



High-Performance Light Alloys 2022

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Message from the Guest Editors

Light alloys, which have the advantages of a high specific strength and specific stiffness, have wide application in aerospace, transportation, automobile, electronics and the national defense military industry. Various high-performance light alloys have been developed in recent years. One main focus is to improve the mechanical properties of light alloys to reduce the weight of components and improve the service life. The preparation method, such as casting, plastic processing, welding and joining, heat treatment and powder metallurgy, plays an important role in the microstructure evolution and the improvement of mechanical properties.

This Special Issue will compile recent developments and excellent results in the field of high-performance light alloys to accelerate their large-scale application. The articles presented in this Special Issue will cover but are not limited to the following topics: aluminum alloys, magnesium alloys, titanium alloys, metallic composites, casting, plastic processing, welding and joining, heat treatment, powder metallurgy, phase transformation, texture, strengthening and toughening, and fatigue properties.





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Message from the Editor-in-Chief

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