

Special Issue

3D Printing of Metal

Message from the Guest Editor

Metal 3D printing, as an advanced forming, can manufacture parts directly from digital model by using layer by layer material build-up approach. This manufacturing method can prepare complex shape metal parts in short time, with and high precision. 3D printing processes can be classified into two major groups, Powder Bed Fusion based technologies and Directed Energy Deposition. 3D printing features freedom to part complexity, part design and light-weighting for aerospace, automobile and other industries application. The Global Metal 3D Printing Market is mainly driven by the the fast developing of aerospace and automobile industry. The Global Metal 3D Printing Market size was valued at USD 534.18 Million in 2020 and is projected to reach USD 4458.76 Million by 2028, growing at a CAGR of 30.38% from 2021 to 2028. In this Special Issue, we welcome articles that focus on metal 3D printing materials, processes and their influence on the final products' microstructure and performance, providing guidance for the development of metal 3D printing technology.

Guest Editor

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About the Journal

Message from the Editorial Board

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.

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