



materials



an Open Access Journal by MDPI

Materials Physics in Thermoelectric Materials

Guest Editors:

Prof. Dr. Bao-Tian Wang

Institute of High Energy Physics,
Chinese Academy of Sciences
(CAS), Beijing 100049, China

Dr. Peng-Fei Liu

Institute of High Energy Physics,
Chinese Academy of Science
(CAS), Beijing 100049, China

Deadline for manuscript
submissions:

closed (20 February 2024)

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.



mdpi.com/si/108278

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)