Special Issue

Mechanical and Thermal Characterization of Novel Thermal Barrier Materials

Message from the Guest Editor

The scope of this Special Issue, titled “Mechanical and Thermal Characterization of Novel Thermal Barrier Materials”, includes research on the latest developments in thermal barrier coatings and their applications, in both academia and industry, and it offers a comprehensive understanding of the mechanisms behind the effective protection during operation. This Special Issue focuses on TBC materials studies for optimizing their properties, the development of their fabrication process, their characterizations, and their evaluation techniques. We highly encourage the submission of original research, engineering articles, communications, and critical reviews in the area of thermal barrier coatings and their applications from both academia and industry, covering topics including, but not limited to, the following:

- Novel thermal barrier materials;
- Novel fabrication technologies of TBC;
- Chracterization of thermal and/or mechanical properties;
- Novel evaluation techniques for protection.

Guest Editor

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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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