

Special Issue

Deformation and Mechanical Behavior of Metals and Alloys

Message from the Guest Editor

The deformation behavior of metals and alloys covers a wide range of phenomena, including elastic deformation, which is reversible, and plastic deformation, which involves permanent changes due to dislocation movement. Creep, a slow, time-dependent deformation under constant stress at high temperatures, and fracture, the separation of a material into parts, are also critical phenomena. Research on the deformation behaviors provides a comprehensive understanding of how these materials respond to various forces, which are important for their application in various industries, from construction to aerospace. Continuous research and development in this field continues to enhance the functionality and applications of metals and alloys, promoting technological and industrial advancements. Therefore, this Special Issue mainly focuses on the deformation and mechanical behavior of metals and alloys. We very much look forward to your contributions.

Guest Editor

Dr. Guanghui Chen

School of Materials and Metallurgy, Wuhan University of Science and Technology, Wuhan 430081, China

Deadline for manuscript submissions

31 July 2025



Journal of Manufacturing and Materials Processing

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 5.2



mdpi.com/si/209076

*Journal of Manufacturing and
Materials Processing*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jmmp@mdpi.com

[mdpi.com/journal/
jmmp](https://mdpi.com/journal/jmmp)





Journal of Manufacturing and Materials Processing

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 5.2



[mdpi.com/journal/
jmmp](https://mdpi.com/journal/jmmp)



About the Journal

Message from the Editor-in-Chief

Journal of Manufacturing and Materials Processing (JMMP) (ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute high-quality, innovative, and ground-breaking research articles to *JMMP*.

Editor-in-Chief

Prof. Dr. Steven Y. Liang
George W. Woodruff School of Mechanical Engineering, Georgia
Institute of Technology, Atlanta, GA 30332-0405, USA

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, CAPIus / SciFinder, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2
(Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.2 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the first half of 2025).