

Special Issue

Advanced Light Metals: Microstructure, Properties, and Applications

Message from the Guest Editors

The demand for advanced alloys has been steadily increasing across various industries, driven by the need for materials that can meet the high requirements of modern applications. The aerospace, automotive, electronic, building and medicine sectors, among others, are continually seeking alloys with superior performance characteristics to enhance their specific strength; corrosion, fatigue, creep and wear resistance; thermal stability, formability, machinability, and weldability, as well as their cost effectiveness and environmental and health safety. We welcome submissions on investigations focused on novel light metal alloys and composites, including those used as coatings and containing light elements like scandium, lithium, yttrium or alkaline earth metals to improve the properties and reduce the weight of products. Research areas:

- Innovations in alloy composition;
- New methods for alloy production and processing;
- Characterization of microstructures using modern techniques, microstructural modelling and simulations;
- Relationships between microstructure and properties of light metal alloys;
- Environmental impact and recycling.

Guest Editors

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About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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