



## Nanocomposite Films and Coatings for Aerospace Applications

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### Message from the Guest Editor

Multifunctional nanocomposite films and coatings can play a key role in protecting and safeguarding the various spacecraft components from the surrounding environment. These films and coatings have other potential uses, including in sensors, structural health monitoring and electromagnetic interference shielding.

The topics of interest include but are not limited to the following:

- Anti-icing and UV protective coatings for aircrafts;
- Nanocomposite paints for aircraft and spacecraft;
- Manufacturing of films and coatings for aerospace applications;
- Nanocomposite films and coatings for mitigation of space effects such as oxygen atom attack, contamination, solar UV degradation, physical sputtering, spacecraft glow, spacecraft charging, radiation effects and hypervelocity impact damage on spacecraft surfaces;
- Experimental testing and numerical analysis to determine performance of nanocomposite films and coatings in service;
- Durability and reliability of films and coatings in operative aerospace environments.





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## Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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