## Special Issue

# Advances in Thermal Conductivity and Thermal Management of Polymer Materials

## Message from the Guest Editors

Effective thermal management in high-power electronics is significant for the energy efficiency and safety issues of electronics. However, the thermal management ability of polymers and polymer composites cannot meet the demand of next-generation, high-power electronics. The mechanism of heat transport in polymeric thermal management materials remains unclear. As a result, increasing the thermal management ability of polymeric materials is significant for their use in the electronics market. This Special Issue aims to present and disseminate the most recent advances related to the experiment, theory, design, and modeling of the polymeric thermal management materials. Topics of interest for publication include, but are not limited to, the following:

- Thermal conductivity of polymer and polymer composites;
- Technologies for the thermal conductivity measurement of polymers;
- Theories and models of heat transport in polymers;
- Polymeric phase change materials for thermal management;
- Applications of polymeric thermal management materials in electronics;
- Machine learning for the related properties of polymers and polymer composites.

#### **Guest Editors**

Dr. Guangxin Lv

School of Sustainable Energy and Resources, Nanjing University, Suzhou 215163, China

Dr. Meng An

Department of Mechanical Engineering, University of Tokyo, Tokyo 113-8654, Japan

## Deadline for manuscript submissions

20 February 2026



# **Energies**

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/233638

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



## **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)

