



## Advances in Microstructural Characterization of Metals by EBSD

Guest Editor:

**Dr. Sónia Simões**

Metallurgical and Materials  
Engineering Department, Faculty  
of Engineering, Oporto  
University, 4099-002 Porto,  
Portugal

Deadline for manuscript  
submissions:

**closed (31 March 2021)**

### Message from the Guest Editor

Dear Colleagues,

Electron backscattered diffraction (EBSD) is a material characterization technique that attracts many researchers for the characterization of different types of materials. This technique presents itself as an asset in the characterization of the materials since it presents an excellent resolution, and the possibility of characterizing several microstructural aspects that is not possible with other techniques. Some of these microstructural characteristics can be the grain size with a high resolution, crystallographic orientation, texture, and aspects related to the texture and character of the grain boundaries, among others.

In this context, this Special Issue will aim to include works on the application of EBSD to characterize metallic materials at different scales and present the greatest challenges encountered in the application of this technique as well as its main applications and full potential in advanced materials characterization. We welcome submissions of both theoretical and experimental research, review articles, and novel results.





an Open Access Journal by MDPI

## 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

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Metallurgy and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

## Contact Us

---

Metals Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/metals](http://mdpi.com/journal/metals)  
[metals@mdpi.com](mailto:metals@mdpi.com)  
[X@Metals\\_MDPI](https://twitter.com/Metals_MDPI)