Special Issue

Research on the Microstructure and Properties of Metal Alloys

Message from the Guest Editors

Metals and alloys occupy an important place in human history. Today, they make up one of the basic groups of construction materials. Alloy technology uses smelting and casting methods. Further possible methods include forming, welding, sintering, electrolysis, solid state diffusion saturation and additive methods and heat treatment.

The properties of metal products depend on the chemical composition and microstructure, formed during a series of technological procedures. The microstructure and properties of alloys are evaluated today using various methods. The study of the rules for forming the structure of alloys and the mechanisms of decohesion opens a new pathway for optimizing the properties of known alloys as well as designing new ones with improved properties.

Topics of interest in this Special Issue include the analysis of the microstructure and properties of alloys, their processing, the application of modern research and modeling and simulation techniques. Review articles relating to these topics are welcome to submit to this Special Issue. We look forward to receiving your submissions and jointly developing this interesting area of research.

Guest Editors

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Deadline for manuscript submissions

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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.

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