Special Issue

Development, Characterization and Properties of High-Performance Aluminum Alloys

Message from the Guest Editor

Aluminum alloys have been widely used in the aerospace and automobile industries because of their excellent specific strength. Several methods for the characterization of aluminum alloys have been introduced with the increase in aluminum applications, alongside advancements in analysis methods using the latest research equipment. Promoting the understanding of the fundamental aspects of the relationships between processing, properties, and microstructures is important, and the advanced characterization of these alloys would provide confirmative theories such as solidification, phase transition, deformation, fracture, corrosion, and age-hardening behaviors. This Special Issue embraces fundamental physics as well as an industrial viewpoint for applications in aluminum alloys. Manuscripts relating progressive results are highly welcomed from both academic and commercial viewpoints.

Guest Editor

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Message from the Editor-in-Chief

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editor-in-Chief

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