

Special Issue

Preparation and Properties of Aluminum Alloy Materials (2nd Edition)

Message from the Guest Editor

The combination of the low density, good corrosion resistance, strength, and formability of aluminum alloys makes them attractive to automotive and aircraft manufacturers. Research has shown that lightweight vehicles can improve vehicle power, reduce fuel consumption, and reduce exhaust emissions and air pollution while ensuring vehicle strength and safety performance. For every 10% reduction in vehicle weight, fuel consumption can be reduced by 6%–8%, and exhaust emissions can be reduced by 5%–6%. 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. They are very important and one of the best materials for the lightweight design of automobiles.

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

Guest Editor

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Deadline for manuscript submissions

closed (20 March 2025)



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About the Journal

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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