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# Thermoelectric Nanocomposites and Devices: Design, Fabrication and Applications

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Deadline for manuscript submissions:
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## Message from the Guest Editors

Thermoelectric techniques have been achieving fruitful research results in the past decades as one of the solutions for improving the efficiency of energy consumption by turning waste heat directly into electric power. For them to be applied industrially, however, the performance and reliability of thermoelectric materials and devices must be enhanced in terms of their design, fabrication, and application processes. Nanotechnology has been approved as an effective way of tuning thermal and electrical transport properties and mechanical performance in thermoelectric materials and devices.

The topics of interest to this Special Issue include but are not limited to thermoelectric performance optimization by nanotechnology (i.e., nanostructure, nanocomposites), nanomaterials for mechanical performance enhancement in thermoelectric materials, nanomaterials for thermal management and utilization, nanofluid use in thermoelectric devices, thermal interface materials, and phase change materials in energy conversion and hybrid devices.

We look forward to receiving your contributions.

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## Editor-in-Chief


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## Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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