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High Pressure Materials: Synthesis, Characterization and Properties

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Deadline for manuscript submissions: **20 December 2024**

Message from the Guest Editors

This Special Issue focuses on a new approach in advanced materials for high-pressure phase-stable-like diamond and cubic boron nitride for their synthesis and consolidation, for the growth of single crystals like quartz, and for the densification of refractory materials like carbide, boride, nitride, and oxide for their unique properties.

The application of high pressures for the synthesis and characterization of materials obtained at high pressures, including the study of their properties, allows us to observe these phase transitions in situ and/or ex-situ, such as those of graphite–diamond and hexagonal–cubic boron nitride.

This Special Issue aims to give an overview of recent advancements in high-pressure processes/technologies for the synthesis of advanced functional inorganic materials. To this end, we are pleased to invite you to submit a manuscript to this collection. Articles, papers, and reviews are all welcome.

Specialsue



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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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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