Special Issue

Advanced Polymer Materials and Composites: Manufacturing, Properties, and Applications in the Aerospace Field

Message from the Guest Editors

Advanced polymer materials and polymer-based composites are of great interest for the aeronautics and space fields due to their tremendous technological potential across numerous applications. These materials offer the exciting prospect of creating novel components and structures with tailor-made properties and multifunctionality. This Special Issue aims to collect recent studies on cutting-edge research with implications for the aerospace industry. In particular, this issue focuses on the rapidly evolving field of polymer materials and polymer-based composites, including nanocomposites, which hold significant promise for diverse applications in aeronautics and space exploration. Specific areas of interest include recent advancements and breakthroughs in manufacturing processes for aeronautical and space structures, the development of lightweight and durable components with tailored properties, and the sustainable fabrication of polymer-based materials and composites. Research adopting a multidisciplinary approach, tackling challenges associated with harsh environments, fatigue, damage tolerance, and other operational aspects is also encouraged.

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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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