

Special Issue

Thermomechanical Processing, Microstructure Evolution and Mechanical Properties of Alloys

Message from the Guest Editors

Thermomechanical processing (TMP) is a physical metallurgical process that combines the mechanical or plastic deformation process with thermal processes. It has been widely applied to optimize the microstructure of alloys through grain refining, phase transformation, etc., to improve their mechanical properties. This Special Issue will focus on the recent development of thermomechanical processing. It will cover alloy design, phase transformation, participate control, and prediction of microstructure evolution and mechanical properties of the alloys in TMP. Applications of artificial intelligence and big data analysis in TMP for optimizing TMP will be included in this issue.

Guest Editors

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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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