

Special Issue

Analysis and Design of Structures and Materials

Message from the Guest Editor

In the engineering field, the efficient and reliable design of safe and functional structural materials has always been of major importance. Any material component should be appropriately designed in order to present exceptional performance under a variety of simple or combined, static or dynamic, mild or severe loadings or stimulus or other effects of structural, thermal, electrical, or magnetic nature. Novel materials typically have non-linear multi-physical properties and characteristics due to their special structural characteristics or method of manufacturing. Therefore, there is a great challenge for developing new theoretical and numerical tools and techniques, optimization and computational algorithms, and advanced experimental methods capable of accurately representing the distinct structural characteristics of such materials, predicting their behavior and allowing their optimized design under a variety of environmental conditions.

The present Special Issue aims to provide modern theoretical, numerical, and experimental methods, as well as innovative technologies, for the analysis and design assessment of structures and materials.

Guest Editor

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Message from the Editorial Board

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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