

Special Issue

Design, Development and Characterization of Advanced Metallic Materials

Message from the Guest Editor

With the explosion in the development and design of new type of materials, whether they find application in aerospace, aeronautical, automotive, electronic, and bio-medical, materials need to be characterized from atomistic and microstructural points of view to correlate the structure with the properties they are exhibiting. There has been a leap in development in the field of physical methods used to characterize materials in the last decade. The modern equipment helps in terms of advanced capabilities to understand the microstructure and the physico-chemical nature of the constituents at the nanoscale, to better relate with the properties and multi-scale modeling techniques, thereby revealing the interrelationship with the physical, mechanical, and chemical properties of materials.

This Special Issue intends to collect papers in the field of the design, development, and characterization of advance materials that have contributed to our understanding of material behavior. The aim of this Issue is to show the advances in characterization methods, their input into the modeling of the phenomena, and the final outcome on the cross-correlation with the properties observed.

Guest Editor

Prof. Dr. Rajashekhara Shabadi
University of Lille, Lille, France

Deadline for manuscript submissions

closed (30 September 2022)



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

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About the Journal

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.

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

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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