Special Issue

Microalloying in Ferrous and Non-ferrous Alloys

Message from the Guest Editors

The addition of small amounts of Nb, Ti, or V alone or in combination is crucial to significantly improve the strength and ductility of metals and alloys at a low cost. Ferrous and non-ferrous alloys are now commonplace in a wide variety of practical applications. The subject of microalloving in ferrous and non-ferrous alloys is associated with many aspects of physical metallurgy, such as strengthening mechanisms, toughness, ductility, hot working, cold working and recrystallization, non-metallic inclusions, precipitation and phase transformation, grain refinement, weldability, etc. With a view to new microalloving technologies in ferrous and non-ferrous alloys, we offer this Special Issue entitled "Microalloying in Ferrous and Non-Ferrous Alloys". The purpose of this Special Issue is to organize information about the interactions between processing and microstructural development and the effect of microalloving additions to provide a basis for the control of the microstructure, and hence the final mechnical and service properties, of microalloyed ferrous and nonferrous alloys subjected to industrial heat treatments and hot working practices.

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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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