Special Issue

Steel Heat Treatment

Message from the Guest Editor

Heat treatment has been used to improve steel's formability or performance since time immemorial. In this Special Issue, we will seek to provide a set of articles on various aspects of the heat treatment of steels, with a focus on microstructures and mechanical properties, including both research papers and review papers, informing readers on the latest ongoing research and development activities, on the current state of the art, and on prior history. The Special Issue will seek to encompass (but will not be limited to) the following topics: the influence of alloy composition and prior processing; structural and microstructural evolution during the thermal process; ensuing formability or final mechanical performance, including static, cyclic and dynamic behavior in relevant subsequent processes or final applications; sensitivity to environmental degradation, including corrosion and hydrogen embrittlement; development of new heat treatment methods for new or emerging materials or prior processes, such as additively manufactured steels, or for special applications or improved performance; industrial applications, and history.

Guest Editor

Dr. Paolo Matteis

Department of Applied Science and Technology, Turin Technical University (Politecnico di Torino), IT-10129 Turin (Torino), Italy

Deadline for manuscript submissions

closed (31 October 2021)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/77733

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