Special Issue

Advances in Multifunctional Materials Obtained at High Temperature and Pressure Conditions

Message from the Guest Editor

Metals, ceramics, and metal–ceramic composites obtained at high temperatures (above 1000 °C) and pressures equal to or higher than 35 MPa most often belong to high-melting materials. These materials are obtained by ultra-high pressure sintering methods, including HP-HT, hot pressing, spark plasma sintering, plasma spray, and others. The most famous materials that are obtained using these methods are diamonds, cubic boron nitride, carbides, borides, nitrides, some stainless steels, Ni-base alloys, refractory metals (e.g., tungsten, rhenium, osmium, tantalum, molybdenum, niobium, zirconium, and iridium), their alloys, and others. The application of these materials is very wide in many areas of life. Therefore, this Special Issue welcomes contributions from all researchers working on high temperature and pressure material retrieval, as well as on their synthesis, characterization, properties, and applications.

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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