Special Issue

Structure and Properties of Aluminium Alloys 2024

Message from the Guest Editor

The main prerequisite for the future success of aluminium and its alloys is the continuous improvement of existing aluminium alloys and the development of new ones. In addition to conventional fabrication methods (casting, forming, powder metallurgy), additive manufacturing technologies provide additional opportunities for tailoring the microstructure of the alloys and designing new combinations of properties. In this Special Issue, we welcome original research articles and reviews. The research areas should include the relationships between the manufacturing methods, structure, and properties of aluminium alloys. Specifically, the properties of aluminium alloys are based on their structure, which can be modified using different manufacturing routes. Articles dealing with the effect of microstructure and properties on carbon footprints are highly desirable. The papers presented in this Special Issue should provide an overview of the scientific and technological state of the art of aluminium alloys in 2024. Your contribution to this 2024 account will be highly valuable and appreciated. We look forward to receiving your contributions.

Guest Editor

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Deadline for manuscript submissions

closed (10 May 2025)



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About the Journal

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.

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