



metals



an Open Access Journal by MDPI

Material and Process Design for Lightweight Structures

Guest Editor:

Dr. Talal Al-Samman

RWTH Aachen University,
Institute of Physical Metallurgy
and Materials Physics (IMM),
52074 Aachen, Germany

Deadline for manuscript
submissions:

closed (31 December 2018)

Message from the Guest Editor

Dear Colleagues,

The drive toward increased fuel efficiency and a reduction in the harmful emission of greenhouse gases associated with energy generation and transportation has led, in recent years, to a resurgence of interest in light alloys and new lightweight alloy design strategies. In automotive industry, the need to reduce vehicle weight has led to extensive research efforts to develop aluminum and magnesium alloys for structural car body parts. In aerospace, the move toward composite airframe structures demands an increased use of formable titanium alloys. Given the extensive scientific and technological importance of this timely subject, it is expedient to collect concise reports—to be presented in this Special Issue—on the current status in the field in the areas of manufacturing and processing technologies of light metals, microstructure and texture manipulation, innovative alloy design concepts and advanced characterization methods and in-situ techniques.

Dr.-Ing. Talal Al-Samman
Guest Editor



mdpi.com/si/12751

Special Issue



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, Ei Compendex, CAPus / 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](https://twitter.com/X@Metals_MDPI)