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Static and Dynamic Recrystallization, and Phase Transformation in Metallic Materials

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Deadline for manuscript submissions:

closed (28 February 2021)

Message from the Guest Editors

The occurrence of static and dynamic recrystallization and phase transformation has been the backbone of manufacturing and metallurgical engineering in the past decade to maximize the mechanical properties of alloys during processing. However, despite significant progress in this area, the rise of sophisticated materials testing methods and characterization techniques has presented opportunities to further push the mechanical properties of alloys to their limit by controlling the microstructure.

This Special Issue of *Metals* invites experts from around the world to submit papers related to static and dynamic recrystallization and phase transformation, including transformation-induced plasticity, of various alloys such as but not limited to steels, nickel-based alloys, titanium alloys, magnesium alloys, aluminum alloys, and highentropy alloys. Although these phenomena are common during deformation and cyclic heat treatment, papers related to other materials processing such as additive manufacturing are also welcome. This Issue is particularly interested in the microstructural analysis of alloys as well as the modelling of their behavior at room and high temperatures.











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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. and mechanical behavior. phase transitions microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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