Special Issue

Innovative Directions in Thermoelectric Materials: Development and Characterization Approaches in Nano-Scale

Message from the Guest Editors

This Special Issue aims to address a range of new material design strategies and approaches related to the development, engineering and characterization of advanced thermoelectrics in nano-scale, including nano-structuring, nano-materials, nano-composites, low-dimensionality strategies, band structure engineering, hierarchical phonon scattering, etc. Research topics may include (but not limited to) novel synthetic methods, emphasizing sustainable and environmentally friendly concepts, advanced characterization techniques, involving investigations in atomic-, nano-, and micro-structure, electrical and thermal transport property measurements as well as computational approaches. We look forward to receiving your contributions.

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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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