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Microalloying in Ferrous and Non-ferrous Alloys

Guest Editors:

Prof. Dr. Minghui Cai

School of Materials Science and Engineering, Northeastern University, Shenyang 110819, China

Dr. Ge Zhou

School of Materials Science and Engineering, Shenyang University of Technology, Shenyang 110870, China

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Message from the Guest Editors

Dear Colleagues,

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 microalloying 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 microalloying 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 microalloying additions to provide a basis for the control of the microstructure, and hence the final mechnical and service properties, of microalloved ferrous and non-ferrous alloys subjected to industrial heat treatments and hot working practices.

Specialsue



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Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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 metallurgical field the 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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Metals Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals_MDPI