





an Open Access Journal by MDPI

Recent Innovations in Alloy Design and Processing of Microalloyed Steels

Guest Editor:

Prof. Dr. Hardy Mohrbacher Department of Materials Engineering (MTM), KU Leuven, 3001 Leuven, Belgium

Deadline for manuscript submissions:

closed (31 October 2021)

Message from the Guest Editor

Microalloyed steels have been produced globally by the steel industry for around 50 years at an ever-increasing volume. The well-known metallurgical effects are related to microstructural refinement and precipitation of microalloy particles in the form of carbides or nitrides. Utilizing these mechanisms have allowed designing low-carbon steels with high strength while having excellent weldability and formability.

Over the years, the knowledge on the physical metallurgy of microalloys has been steadily increasing as new characterization techniques have allowed deeper insights into the specific functionality of microalloying elements and their interactions with other alloying elements.

This Special Issue invites authors to report on recent innovations in alloy design and processing of microalloyed steels. Contributions should focus on physical metallurgical effects and the interaction with processing and application properties. Reviews reflecting on the state-of-the-art as developed over the more than five decades of microalloying are also welcome.











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 metallurgical field the 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 <u>article processing charges</u> (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 & 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