Special Issue

Microstructure and Properties of Aluminum Alloys

Message from the Guest Editors

The global production of aluminum alloys has been increasing over the past few decades due to the increasing application of aluminum alloys in the automotive, aerospace, building, and other industries. The future success of aluminum and its alloys depends not only on the further improvements of existing and secondary alloys but also on the development of novel aluminum alloys. Every change in casting, forming, modification, heat treatment, recycling, grain refinement, precipitation of secondary phases, and other processing steps affects the microstructure and thus changes the properties of aluminum alloys.

This Special Issue of Metals is focused on relationships between structure and properties of aluminum alloys. The papers presented in this Special Issue will give an account of the scientific and technological state of the art of aluminum alloys in 2021. Your contribution to this account will be highly valued and appreciated. We invite you to contribute research work that relates to the effects of different production factors on the structure and properties of aluminum alloys.

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Deadline for manuscript submissions

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Message from the Editorial Board

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.

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