Special Issue

Recent Insights into Mechanical Properties of Metallic Alloys

Message from the Guest Editor

A focus of materials scientists has often been the study of the mechanical properties of metallic alloys, due to their critical role in a wide variety of technological applications. Recent developments in analytical techniques and mathematical modelling allowed researchers to obtain deeper insights into the primary mechanisms that determine these properties. This has led to significant progress in the development and optimization of alloys.

Recent studies have also focused on the impact of additive manufacturing techniques, such as selective laser melting and electron beam melting, on the mechanical performances of several alloys. In fact, additive manufacturing allows researchers to realize complex geometries and tailored microstructures: this produces unique mechanical properties that are not achievable through conventional manufacturing techniques.

This Special Issue welcomes contributions that include original research manuscripts, reviews, and case studies. We look forward to receiving your contributions.

Guest Editor

Dr. Daniela Pilone
DICMA, Sapienza Università di Roma, Via Eudossiana 18, 00184 Roma, Italy

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Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

mdpi.com/journal/metals

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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.

Editor-in-Chief

Prof. Dr. Yong Zhang
Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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