



metals

an Open Access Journal by MDPI



Recent Progress in the Forming of High-Strength Lightweight Alloys

Guest Editor:

Prof. Dr. Yanli Song

Hubei Key Laboratory of
Advanced Technology for
Automotive Components, Wuhan
University of Technology, Wuhan
430070, China

Deadline for manuscript
submissions:

20 June 2024

Message from the Guest Editor

Dear Colleagues,

We are pleased to invite you to publish original contributions relating to the forming of high-strength lightweight alloys. High-strength lightweight alloys such as high-strength steel, aluminum alloy, magnesium alloy and titanium alloy, are important structural metal materials with excellent characteristics of high specific strength, high specific stiffness and excellent lightweight performance, etc. This Special Issue focuses on the new forming methods of high-strength lightweight alloys.

Articles concerning the theories, technologies and applications related to the forming of high-strength lightweight alloys are welcome. This will provide a broad platform for scientists and engineers in the field of material processing all over the world to showcase their latest research work. Therefore, this Special Issue will cover, without being limited to, the following fundamental and applied research topics: High-strength lightweight alloys; Material characterization; Kinetic modeling; Constitutive modeling; Deformation mechanics; Forming and joining processes; Rapid aging; Process and system modeling; Fatigue and fracture; Applications

Prof. Dr. Yanli Song
Guest Editor



mdpi.com/si/148535

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**, **CAPlus / SciFinder**, and **other databases**.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q1 (*Metals and Alloys*)

Contact Us

Metals Editorial Office
MDPI, St. Alban-Anlage 26
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)