Special Issue

Tribological and Machining Characteristics of Metallic Materials

Message from the Guest Editors

The study of friction, wear, and lubrication of surfaces in relative motion is a highly topical subject. This is because, when it comes to metallic materials, tribological characteristics are fundamental in determining their effectiveness in engineering and manufacturing applications. The interaction between the tribological properties of metallic materials and their machining processes has a significant impact on the lifespan of cutting tools, the quality of machined parts, and production efficiency. In this Special Issue, we aim to focus on research in tribology and machining, where the goal is not only to improve existing processes but also to innovate in the development of new materials and cutting technologies. This includes the design of advanced alloys and the development of tool coatings that offer better wear and temperature resistance. Thus, tribology and the machining of metallic materials represent an essential field of study to advance modern engineering and meet the demands of industries requiring greater precision and efficiency.

Guest Editors

Dr. Moises Batista

Department of Mechanical Engineering and Industrial Design, School of Engineering, University of Cadiz, E11519 Puerto Real, Spain

Dr. Juan Manuel Vazquez Martinez

Department of Mechanical Engineering and Industrial Design, School of Engineering, University of Cadiz, Adv. Universidad de Cadiz 10, E11519 Puerto Real, Spain

Deadline for manuscript submissions

closed (25 January 2025)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/204582

Metals
Editorial Office
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 2.5 CiteScore 5.3





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, Ei Compendex, 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 18 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 2025).