Special Issue

Preparation and Properties of Aluminum Alloy Materials

Message from the Guest Editors

The combination of the low density, good corrosion resistance, strength and formability of aluminum alloys makes them attractive to automotive and aircraft manufacturers. The main goal of modern aircraft manufacturing is to reduce manufacturing costs and operating expenses. Compared with steel materials for automobiles, aluminum alloys absorb 50% more energy than steel during a crash. Aluminum alloys are green and environmentally friendly materials that can be recycled.

In recent decades, global environmental protection has required the automotive industry to increase fuel efficiency and reduce carbon dioxide emissions. This has promoted research into the application of lightweight materials instead of traditional steel materials. These are currently hot and timely topics. Therefore, considering the safety of vehicles, it is necessary to carry out systematic research on the component design, forming process and performance control of aluminum alloy materials in terms of replacing steel with aluminum alloys.

It is our pleasure to invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are all welcome.

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Deadline for manuscript submissions

closed (25 March 2022)

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/96811

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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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