

Special Issue

High-Performance Metal Additive Manufacturing

Message from the Guest Editors

In this Special Issue, we seek to present a comprehensive collection of research articles, reviews, and case studies that highlight the state-of-the-art techniques, novel materials, in/ex situ materials characterization, process optimization, modelling and simulation, and applications in metal AM, with a specific focus on achieving high-performance outcomes for strategic sectors, including the aerospace, marine, automotive and energy industries. We encourage submissions that cover a wide range of topics, including, but not limited to, the following:

- Design methodologies for high-performance metal parts using AM techniques.
- Advanced metal powders and alloys tailored for AM, specifically metal matrix composites and smart alloys.
- Process optimization and control strategies to enhance mechanical, chemical and physical properties and surface finish of additively manufactured parts.
- Novel post-processing techniques for improving the performance of additively manufactured metal components, particularly in extreme environments.
- Real-world applications of high-performance metal AM in diverse sectors.

Guest Editors

Dr. Hamed Asgari

Department of Mechanical Engineering, University of New Brunswick, Fredericton, NB, Canada

Dr. Elham Mirkoohi

Department of Mechanical Engineering, Auburn University, Auburn, AL 36849, USA

Deadline for manuscript submissions

closed (30 September 2024)



Journal of Manufacturing and Materials Processing

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 5.2



mdpi.com/si/176596

*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





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 15.9 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).