

Special Issue

Microstructures and Properties Characterization of Metallic/Composite Coatings

Message from the Guest Editor

Thin metallic and composite coatings are used as protective coatings that significantly improve the hardness, wear, corrosion and oxidation resistance of structural materials, as well as serving as the main structural elements of various components and devices in micro- and nanoelectronics, etc. Despite a large amount of work being done in the field of the investigation of microstructure evolution in coatings deposited under different conditions, detailed studies of the effect of the microstructure on the mechanical and other characteristics are still necessary because of the need to obtain new coatings with improved characteristics by varying the deposition parameters and resulting microstructures. This Special Issue is focused on various aspects of microstructure evolution in metallic and composite coatings, obtained using different deposition techniques, as well as on the relation between their microstructure and other properties. Original articles and reviews in the areas of the deposition and experimental characterization of metallic and composite coatings, as well as the computer simulation of their behavior, are welcomed.

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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