# Special Issue

# Grain Refinement and Mechanical Properties of Cast Alloys

## Message from the Guest Editor

Cast alloys are the most important engineering materials, mainly cast Al alloy, cast Mg alloy, cast Ti alloy, cast iron, cast steel, cast superalloy (Ni-based or Co-based), cast Cu alloy, and cast Zn alloy. Among these cast alloys, grain refinement plays an important effect in the solidification microstructure control and mechanical properties improvement. Especially, for the recycling cast alloys, grain refinement becomes more important to control solidification microstructure and improve mechanical properties. Achieving grain refinement for cast alloys is therefore of great necessity to ensure the high performance of many different cast alloys. In this Special Issue, all aspects of grain refinement and mechanical properties of cast alloys are welcome. Especially, recycling cast alloys is a special focus.

## Guest Editor

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## Deadline for manuscript submissions

closed (30 April 2024)

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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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