

## Special Issue

# Synthesis, Properties and Applications of Alloy Materials

### Message from the Guest Editors

Metallic materials or alloys have been studied and continuously developed since the iron age for their use in various kinds of applications, such as structural, electrical, magnetic, thermal and biomedical applications. Fracture toughness, strength, ductility, thermal conductivity, thermal stability, corrosion resistance, electrical conductivity, magnetic coercivity, and magnetic hysteresis are prominent examples of alloy properties, which are essential for various kinds of applications. While these properties are intimately connected to the alloys' internal structure, the structure in turn is a result of their synthesis and processing, including casting, sintering, additive manufacturing, etc. In this Special Issue, we invite articles that focus on the processing–structure–property relationships in alloys for their applications in various sectors, such as transport, energy and biomedical sectors. The articles will cover various topics ranging from, but not limited to, alloy synthesis, processing routes, microstructure, phase transformation, detailed characterization, and their physical and mechanical properties.

### Guest Editors

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### Deadline for manuscript submissions

closed (20 January 2025)



## International Journal of Molecular Sciences

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