



an Open Access Journal by MDPI

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

Guest Editor:

#### Dr. Eunkyung Lee

Department of Ocean Advanced Materials Convergence Engineering, Korea Maritime and Ocean University, Busan 49112, Korea

Deadline for manuscript submissions: closed (31 December 2021)

#### 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.









an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

# **Contact Us**

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/applsci applsci@mdpi.com X@Applsci