



Advanced Ceramic and Glass Materials: Preparation, Characterization and Applications

Guest Editor:

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Message from the Guest Editor

In the field of aerospace, extreme high temperature environment brings difficulties to the design of aircraft. Advanced thermal protection system is one of the keys to ensure the safe flight of aircraft, in which lightweight thermal insulation materials are an important part of a thermal protection system. High temperature-resistant adhesives and coating are necessary auxiliary materials for assembly. This Special Issue will address the preparation, characterization and applications of advanced ceramics, composites, glasses for application in the range of $> 1000^{\circ}\text{C}$. Special emphasis will be placed on the mechanical properties, radiation resistance, thermal properties and structure evolution. Toughening has always been the key to improve the properties of extreme high temperature materials. The Special Issue also welcomes manuscripts on the analysis of in situ growth and strengthening mechanisms. Topics of interest include, but are not limited to, the following:

- Ceramics or glasses for extreme environmental applications;
- Fiber-reinforced ceramic-based composites;
- High-temperature resistant adhesives and coatings;
- Nano/micro phases in situ growth for reinforcement.





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Message from the Editor-in-Chief

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