Special Issue

Modelling of Deformation Characteristics of Materials or Structures

Message from the Guest Editor

Nowadays, simulation techniques and numerical methods have been rapidly evolving in order to apply increasingly complex models and to meet the growing requirements of engineering applications. Also, newly developed analytical solutions have covered a wider range of scientific problems and are benchmark solutions for numerical simulations.

This Special Issue of Materials is devoted to analytical and computational methods in the modelling of material characteristics. Among others, the following topics are the main fields of interest of this Issue: linear and non-linear behavior elasticity and plasticity models; materials with anomalous characteristics; metamaterials; auxetic cellular materials; smart materials; porous materials; functionally graded materials, dynamics and fatigue of materials; the topological optimization of structures; heat transfer in materials and structures; as well as other topics relating to computational methods in the engineering and modelling of materials. We invite you to submit research articles concerning the latest research work in these areas, with an emphasis on applications in all areas of materials and mechanics engineering.

Guest Editor

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Deadline for manuscript submissions

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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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