Special Issue

Advanced Processing of Matrix Composites

Message from the Guest Editors

In the last few decades, extensive research has been conducted to develop new lightweight composites, including metal matrix composites, resin matrix composites, ceramic matrix composites, etc., for different applications. Magnesium, aluminum alloys, and carbon-fiber-reinforced polymers have evolved as essential light-weight automotive materials. Various processing operations based on specified matrix materials are used to create these lightweight composites. For example, powder and liquid metallurgy are conventional techniques for producing metal matrix composites, and hand laying methods, compression molding, and vacuum bag molding are traditional methods for developing polymer matrix composites. There are still many unanswered questions with respect to metal matrix fabrication, including the importance of the working environment for new devices, the types of matrix and reinforcing methods needed, and improvements in processing and post-processing methods. This Special Issue welcomes original research papers and review articles on novel feeding techniques for developing and processing matrix composites.

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About the Journal

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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