Special Issue

Mechanical Behaviour of Advanced Metal and Composite Materials

Message from the Guest Editors

We aim to collate original research and review papers on key topics related to advanced composite materials, including:

- Materials: short and long fibre-reinforced polymers, prepregs, hybrid materials, including metal/composite and hybrid/fibre composites, 3D printing materials, and bio-inspired structures.
- Industrial fields: aerospace, ground-based transportation, marine, renewable energies, civil engineering, sports and leisure, medical, and agricultural applications.
- Topics: structural optimisation, material design, multifunctional materials, structural health monitoring, mechanical properties of structures, advanced testing, numerical modelling, and material modelling at different scales.
- Structural behaviour investigation: standard and nonstandard experimental methodologies (tensile, compressive, bending, shear, impact, etc.), uniaxial and multiaxial testing, study on anisotropy, fracture and damage (damage characterisation and modelling), joining of composite materials, multifunctional materials, applications of numerical techniques for advanced modelling, multiscale modelling, structural optimisation methods for lightweight design of structures.

Guest Editors

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Deadline for manuscript submissions

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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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