



Research on Performance Improvement of Advanced Alloys

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Deadline for manuscript submissions:

20 January 2025

Message from the Guest Editors

Advanced alloys are the strong foundation of modern industry. It is a fact that advanced alloys commonly serve as structural or functional materials for innovative designs targeting properties such as lightweight, heat resistance, wearing resistance, etc. Excellent functional properties are important for more attractive and efficient products in terms of improved properties or lower production cost. Consequently, it is a so significant issue how to adjust the microstructure and even the corresponding properties of advanced alloys. Furthermore, it is necessary to explore heat treatment processes, forming processes, surface treatment processes, etc.

The aim of this issue is to discuss recent advances and new developments in the relationships between various processes and service performance of advanced alloys. The scope of the issue is not only limited to heat treatment processes, forming processes and surface treatment processes, but also includes advanced alloy design, physical and numerical simulation, microstructure characterization, performance evaluation, etc.





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Message from the Editor-in-Chief

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