Special Issue

Nuclear Materials and Their Derivatives: Synthesis, Structure, and Properties, Second Edition

Message from the Guest Editors

Developing and optimizing nuclear materials has greatly facilitated the development of fusion reactors, fission reactors, and similar environments, including neutron sources. Structure, phase transition, stability, mechanical and thermodynamic properties, lattice dynamic properties, neutron and charged particle radiation effects of the entire fuel cycle, actinides and their compounds under different external conditions need careful investigation. Many related synthesis methods and simulation techniques are in development. Deep physical insights and theoretical understanding have greatly promoted further developments and applications of nuclear materials. This Issue aims to provide a unique international forum for researchers working in nuclear materials to report their latest endeavors in advancing this field, including new pristine nuclear materials, methods used to improve nuclear materials and their performance, theoretical understanding and physical insights into nuclear materials and their derivatives, synthesis and structural characterization of nuclear materials, computational discovery of new nuclear materials, physical and chemical properties of nuclear materials, etc.

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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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