Special Issue

Experimental Mechanics of Micro-Nano Scale Spectroscopy

Message from the Guest Editor

The experimental investigation on mechanical behavior around various new materials and structures is a hot field in materials science and engineering, which requires the continuous development of new methods and technologies of experimental mechanics. In recent years, micro and nano spectral technologies, such as micro-Raman spectroscopy and micro fluorescence spectroscopy, have seen many influential achievements in frontier applications of mechanical studies. A new sub-branch of experimental mechanics is forming, namely, spectral experimental mechanics. This Special Issue intends to gather the recent results of spectral technologies in the methodological research of experimental mechanics and the frontier field of mechanics at the micro and nano scale. We look forward to contributions including, but not limited to, the following fields.

- Experimental theory of spectral–mechanical characterization;
- New methods or techniques of mechanical measurement using spectroscopy;
- New development of spectral instruments for the experimental study of mechanics;
- Application of spectral analysis on the mechanical behaviors of advanced materials,

Guest Editor

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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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