Special Issue

New Materials for Neutron Sources and Instruments

Message from the Guest Editor

A significant part of recent developments in neutron research and technologies is related to the design of new materials with special properties, as well as methods of their use. An example is the development of reflectors effective for slow neutrons (fluorinated diamond nano-powders, graphites intercalated with fluorine, etc), previously unavailable for standard neutron reflectors. The use of such reflectors also requires the development of methods for designing the desired chemical and physical properties of these materials, methods for their use and calculation of the interaction of neutrons with such reflectors, characterization of reflector materials and entire devices, research into their radiation resistance, etc. We believe that a systematic analysis of all these and other related technologies, methods, and materials in one Special Issue will serve as a positive impetus for the development of this entire field.

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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