

Special Issue

Optimization and Applications of Metal Additive Manufacturing

Message from the Guest Editors

Metal additive manufacturing has been involved in many industry fields, and the related market scales are expanding rapidly.

Various kinds of additive manufacturing methods have been applied for metal fabrication, including direct energy deposition, wire and arc additive manufacturing, laser powder bed fusion, electron beam powder bed fusion, binder jetting, and ultrasonic additive manufacturing. The dimensions and complexities of the manufactured parts, the available metal systems, the controllable parameters, and the final microstructures and properties vary with method.

Exploring the most suitable method for each metal, solving the forming problems that are faced during the additive manufacturing process, understanding the related microstructural evolution, optimizing and maximizing their service properties, and discussing how to polish the surface of additive-manufactured parts are the goals of this Special Issue. We also welcome articles that provide more practical application cases for metal additive manufacturing.

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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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