

Special Issue

Phase Transformation and Microstructure Characterization in Steels

Message from the Guest Editor

There is a wide variety of microstructures and properties that can be generated by solid-state transformation and processing in steels, which are leading to numerous exciting discoveries in the context of iron and its alloys today. Phase transformation in steels cause a combination of diverse microstructures, leading to the kaleidoscope of performances. However, the processing, microstructure, and property relationships in steels continue to present challenges to researchers because of the complexity of phase transformation and the wide scope of microstructures and properties achievable. This Special Issue is focused on the recent development trends of steels, such as high strength and toughness, wear resistance, corrosion resistance, etc., and the state of metals and their alloys. The Special Issue also aims to outline fundamental trends in the field of modeling and engineering applications and the relationship of microstructure characterization and properties in steels.

Guest Editor

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About the Journal

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

Prof. Dr. Yong Zhang

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