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Development and Exploration of Alloys: Mechanical Properties and Microstructures

Guest Editors:

Dr. Marcelo Roldán

CIEMAT, National Fusion
Laboratory, Technology Division,
Avda. Complutense, 40, 28040
Madrid, Spain

Dr. Edgar León Gutiérrez

CIEMAT, National Fusion
Laboratory, Fusion Technology
Division, Avda. Complutense, 40,
28040 Madrid, Spain

Dr. Nerea García Rodríguez

CIEMAT, National Fusion
Laboratory, Technology Division,
Avda. Complutense, 40, 28040
Madrid, Spain

Deadline for manuscript
submissions:

closed (10 June 2023)

Message from the Guest Editors

Dear Colleagues,

Although humankind has been using and developing alloys for thousands of years, the search for the continuous improvement of their properties and new applications with more demanding requirements continues. Industrial and technological advances go hand-in-hand with developing new metallic materials with higher performance, durability, and a more sustainable cradle-to-tomb cycle.

This Special Issue is intended to be a compilation of the latest advances in the development of alloys, the improvement of existing ones, and new fabrication routes. It will mainly emphasize their outstanding mechanical properties and microstructural features' evolution.

The acceptance criteria do not restrict any alloy type, application, or characterization technique, although the articles must show significant advances in the field, accompanied by high-scientific-level discussion.

Keywords:

- new alloys for advanced applications
- non-conventional mechanical characterization
- in-depth microstructure analysis
- cutting-edge manufacturing routes
- advances in metallurgy



mdpi.com/si/142649

Special Issue



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Editors-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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