Special Issue

Micro- and Nanoscale Mechanical Properties of Biomaterials

Message from the Guest Editors

The micro- and nanomechanical characterization of biological samples offers the possibility of retrieving the biophysical properties of tissues, cells, fibrous components and biomolecules. During recent decades, important achievements towards the development of groundbreaking experimental techniques for determining the mechanical properties of highly heterogeneous materials have been presented. It is also significant to note that new mathematical models for data processing have also been recently developed. In addition, determining the mechanical properties of biological materials and biomaterials at the micro- and nanoscale has opened new prospects regarding various applications such as disease diagnosis and prognosis. This Special Issue welcomes contributions on new results related to:

- The mechanical characterization of biological samples and biomaterials at the micro- and nanoscale;
- Experimental techniques for micro- and nanomechanical characterization;
- Experimental techniques that combine imaging modes with mechanical property determination;
- Applications of mechanical characterization in disease diagnosis and prognosis;
- New mathematical models for data processing.

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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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