Special Issue

Characterization and Properties of Thermal Barrier Coatings

Message from the Guest Editor

Coupled problems are extremely complex, even more so when different materials and damage are involved. This is the case with thermal barrier coatings, where a brittle and porous coating is deposited in a metallic substrate. The interface damage that produces spalling, the orthogonal cracks that increase thermal conductivity or chemical reactions, are only a few examples of the complexity achieved by the thermal barrier coatings during their service life. The industrial interest of the thermal barrier coatings, in their different configurations, is pushing the research of this complex topic. This Special Issue is focused on aerospace structures, but any other industrial application of high interest is welcome. The Special Issue aims to cover any approach to the problem. Both experimental results and numerical models will be considered for publication, as well as any scales considered in the study. It is a pleasure for me to invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are all welcome.

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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