



Microstructure and Mechanical Properties of Steel

Guest Editor:

Prof. Dr. Tianying Xiong

Institute of Metal Research,
Chinese Academy of Sciences,
Shenyang, China

Deadline for manuscript
submissions:

closed (31 December 2021)

Message from the Guest Editor

As the most used metal material in the world, steel supports our industry and life. With the progress of industrial technology, the demand for key components for steel, especially special steel, is increasing. Therefore, it is imperative to study steel with new alloy composition, processing technology, microstructure and mechanical properties for strict service conditions. In recent years, great results have been obtained in steel research by ultra-pure metallurgy, supernormal preparation, microstructure modification and grain boundary construction. However, there are still many interesting problems to be solved in steel microstructure modification and supernormal mechanical properties.

In this Special Issue, modern trends of steel, including the smelting, processing, microstructure, mechanical properties and so on, are highlighted and discussed.

It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

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

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)