

Special Issue

Morphing Enabling Technologies for Aerospace Systems

Message from the Guest Editors

Flexible morphing deployable aeroshells are increasingly emerging as novel and alternative concepts for performing the controlled re-entry and precise landing of space vehicles. Shape morphing during entry could enable trajectory control by providing enhanced versatility and flight maneuverability, otherwise not achievable with the current rigid decelerators. This Special Issue is dedicated to novel perspectives in modern de-orbiting and re-entry systems featuring advanced mechanisms for the structural shape control of both inflatable and mechanically deployable systems to accomplish the desired entry trajectories and improved landing accuracy by modulating lift over drag. In the development of solutions to these challenges, articles may address various topics, ranging from the structural design of deployment mechanisms (the physical obstruction producing aerodynamic drag) to the aeroshell's ability to reduce the peak heating rates through a decreased ballistic coefficient, including novel design concepts, entry vehicle trajectory simulations, aerothermal assessments, multibody analyses, and multi-objective optimization.

Guest Editors

Dr. Ignazio Dimino

The Italian Aerospace Research Centre (CIRA), 81043 Capua, Italy

Dr. Cristian Vendittozzi

Course of Aerospace Engineering, FGA-Campus, UnB, Brasilia 72444-240, DF, Brazil

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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