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Advances in Structural Phase Transition and Physical Properties of Nanomaterials under High Pressure

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Deadline for manuscript
submissions:

closed (10 July 2022)

Message from the Guest Editors

Dear Colleagues,

As an effective tool for modulating the crystal structure and electronic structure of materials, high pressure provides a unique way to explore the new phenomena and properties of the materials. Nanomaterials have extraordinary physical and chemical properties resulting from the nanosize effect. It is not surprising that high pressure studies on nanomaterials took place in parallel to the growth of nanosciences either to better understand the properties of nanomaterials or to provide alternative methods for preparing nanomaterials with high-pressure phases.

Papers for this Special Issue are invited that cover all aspects of crystal structural transitions, mechanical properties, optical properties, electronic properties, and magnetic properties nanoscaled materials with various sizes and nanostructures/dimensions under high pressure. You are welcome to focus primarily on the new phenomena of nanomaterials under high pressure, and new developing high-pressure techniques and theoretical methods for studying nanoscale materials.

Full papers, communications, and reviews are all welcome.

Yours sincerely,

Prof. Quanjun Li

Prof. Xiaobing Liu

Guest Editors

Special Issue



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Editor-in-Chief

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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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