the benefits and/or the limits about the use of PCM-based solutions for thermal energy storage in the considered applications, also through comparisons with solutions based on conventional thermal energy storage systems. Topics of interest for publication include, but are not limited to:

- PCMs for the management and storage of thermal energy in electronic systems;
- Integration of PCMs in buildings;
- Integration of PCMs in solar thermal collectors;
- Integration of PCMs in PV, CPV, and hybrid PV/T systems;
- PCMs for space heating and domestic hot water;
- PCMs for thermal management of lithium-ion batteries;
- Life cycle assessment (LCA) and life cycle cost (LCC) of PCMs;
- PCMs in cooling applications;
- PCMs in cold-chain logistics;
- Integration of PCMs in solar desalination systems;
- Application of cascaded multiple-PCMs;
- Application of PCMs in heat exchangers;
- Techniques for improving heat transfer in PCMs systems.

Guest Editors

Dr. Luigi Mongibello

ENEA—Italian National Agency for New Technologies, Energy and Sustainable Economic Development, Portici Research Center, P.le E.Fermi, 1, 80055 Portici, NA, Italy

Dr. Matteo Morciano

Department of Energy, Politecnico di Torino, 10129 Torino, Italy

Deadline for manuscript submissions

closed (31 January 2024)

Energies

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Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/140345

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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

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