

Special Issue

Advanced Techniques for Metallurgical Characterization

Message from the Guest Editor

The metallurgical characterization of materials is crucial for their industrial development and implementation. In recent years, advanced techniques in the metallurgical characterization of metals and alloys have been applied in an effort to understand the relationship between the metallurgical aspect of materials and their properties and processing conditions. In this context, this Special Issue will include works on the application of advanced characterization techniques to characterize metallic materials at different scales, present the main challenges and applications of characterization, and show different characterization methods that can be performed, as well as the full potential of the characterization of advanced materials. Both theoretical and experimental research, review articles and novel results are welcome. The specific scope of interest includes (but is not limited to) the characterization of metals, alloys, nanomaterials and metal matrix nanocomposites using advanced techniques in order to evaluate metallurgical aspects such as grain growth, deformation behavior, texture, phase transformation, etc.

Guest Editor

Dr. Sónia Simões

DEMec—Department of Mechanical Engineering, Faculdade de Engenharia da Universidade do Porto, Porto, Portugal

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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 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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