Special Issue

Mechanical Behavior of Biological and Bio-Inspired Materials

Message from the Guest Editor

The field researching the mechanics of biological and bioinspired materials has undergone an exciting development over recent decades, which makes it stand at the cutting edge of the fields of mechanics, materials, biology, and medicine. As an intriguing interdisciplinary research field, it aims to elucidate the fundamental principles in nature's design of strong, multi-functional and smart materials by focusing on the assembly, deformation, stability and failure of the materials. For instance, the knowledge on mechanical principles of biological materials is very helpful for addressing some major challenges in material sciences and engineering. They also have the potential to provide a quantitative understanding about how forces and deformation affect human beings' health, diseases and treatment at the tissue, cellular and molecular levels. Original papers and reviews dealing with the latest findings in the mechanical behavior of biological and bioinspired materials are all welcome. The type of material and application may be among the ones cited above or covered by the keywords (though not exclusively).

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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