Special Issue

Microstructure/Property Relationship in Metallic Powder Metallurgy

Message from the Guest Editors

Powder metallurgy (PM) is a continually and rapidly advancing technology including most metal and alloys. PM is a highly developed method of manufacturing reliable ferrous and non-ferrous parts with a homogeneous structure. The PM process enables manufacturers to make products that are more consistent and predictable in their behavior across a wide range of applications. Additionally, the PM process has a high degree of flexibility, allowing the tailoring of the physical characteristics of parts to suit specific property and performance requirements. This Special Issue seeks to provide a selection of original research focused on the microstructure/property relationship in metallic parts obtained by various PM routes. Papers dealing with new microstructures and specific properties of metal powders are also welcome, especially:

- Microstructure phenomena: porosity evaluation, microstructure variety, etc.;
- Press-and-sinter;
- Unconventional sintering processes;
- Unconventional PM processes;
- Post processing of PM;
- New PM materials and applications;
- Mechanical properties: fatigue, wear, plasticity mechanisms;
- Unconventional applications of PM products.

Guest Editors

Prof. Dr. Robert Bidulský

Bodva Industry and Innovation Cluster, Budulov 174, 04501 Moldava nad Bodvou, Slovakia

Dr. Jana Bidulská

Faculty of Materials, Metallurgy and Recycling, Technical University of Kosice, Kosice, Slovakia

Deadline for manuscript submissions

closed (31 May 2022)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/74845

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

mdpi.com/journal/metals

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/journal/metals

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Metals and Alloys)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

MDPI