Special Issue

Advanced Processing Technology on Mg Alloys

Message from the Guest Editors

With the popularization of lightweight vehicles and airplanes, new structural materials have become more and more important, among which magnesium alloy is one of the most important lightweight metallic materials. The processing of magnesium alloy is very important. which decides whether the structure can be manufactured and further be used. As a result, this Special Issue is focused on the advanced processing technology on Mg alloys. Articles concerning the processing method of magnesium alloys, the characterization, as well as the simulation are welcome. Any new processing method on Mg alloy, such as stamping, forging, casting, welding, additive manufacturing and the characterization on its mechanical property, as well as the new processing finite element (FE) modeling method are welcome. More specifically, this Special Issue will cover (but is not limited to) the following fundamental and applied research topics:

- Mg alloys;
- Processing innovation;
- Processing control;
- Characterization;
- Mechanical behavior;
- Process modeling;
- Forming, casting, joining, machining;
- Additive manufacturing.

Guest Editors

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About the Journal

Message from the Editorial Board

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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