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Nanostructured Thermoelectric Materials (2nd Edition)

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Deadline for manuscript submissions:
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Message from the Guest Editors

In recent years, thermoelectric materials have attracted heightened interest. Thermoelectric efficiency is related to the dimensionless figure of merit, which depends on the Seebeck coefficient, electrical and thermal conductivity, and temperature. One strategy that has been widely applied in order to maximize the figure of merit involves minimizing the thermal conductivity. A detailed description of thermal and electrical transport on the nanoscale, however, is not trivial from a theoretical or experimental perspective, since macroscopic descriptions of transport phenomena are often not valid on the nanoscale. Since both thermal and electrical transport play a crucial role in thermoelectric materials, it is of particular interest to carefully describe the interaction of the two types of carriers, namely electrons, or charge carriers, and phonons.

This Special Issue aims to publish theoretical and experimental studies that may lead to an enhanced understanding of the various scattering mechanisms affecting electrons and phonons, particularly the interactions of the two, and that focus on their effects in nanostructured materials.

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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