

Special Issue

Advanced Materials under Extreme Environments

Message from the Guest Editor

The continuous and increasing demand for energy production and storage, aerospace transportation, and planetary exploration has driven the need to develop new materials and characterize their physical and chemical properties in extreme environmental conditions. Extreme conditions such as elevated temperatures and pressures, high radiation fields, and corrosive environments are encountered in nuclear energy, aeronautical and space applications. In this upcoming Special Issue of *Materials*, entitled “The Advanced Materials in Extreme Environments”, welcomes contributions from all STEM fields related to experimental and theoretical research into advanced materials which have applications in extreme conditions on Earth and other planetary bodies of our solar system. Our intention is to emphasize all classes of advanced materials (metallic alloys, ceramics, polymers, and composites) exposed to extremes such as high temperatures, cryogenic conditions, high pressure, ultra-high vacuums, radiation fields, and far-from-equilibrium conditions.

Guest Editor

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Message from the Editorial Board

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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