Special Issue

Novel Nanostructures for Thermoelectric Applications

Message from the Guest Editor

With the miniaturization, integration, and flexibility of thermoelectric semiconductor devices being enhanced, there is an urgent need to develop high-performance thermoelectric materials. Compared with the continuously enhanced thermoelectric properties of thermoelectric materials, the mechanical properties of thermoelectric materials have considerably lagged behind. In particular, the lack of ductility in inorganic thermoelectric semiconductors severely hinders their commercial applications. Therefore, it is important to develop ductile thermoelectric materials that improve the reliability and service life of flexible thermoelectric devices. Due to your expertise in flexible thermoelectric materials and devices, we cordially invite you to contribute a paper to this Special Issue focused on microstructures and the mechanical and thermoelectric properties of various flexible thermoelectric materials and devices. Full papers, communications, and reviews are welcome.

Guest Editor

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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 nanometerscale 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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