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Development of Advanced Aluminum and Magnesium Alloys: Microstructure, Mechanical Properties and Processing

Guest Editor:

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Message from the Guest Editor

Mg and Al alloys are the first and second engineering light metals, which are widely used in aviation, aerospace, navigation, automotive, and electronics fields. High-performance advanced Mg and Al light alloys will have great application potentials in the future, which has also become a research hotspot.

For the Special Issue reviews, short communications and full-length research papers focused on the following topics are welcome:

- High-strength, high-toughness, and high-modulus Mg and Al alloys;
- Processing of innovative high-strength Mg and Al alloys, such as casting, plastic forming, welding, or 3D printing methods or powder metallurgy methods;
- Relationships among the microstructure, mechanical properties, and processing conditions of the Mg and Al alloys;
- Composition design and calculation, and microstructure regulation of the Mg and Al alloys;
- Control of formation and defects of the Mg and Al alloys components during the processing processes.

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