

## Special Issue

# Recent Advances in Directed Energy Deposition of High-Performance Alloys

### Message from the Guest Editors

This Special Issue aims to provide a dedicated platform for sharing new innovative findings, discussing accomplishments, and exploring future directions in metal deposition research. We welcome case studies, reviews, short communications, and original research articles, including but not limited to the following areas:

- Methodologies for the design of high-performance metal components with a focus on high-entropy alloys, functionally graded materials, and multi materials utilizing DED techniques.
- The application of advanced metal powders and alloys customized for DED additive manufacturing, with a particular focus on metal matrix composites.
- Innovations in tailoring process-microstructure-properties relationships of DED-fabricated parts and components.
- Case studies of practical implementations of DED manufacturing in various industrial sectors, showcasing real-world applications and outcomes.
- Applications of DED technology in cladding, repair, and remanufacturing.

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### Guest Editors

Dr. Alireza Vahedi Nemani

Dr. Mahya Ghaffari

Dr. Ali M. Nasiri

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### Deadline for manuscript submissions

31 August 2025



## Journal of Manufacturing and Materials Processing

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Impact Factor 3.3  
CiteScore 5.2



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

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## 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*.

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### Editor-in-Chief

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

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#### High Visibility:

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#### Journal Rank:

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#### 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).