Special Issue

Novel High-Temperature Materials: Preparation, Characterization, and Applications

Message from the Guest Editor

The Special Issue on "Novel High-Temperature Materials: Preparation, Characterization, and Applications" brings together scientists to discuss advanced research on these group of materials. Hightemperature materials are ceramics, metals, their alloys. and composites which offer excellent chemical, phase, and property stability, at temperatures exceeding 900 °C. More specifically, these are the materials which could be used at such high temperatures and consist principally of some stainless steels, Ni-base alloys, single-crystal super alloys, refractory metals (tungsten, rhenium, osmium, tantalum, molybdenum, niobium, zirconium, iridium), their alloys, and a wide group of ceramic materials. These materials are used as materials of thermal protection systems (TPS), coatings for materials exposed to high temperatures, and bulk materials for heating elements or isolators. Therefore, this Special Issue welcomes contributions from all researchers working on high-temperature materials obtaining, as well as on their modeling, 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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