

Special Issue

Arc-Based Directed Energy Deposition: Processes, Applications and Monitoring

Message from the Guest Editors

This Special Issue of the *Journal of Manufacturing and Materials Processing (JMMP)*, titled "Arc-Based Directed Energy Deposition: Processes, Applications and Monitoring", aims to present recent developments and research trends in DED-Arc. We invite original research articles, reviews, and case studies covering a broad range of topics, including but not limited to:

- Innovations in DED-Arc processes design and optimization;
- Process monitoring and control systems (e.g., thermal imaging, sensors, and AI);
- Influence of shielding gas, wire feedstock, and energy input;
- Modeling and simulation of DED-Arc deposition behavior;
- Industrial applications in aerospace, energy, automotive, and marine sectors;
- Sustainability, cost analysis, and lifecycle assessment of DED-Arc processes.

Guest Editors

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Dr. Nicola Contuzzi

Deadline for manuscript submissions

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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*.

Editor-in-Chief

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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).