





an Open Access Journal by MDPI

Powder Metallurgy of High-Entropy Alloy

Guest Editors:

Prof. Ivo Dlouhý

Institute of Physics of Materials, Czech Academy of Sciences and Institute of Materials Science and Engineering, Brno University of Technology, Brno, Czech Republic

Dr. Hynek Hadraba

Institute of Physics of Materials, Czech Academy of Sciences, Brno, Czech Republic

Deadline for manuscript submissions:

closed (1 August 2020)

Message from the Guest Editors

Dear Colleagues,

Recently, the high-entropy alloys (HEAs), medium entropy alloys and/or multi-principal element alloys have attracted significant interest. Powder metallurgy (PM) has been proven to be a reliable and not too expensive method capable of relatively easy and efficient production of HEAs. Compared to casting, PM requires lower temperatures for its processing, since it can be produced through solid state sintering. Nevertheless, there are open problems to be fixed, e.g. oxides and/or other secondary phase particles formation, routes to optimise microstructure relating to HEAs performance under mechanical loading etc.

In this Special Issue, articles will be invited that focus on separate steps of mechanical alloying and HEAs powder preparation and characterisation methods, their influence on sinterability by different techniques and the final materials' performance both from the powder stage and/or compaction stadium. Fast and low-cost processes especially remain of interest, being fully controllable and with a high implementation potential.











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 metallurgical field the ranging from processing. and mechanical behavior. phase transitions 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 <u>article processing charges (APC)</u> 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