



## Development of Light Alloys and Their Applications

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### Message from the Guest Editors

Dear Colleagues,

Magnesium, aluminium, and titanium are often classified as light alloys because of their high strength-to-weight ratio and/or high stiffness-to-weight ratio. These light alloys have significant commercial importance. The most commonly used of the light alloys are aluminium alloys, not only in automotive and aerospace applications but also for cans and foils. Today, titanium alloys and magnesium alloys are becoming more widely used. Titanium alloys are mostly used in the aerospace industry due to their low density and high strengths, especially at high temperatures. Other applications of titanium alloys include marine and petrochemical applications due to their excellent corrosion resistance. Magnesium alloys, however, are used when further savings in weight are required, for example, in components for aircraft, material-handling equipment, and portable power tools. Although light alloys have been successfully applied in various fields, there are still some shortcomings to overcome. Research on light alloys is still in progress.





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## Message from the Editor-in-Chief

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