Special Issue

Recent Advances in Superconducting Alloys and Compounds

Message from the Guest Editor

Superconductivity is a macroscopic manifestation of the quantum mechanics. Since its discovery in 1911, the exploration of new superconductors has been a long-standing pursuit in the materials research community because it not only strengthens our understanding of the superconducting mechanism, but also leads to potential applications. In recent years, topological superconductors, non-cetrosymmtric superconductors, and high-entropy superconductors are several active subjects of investigation. This Special Issue aims to collect the latest research results on these superconductors. The work published in the Special Issue is expected to comprise studies on the synthesis, crystal structure, and physical properties of solid-state materials, including (but not limited to) alloys and compounds, contributing to the development of areas of interest. The papers that report theoretical predictions and review latest research advances are also welcome.

Keywords:

- superconductivity
- nontrivial band topology
- non-centrosymmetric crystal structure
- large configuration entropy

Guest Editor

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Deadline for manuscript submissions

closed (10 August 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/147758

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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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