

Special Issue

Heusler and Half-Heusler Compounds

Message from the Guest Editor

The increasing interest in Heusler and half-Heusler compounds, since the first discovery of the 1st Cu₂MnAl 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

Guest Editor

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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.

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