materials

an Open Access Journal by MDPI

IMPACT FACTOR 3.2

Indexed in: PubMed

CITESCORE 6.4

Heusler and Half-Heusler Compounds

Guest Editor:

Prof. Dr. Yaniv Gelbstein
Department of Materials Engineering, Ben-Gurion University of the Negev, Beer-Sheva 84105, Israel

Deadline for manuscript submissions:
closed (31 October 2019)

Message from the Guest Editor

The increasing interest in Heusler and half-Heusler compounds, since the first discovery of the 1st Cu_2MnAl Heusler compound by the German scientist Friedrich Heusler in 1903, passing 100,000 publications in 2017, with more than 1500 reported compounds, is due to their high potential for a wide variety of applications in future energy fields (including thermoelectrics, solar cells) and spintronics. New ferromagnetic, semiconducting, or even topological-insulating Heusler and half-Heusler compositions with unique properties are constantly reported, highlighting their scientific and applicative significance. The more than 250 semiconducting phases reported to date can be tuned to modify their energy gaps, from 0 to 4 eV, using chemical composition and process parameter variations. Magnetism can be controlled in the metallic phases and combining superconductivity with topological states can lead to new multifunctional materials.

For further information, please click:

http://www.mdpi.com/journal/materials/special_issues/heusler_half_heusler_compounds

Prof. Yaniv Gelbstein
Guest Editor

materials

IMPACT FACTOR 3.2 | Indexed in: PubMed | CITESCORE 6.4

an Open Access Journal by MDPI

Editors-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

Prof. Dr. Yuguang Ma
State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

Message from the Editorial Board

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

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi