Special Issue

Powder Processing of Light Alloys and Composites

Message from the Guest Editor

Light alloys and light alloy-based composites are widely employed in applications requiring a high strength-toweight, energy efficiency, and safety critical performance, including in transport, aerospace, and biomedical applications. Over the past decades, there have been substantial developments in alloy design and processing, leading to improvements in performance and increased usage. Powder-based processing routes, including conventional powder metallurgy and emergent additive manufacturing methods, offer prospects for the economical production of net-shape components with complex or customised designs. There is also substantial opportunity to integrate both ex-situ and insitu reinforcement toward the fabrication of light alloybased composites with enhanced properties, including greater strength and better wear resistance. Despite recent advances, ongoing research is required in order to understand and improve important aspects of their processing and structures for better performance and reliability.

Guest Editor

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Deadline for manuscript submissions

closed (30 November 2021)



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Impact Factor 3.1 CiteScore 6.4 Indexed in PubMed



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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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