metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 4.9

Microstructure–Mechanical Property Relationships in High-Strength Steels (2nd Edition)

Guest Editors:

Prof. Dr. Koh-ichi Sugimoto
School of Science and Technology, Department of Mechanical Systems Engineering, Shinshu University, 4-17-1 Wakasato, Nagano 380-8553, Japan

Dr. Tomohiko Hojo
Department of Mechanical Engineering and Intelligent Systems, Tohoku Gakuin University, 1-3-1 Tsuchitoi, Aoba-ku, Sendai 980-8511, Japan

Dr. Junya Kobayashi
Department of Mechanical Systems Engineering, Ibaraki University, 4-12-1 Nakanarusawa-cho, Hitachi 316-8511, Japan

Message from the Guest Editors

This Special Issue of *Metals* focuses on microstructure–mechanical-property relationships in (1) advanced high-strength steels, including dual-phase steels, complex-phase steels, low-alloy TRIP-aided steels with a different matrix structure, medium-/high-Mn steels, medium-/high-entropy steels, and low-density steels. Additionally, we intend to highlight (2) traditional high-strength steels such as ferritic/pearlitic steels, precipitation-hardening steels, bainitic/martensitic steels, maraging steels, stainless steels, bearing steels, spring steels, or rail steels. In addition to inviting submissions on these topics, we also welcome research articles on mechanical properties, including tensile properties, formability, toughness, fatigue properties, delayed fracture strength, and wear properties, tested in several conditions, such as elevated and cryogenic temperatures or a corrosive atmosphere.

Deadline for manuscript submissions:
31 January 2025

mdpi.com/si/205454

Special Issue

metals

IMPACT FACTOR 2.6

CITESCORE 4.9

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 and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI