Special Issue

Microstructure Characterization of Materials: In Situ TEM Investigation

Message from the Guest Editor

One picture means more than a thousand words. Undoubtedly, this is one of the slogans that guide researchers specializing in dynamic imaging experiments. There is no doubt, however, that despite the passage of years, in situ electron microscopy remains an exceptionally demanding technique. The experiments carried out with it allow pushing the boundaries of knowledge but often require significant interference in the microscope or the use of dedicated, prototype devices. Changing the sample temperature, interaction with a magnetic or electric field, mechanical, light, or accelerated particle influence, chemical experiments in liquids and gases, electron beam-driven reactions—despite the wide possibilities, the pool of available experiments remains open and limited only by the creativity of researchers. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews in the field of in situ electron microscopy are all welcome. We are interested in both research carried out with the use of commercial systems and your prototype designs, not limited to only TEM or SEM.

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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