

Special Issue

Materials Physics in Thermoelectric Materials

Message from the Guest Editors

Thermoelectric materials, which could directly convert a temperature gradient into electrical energy, provide a promising solution for sustainable energy harvesting. The development of thermoelectric materials has recently gained tremendous attention in the fields of solid-state physics, chemistry, materials science, and engineering. Many strategies have been implemented to achieve a high-efficiency thermoelectric conversion efficiency, e.g., doping, defect, intercalation, band engineering, strain, nanostructures, and molecule junctions, which greatly promote further applications of thermoelectrics. This Special Issue on “Materials Physics in Thermoelectric Materials” aims to provide a unique international forum for researchers working in thermoelectric materials to report their latest endeavors in advancing this field, including new pristine thermoelectric materials, strategies used to improve thermoelectric performance, theoretical understanding thermoelectrics, physical insights into engineering high-performance thermoelectrics, computational discovery of new thermoelectric materials, and so on.

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Deadline for manuscript submissions

closed (20 February 2024)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



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About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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