Special Issue

Research on Microstructure and Mechanical Properties of Additively Manufactured Metals and Alloys

Message from the Guest Editors

Metals Additive Manufacturing (AM) is a rapidly growing manufacturing capability. The cumulative annual growth of AM is predicted to exceed 20% CAGR for many years to come, reaching \$11.9bn in 2019 and expected to rise to over \$63bn by 2025. The metals (AM) market is particularly buoyant, rising 41% CAGR over 2010-2014. The current metal AM market is over £330m, with increasing application in aerospace & defence industry. In these high-value, and often safety critical applications, the quality of the material is of upmost importance, and there is a concerted research effort in understanding the fundamental phenomena in the microstructural development in AM processed metals, and the effect of these microstructures on their performance in end-use applications. For this Special Issue in Metals we welcome reviews and articles in the area of microstructure and mechanical properties of Additively Manufactured metals and alloys.

Guest Editors

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Deadline for manuscript submissions

closed (30 May 2024)



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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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