

Special Issue

Advances in High-Temperature Materials: Fabrication, Characterization, and Protection

Message from the Guest Editors

Recent decades have witnessed rapid development in high-temperature industries such as energy conversion systems of land-based power plants or nuclear operations, as well as propulsion systems of aircraft or rockets. As a result, a series of advanced ultrahigh-temperature materials have stepped onto the stage. Key questions to be addressed include the following: Why do these materials work at high temperatures? What happens to the microstructure of these materials when serving in such severe conditions? How do we design novel high-temperature or ultrahigh-temperature materials? You are welcome to contribute to this Special Issue, which is dedicated to revealing the mysteries of these materials. The topics of interest include (but are not limited to) the following:

- Alloy design for high-temperature materials;
- Microstructure of high-temperature materials;
- Fabrication of high-temperature materials;
- Mechanical properties of high-temperature materials;
- Corrosion resistance of high-temperature materials;
- Failure of high-temperature materials;
- Protection of high-temperature materials;
- New insights into high-temperature materials.

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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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