

Special Issue

Advances in Structural Analysis of Materials: Finite Element Modeling

Message from the Guest Editor

Recent years have brought about rapid development in the area of new materials. Areas of application include the space, automotive, and sport industries, resulting in many daily use components. It is a great challenge to properly model the behavior of materials of complex macro/microstructure, mechanical characteristics, novel properties

(e.g., noise isolation, heat transfer, lightweight, and metamaterials), etc. for the purpose of their application in structural analysis simulations of load bearing structures. This Special Issue calls for research papers and review articles dealing with the challenge of the application of new materials in structural engineering simulations. Research papers focusing on material simulations corresponding to structural engineering applications, in addition to case studies of simulations of structures with applied novel materials, are welcome. Manuscripts presenting experimental verification are of great value. However, presentations of highly complex numerical simulations and their proper discussion are also welcome.

Guest Editor

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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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