# Special Issue

# Processing Optimization and Performance Characterization of Additively Manufactured Metallic Materials

# Message from the Guest Editor

Additive manufacturing (AM) processes provide the freedom of design where material is deposited and ioined layer by layer to obtain complex components. This technology is relatively new for metallic materials but is already established for products in medical applications, such as dental crowns and prostheses, as well as fabricating prototypes for aircraft or highperformance automotive components. Current research examines the material properties in the condition of asbuilt, heat-treated, and/or HIP (hot isostatic pressing). Aiming to contribute to the qualification of AM components, this Special Issue focuses on present investigations on the optimization of the AM process itself, pre- and post-processes, and the processstructure-properties relationship. The call is open for all metals, especially lightweight and/or high temperature alloys, such as Ti6Al4V or Inconel, with respect to feasible application fields.

# **Guest Editor**

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## Deadline for manuscript submissions

closed (25 April 2023)



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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

