

Special Issue

Design and Fabrication of Metallic Cellular Materials via Additive Manufacturing

Message from the Guest Editor

Additive manufacturing (AM) has revolutionized the fabrication of complex metallic structures, enabling the precise creation of cellular and architected materials with controlled meso- and microscale features. We invite researchers to submit original research articles and reviews. Topics of interest include, but are not limited to, the following:

- **Design and optimization:** Novel methodologies for developing metallic cellular and architected materials with superior functional and mechanical performance.
- **Process innovation:** Advanced AM strategies for improved structural integrity, material properties, and scalability of cellular materials.
- **AI and computational tools:** Application of machine learning, generative design, and simulation to streamline the development of metallic cellular materials.
- **Process–structure–property insights:** Experimental and theoretical studies investigating how AM parameters influence the microstructure and properties of cellular materials.
- **Bio-inspired designs:** Cellular structures inspired by natural systems, optimized for multifunctionality and sustainability.

Guest Editor

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Deadline for manuscript submissions

closed (31 May 2025)



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About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Yong Zhang

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