



Advances in Novel Materials for Aerospace Engineering

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Message from the Guest Editor

Dear Colleagues,

In recent years, much progress has been made on the development of aerospace materials for structural applications. Alloys, such as Al-based alloys, have been developed for the aerospace industry with outstanding advantages. Composite materials have thus started to take on more and more important roles in aircrafts; however, these still face some major issues, such as delamination. Functionally graded materials (FGMs) have been conceived to overcome this limitation.

On the other hand, smart materials are gaining importance continuously in the aerospace industry because of their unique features, such as self-sensing, self-adaptability, memory capabilities, and manifold functions. Finally, a new research field has emerged in the last decade to study metamaterials, among these, acoustic metamaterials are attracting aerospace researchers for the development of lightweight acoustic insulation treatments.

This Special Issue focuses on the following topics: (1) recent advances in the development of aerospace materials, (2) challenges faced by recent aerospace materials, and (3) advances in modelling of innovative aerospace materials.





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Message from the Editor-in-Chief

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