metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 4.9

Modelling the Deformation, Recrystallization and Microstructure-Related Properties in Metals

Guest Editor:

Prof. Dr. Jurij J. Sidor
Savaria Institute of Technology, Faculty of Informatics, Eötvös Loránd University, Károlyi Gáspár tér 4, 9700 Szombathely, Hungary

Deadline for manuscript submissions:
closed (31 December 2019)

Message from the Guest Editor

Experimental investigations of the thermomechanical processing (TMP) of metals clearly demonstrates that technological process tuning parameters have a great influence on both the microstructure and texture evolution. The mesoscopic transformations of polycrystalline aggregates, involving microstructural and crystallographic changes on the grain level, can be interpreted by a vast body of modelling approaches developed. Advances in modelling have created a solid platform for understanding the evolution of microstructural features in polycrystalline systems during particular processing step and assist in revealing the behavior of materials under specific circumstances.

In this Special Issue, we intend to provide a wide spectrum of articles dealing with modelling of microstructural aspects involved in deformation and recrystallization as well as simulation of microstructure-based or texture-based properties in various metals. The latest advances in the theoretical interpretation of mesoscopic transformations based on experimental observations are welcome. The studies dealing with the modelling of structure-property relationships are of particular interest.

metals

IMPACT FACTOR 2.6

CITESCORE 4.9

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, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI