Special Issue

Mechanical Alloying 2018

Message from the Guest Editor

Materials fabricated using mechanical alloying (MA) make a significant contribution to industrial applications. They represent a highly-diverse and strongly multidisciplinary area, with links to numerous industrial sectors. Mechanical alloying was selected as the most appropriate processing method to produce oxide dispersion strengthened (ODS) alloys. This Special Issue will include all aspects of theory, methods, materials and applications of mechanical alloying. Contributions in the following topics are encouraged:

- Synthesis and processing in solid-state science and technology: high-energy milling, severe plastic deformation of materials (SPD), reaction milling.
- New materials/processes: oxide dispersion strengthened (ODS) alloys, nanomaterial, nano-composites, and quasi-crystalline phases/materials.
- Structural characterization: mechanically induced structural changes in materials (point defects, dislocations, clusters, precipitates), surfaces and interfaces in activated solids.
- New equipment and procedures: milling equipment based on improved milling dynamics, processing optimization and milling contamination.

Guest Editor

Prof. Dr. Chun-Liang Chen

Department of Materials Science and Engineering, National Dong Hwa University, Hualien 97401, Taiwan

Deadline for manuscript submissions

closed (31 December 2018)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/12546

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