



Recent Development in Advanced High Strength Steel

Guest Editor:

Dr. Ludmila Kučerová

Regional Technological Institute,
University of West Bohemia,
Univerzitní 8, 30614 Plzeň, Czech
Republic

Deadline for manuscript
submissions:

closed (31 May 2022)

Message from the Guest Editor

Advanced high-strength steels (AHSSs) encompass a large and continuously growing group of steels based on various alloying concepts, usually developed together with dedicated heat or thermo-mechanical treatment methods. The development of AHSSs started from low-carbon low-alloyed TRIP steels and continued to medium-carbon martensitic steels suitable for quenching and partitioning process, medium- and high-alloyed manganese steels, and low-density steels. The birth and development of these steels responded to the demands of the automotive industry for materials with improved strength-to-ductility ratio.

In this Special Issue, we seek to provide a wide set of articles on various aspects of high-strength steels. The idea is to demonstrate the broad range of microstructures, properties, and applications of these steels. Articles on the production methods, development of new materials, microstructure characterization and phase transformation analysis, as well as mechanical and technological properties of advanced high-strength steels are desired. Articles describing the relationship among processing parameters and the resulting microstructures and properties are also expected.





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](https://twitter.com/Metals_MDPI)