# Special Issue

# Powder Metallurgically Manufactured Cellular Metallic Materials

## Message from the Guest Editors

The class of cellular metallic materials now has a long history and is firmly established in the scientific community. Lately, the rapid development of additive manufacturing methods has proved to be a particular innovation driver for this research field. Here, too, powder metallurgical know-how has played an essential role. It has allowed the realization of a variety of novel geometries and optimizations, such as auxetic materials or topologically optimized components. For the latter, another important driver for this research field is the rapid advancement of simulation tools, which, in combination with the increased availability of computed tomographic measurements, has led to significant property improvements. Finally, it is application-related interests that have led to further advancements. Driven by biomedical, thermal, or catalytic applications or questions of energy conversion and heat storage, a broad diversity of fabrication techniques on the one hand and a high level of application-related understanding on the other hand have emerged.

## Guest Editors

Dr. Peter Quadbeck

Fraunhofer-Institute for Manufacturing Technology and Advanced Materials IFAM, Branch Lab Dresden, Bremen, Germany

Dr. Olaf Andersen

Fraunhofer-Institute for Manufacturing Technology and Advanced Materials IFAM, Branch Lab Dresden, Bremen, Germany

## Deadline for manuscript submissions

closed (31 December 2021)

**Metals**

**an Open Access Journal by MDPI**

**Impact Factor 2.6**
**CiteScore 4.9**

mdpi.com/si/77543

*Metals*
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 2.6
CiteScore 4.9

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 17.8 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2024).

MDPI