Special Issue

Hot Stamping Processing of Steel and Alloys

Message from the Guest Editor

Hot stamping technology can improve the formability of materials and obtain parts with high strength and good shape accuracy. Driven by the improved need for automobile body lightweight, hot stamping technology has seen significant new developments in recent years. This Special Issue focuses on the application of new materials, including steel and alloy materials, new die technologies, and new forming and simulation technologies in the field of hot stamping; the application of hot stamping technology in light alloys, such as aluminum alloys, magnesium alloys, and titanium alloys; the application of 2GPa high-strength steel and methods to avoid hydrogen-induced delayed fracture of high-strength steel; new coating development technology; studies on friction and wear behavior in hot stamping processes; and application of new heat treatment technology in the hot stamping field. In addition to the processing of traditional body safety parts, such as anti-collision beam, B-pillar, and so on, we expect hot stamping technology to be used in the processing of new types of parts, such as new energy vehicle battery cases, and so on.

Guest Editor

Dr. Zhiqiang Zhang

Key Laboratory of Automobile Materials, School of Materials Science and Engineering, Jilin University, Changchun 130025, China

Deadline for manuscript submissions

closed (10 October 2024)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/130726

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