Special Issue

Mechanical Behavior and Numerical Simulation of Sandwich Composites

Message from the Guest Editor

Sandwich structures have a high strength-to-weight ratio, good thermal and acoustic insulation properties, and resistance to buckling and crushing. They also offer enhanced durability and impact resistance compared to solid materials. At present, sandwich structures are used in a wide range of applications, including aircraft wings and fuselages, boat hulls, wind turbine blades, and building facades. They are an essential component of modern engineering design and are constantly being improved and refined to meet the demands of a changing world. This Special Issue particularly welcomes full papers on original research studies, review papers, and experimental or numerical investigations related to the theory, testing, modeling, simulation, design, and application of sandwich composites. The topics of this issue include (but are not limited to) studies on the mechanical behavior of sandwich composites, core and skin materials, additive manufacturing or other advanced manufacturing methods, and the optimization of sandwich composites. It should be noted that numerical or analytical research work without test verification is not recommended.

Guest Editor

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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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