Special Issue

New Advances in High-Temperature Structural Materials

Message from the Guest Editors

This Special Issue focuses on the latest developments in research and technology of high-temperature structural materials. We welcome articles, communications, and reviews on the state of the art in the field of conventional, high-temperature structural materials, such as superalloys, refractory alloys, ceramics, intermetallics, composites, thermal barrier coatings, etc. Meanwhile, potential next-generation, high-temperature structural materials capable of withstanding elevated temperatures, such as precipitation-strengthened and refractory medium- and high-entropy alloys, ultra-high-temperature ceramics, advanced intermetallics, and oxide-dispersion-strengthened alloys, are also welcomed. Topics of interest for this Special Issue include, but are not limited to, the following:

- Material-design concept;
- Synthesis and manufacturing method;
- Microstructural characterization technique;
- Static mechanical property;
- Creep and fatigue property;
- Oxidation, corrosion, and thermal resistance;
- Predictive modeling.

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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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