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Advances in High-Performance Non-ferrous Materials

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Message from the Guest Editors

Dear Colleagues,

Nowadays, there is great pressure on energy conservation and emission reduction. In order to achieve these goals, weight reduction in manufacturing fields such as the vehicle, marine, and aerospace industries, and microelectromechanical systems, is the major trend. Although some structures and parts that require special properties and service conditions must use ferrous materials such as steels due to their superior thermal and wear resistance, there is a desperate need to replace these alloys with non-ferrous materials such as Al alloys, Mg alloys, Ti-based alloys, and Cu alloys in order to reduce operational and maintenance costs. Recently, many material processing techniques have been developed to enhance the performance of non-ferrous materials. This Special Issue covers these topics and focuses on the process–structure–performance relationships of high-performance non-ferrous materials.

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Special Issue



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Message from the Editor-in-Chief

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