Special Issue

Magnesium-Based Alloys with Rare Earth Elements

Message from the Guest Editor

Magnesium alloys can be used in a wide range of applications, from lightweight construction to biomaterials. Rare earth elements generally provide good strengthening effects, aging resistance effects and grain refinement effects, which can greatly improve the high-temperature strength and creep resistance of magnesium alloys.

This Special Issue of Materials seeks to highlight recent successes and developments in magnesium-based alloys. The focus of this Special Issue is the relationship between the processing and properties of magnesium alloys containing rare earth elements. Contributions are intended to show the influence of the manufacturing process on the property profile of these alloys. This encompasses microstructural developments , as well as mechanical properties, but also corrosion properties for mechanical engineering applications. Manuscripts dealing with the fabrication of magnesium-based materials with rare earth elements, including alloys, composites and coatings, as well as their microstructure, multifunctional properties, and design, are welcome. It is our pleasure to invite all contributions covering these topics in their entirety.

Guest Editor

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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