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.

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Deadline for manuscript submissions

closed (20 February 2026)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/233638

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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.

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