Special Issue

State-of-the-Art Magnesium Alloys

Message from the Guest Editors

Magnesium alloy is the lightest metal structural material with advantages of high specific mechanical properties (strength, stiffness, elastic modulus), good damping capacity, good machinability, etc., which support its wide application. Its good bio-compatibility allows this alloy to become a rising star in the biomaterial family. Additionally, magnesium alloy has shown great potential as a functional material for energy storage and hydrogen storage because of its features of large hydrogen storage capacity and high theoretical specific capacity for batteries. However, some difficulties still need to be overcome, including its relatively low strength, its poor plasticity and inferior corrosion resistance for structural applications, its narrow hydrogen charging and discharging window for hydrogen storage applications, and its high anodic hydrogen reaction rate for energy applications. Therefore, it is important to develop advanced strategies to overcome these disadvantages. A Special Issue named “State-of-Art of Magnesium Alloys” is launched to further promote the magnesium alloy.

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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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