Special Issue

Advances in the Design and Behavior Analysis of High-Strength Steels

Message from the Guest Editor

High-strength steel demonstrates remarkable performance in industrial applications, such as in vehicles, ships, airplanes, construction, etc. However, the service life of high-strength steel, especially under extreme conditions such as cyclable loadings, high humidity and salinity, and low-to-high temperatures, requires improvement. Thus, the industrial application of high-strength steel needs further investigation of its microstructural evolution, mechanical properties, and corrosion and wear resistance in various service environments. The aim of this Special Issue is to provide *Metals* readers with the most up-to-date research on high-strength steel development for industrial applications. The scope is particularly related to high-strength steel material design, microstructural evolution in various environments, corrosion and wear mechanisms, the use of advanced techniques for testing, etc. We also welcome reviews and research articles.

Guest Editor

Dr. Yanxin Qiao

School of Materials Science and Engineering, Jiangsu University of Science and Technology, Jiangsu 212003, China

Deadline for manuscript submissions

31 December 2024

Metals

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 4.9

mdpi.com/si/198169

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, 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 16.5 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 2024).

MDPI