Special Issue

Recent Advances in the Thermal, Electrical and Thermoelectric Properties of Nanomaterials

Message from the Guest Editors

Our primary aim with this Special Issue is to offer a comprehensive snapshot of the latest breakthroughs and innovations in the field of nanomaterials, focusing on their thermal, electrical, and thermoelectric properties. We expect contributions encompassing a wide range of topics, from the synthesis of novel nanomaterials to pioneering research on the manipulation of thermal conductivity, the enhancement of electrical conductance, and the optimization of thermoelectric efficiency. We invite a diverse array of contributions, including original research articles, reviews, and perspective pieces. Our vision is to create a comprehensive mosaic of the field, offering a multidimensional view of nanomaterials focused on thermal management and thermoelectric applications.

- The synthesis and characterization of nanomaterials with tailored thermal properties;
- Advances in thermal management using nanomaterials;
- Innovations in thermoelectric materials and devices;
- Theoretical models and simulations for predictive nanomaterial design;
- Emerging trends and prospects in the field.

Guest Editors

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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.

Editor-in-Chief

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