

Special Issue

Half-Heusler, Silicide and Zintl-type Thermoelectric Materials

Message from the Guest Editor

Thermoelectric generators are widely considered to become an important component of a sustainable energy future with many opportunities to harvest waste heat. These include stationary sources, such as in power plants and cement works, but also mobile applications including waste heat recovery from exhaust gasses in transportation. There has been an enormous improvement in thermoelectric materials performance over the past two to three decades and peak $ZT > 1$ is now routinely possible. The aim of this Special Issue is to bring together the latest trends in research on half-Heuslers, silicides and Zintl phases. This covers materials synthesis and characterization but also includes work on important materials issues, such as high-temperature stability, electrical and thermal contacting and the fabrication of modules exploiting these materials.

Guest Editor

Prof. Dr. Jan-Willem Bos

EaStCHEM School of Chemistry, University of St Andrews, St Andrews
KY169ST, UK

Deadline for manuscript submissions

closed (31 July 2018)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/9993

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)



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.

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

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 and Metallurgical Engineering) /
CiteScore - Q1 (Condensed Matter Physics)