Special Issue

Modern Cold Spray Technique

Message from the Guest Editors

Research on cold spray technology is rapidly expanding in a number of critical areas that include coatings for corrosion resistance, wear resistance, material restoration, additive manufacturing, structural repair, bio-compatible materials, reactive materials, and direct-write processes. The successful implementation of cold spray has been the focus of research and development efforts in powder composition, processing and characterization, multiphase flow and structural modeling, equipment design and optimization, process parameters, and material testing. New applications that exploit the advantages of cold spray are being developed at an increasing rate. Research is expanding into the fundamental physics of the cold spray process, such as the high strain rate behavior, bonding mechanism, and effects of oxide deposition quality, as well as its areas of application. This Special Issue welcomes papers on cold spray that cover the a spectrum of works, from basic, fundamental research to applications such as additive manufacturing. The Special Issues aims to present cutting edge results from a broad spectrum of technologies.

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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

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