Special Issue

Advances in Light Alloys: Microstructure, Mechanical Properties, Forming Processes and Applications

Message from the Guest Editors

Light alloys play a key role in the move towards a net zero society, enabling the design and manufacture of structures with lower density across industries such as aerospace, automotives, and defence. Light alloys incorporating aluminium, titanium, and magnesium can offer high strength-to-weight ratios, enabling a significant mass reduction that can, in turn, lead to increased efficiency and reduced emissions from aircraft and automotive vehicles. To both create and combine light alloys for use in these applications, new advanced elevated temperature forming processes, such as SPF (superplastic forming) and HFQ (hot-form quench), enable light alloys to be formed into complex geometries.

In this Special Issue, we will focus on advances in light alloys, used, processes that enable their use, the physical properties, and the microstructural evolution of light alloys during forming processes. It is my pleasure to invite you to submit your original research papers, short communications, or review articles that describe the current state-of-the-art within advances in light alloys: microstructure, mechanical properties, forming processes and applications.

Guest Editors

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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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