

Special Issue

Composite Phase Change Materials (cPCMs) for Thermal Management Applications

Message from the Guest Editors

Using phase change material (PCM) as a cooling media has become a very promising cooling technology in the current era with zero-noise and zero-power consumption. While PCMs have a great potential to absorb/release excessive heat during the heating/cooling process, they however possess low thermal conductivity, especially organic PCMs. There is ongoing research on the development of novel energy storage materials in the form of composite PCMs (cPCMs) to enhance their thermophysical properties, reducing super-cooling, improving cyclic reliability, volumetric and gravimetric storage density, cPCMs-integrated thermal management applications, and scale-up. These days, the addition of highly thermal conductive metal-matrix and chemically treated surfaces of nanomaterials have taken over the key attention of researchers and scientists. This Special Issue aims to invite the recent studies based on experimental, numerical, and theoretical analysis on the development of cPCMs and their application in the field of thermal management and efficiency enhancement in various applications. This Special Issue seeks both high-quality original research and review articles.

Guest Editors

Dr. Adeel Arshad

Dr. Muhammad Anser Bashir

Dr. Muhammad Imran

Prof. Dr. Jo Darkwa

Deadline for manuscript submissions

closed (15 November 2022)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/112469

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://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)