

Special Issue

Metal Alloys: Fusion of the Cutting Edge Research Tools with Conventional Metal Study

Message from the Guest Editor

The die-casting process is a representative processing technology of aluminum and applies to parts with excellent mechanical properties and complex shapes, so it accounts for more than 50% of the production rate in aluminum alloy castings, and other aluminum processes, including sand casting and mold casting, it shows a relatively higher potential growth potential than other processes. This Special Issue will share research related to the scientific approach for securing the reliability of such aluminum die-casting products, and, in particular, research related to artificial intelligence and simulation research that has been confirmed as empirical research for mechanism. It will also share the latest results on the characterization, and applications of aluminum alloy materials for the reliability of a die-cast product. Researchers are very welcome to submit their most interesting perspectives, reviews, and original works providing novel insights regarding this material science research field. **Keywords:** Die-casting; Aluminum alloys; Characterization; Artificial intelligence; Smart factory; Microstructure; Simulation; Metals; Mechanical properties.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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