Special Issue

Additive Manufacturing of Aluminum Alloys and Aluminum Matrix Composites

Message from the Guest Editors

With significant advantages in specific strength and stiffness, aluminum alloys and aluminum matrix composites have been widely used in transportation, aerospace, and other applications. Additive manufacturing (AM) has great potential for the rapid customization and repairment of parts and could be generally categorized into fusion, solid-state, and binder jetting AM. The heat source in fusion AM includes laser, electron beam, and electric arc. The style of providing the supplementary material in fusion AM includes powder bed, deposited powder, and deposited wire. Solid-state AM generally includes cold spray, ultrasonic AM, and friction AM. For this Special Issue, we invite you to submit papers in additive manufacturing of aluminum alloys and aluminum matrix composites. The topics include but are not limited to fusion and solid-state additive manufacturing processes, advanced characterization, modeling and simulation, optimization of the manufacturing process, topological optimization, in situ observation, monitoring control, post-treatment, and hybrid manufacturing.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editorial Board

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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