Special Issue

Mechanical Behavior of Advanced Composite Materials and Structures

Message from the Guest Editors

This Special Issue of Materials is devoted to original research and review papers on key topics related to the mechanical behavior of advanced composite materials and structures. Topics of interest include but are not limited to standard and non-standard experimental methodologies (tensile, compressive, bending, shear, impact, fatigue, crash testing, vibration, etc.), studies on anisotropy, fracture and damage (damage characterization and modeling), applications of numerical techniques for advanced modeling, multiscale modeling, and structural optimization methods for the lightweight design of advanced composite structures. This Special Issue aims to provide an overview of the latest innovations related to advanced composite materials and structures. Contributions range from new theories and formulations to analyses and novel applications. Emphasis is placed on mechanics features of composite materials and structures. The issue focuses on experimental. numerical, and analytical studies on different aspects of advanced composite materials and their applications, with a specific focus on mechanical behavior.

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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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