



an Open Access Journal by MDPI

Multiphysics Design of Structural Components for Aerospace Applications

Guest Editors:

Dr. Michele Ferraiuolo

Centro Italiano Ricerche Aerospaziali (CIRA), Via Maiorise, 81043 Capua, Italy

Dr. Daniele Ricci

Centro Italiano Ricerche Aerospaziali (CIRA), Via Maiorise, 81043 Capua, Italy

Dr. Francesco Battista

Centro Italiano Ricerche Aerospaziali (CIRA), Via Maiorise, 81043 Capua, Italy

Deadline for manuscript submissions: **20 October 2024**

Message from the Guest Editors

This Special Issue is devoted to the study of numerical multiphysics analysis and the design of novel approaches able to minimize computation time while not losing accuracy. Particular emphasis can be given to the design of thrust chambers for liquid, hybrid, or solid rocket engines where a multiphysics approach is needed. In addition, works in which the physics involved in the problem are studied in the same numerical framework are welcome. Finally, numerical approaches to simplify the numerical model by means of surrogate and reduced-order models are strongly appreciated since they provide the possibility, for example, to minimize the weight of the component in a reasonable computation time.



mdpi.com/si/201316







an Open Access Journal by MDPI

Editor-in-Chief

Message from the Editor-in-Chief

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

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases. **Journal Rank:** JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/applsci applsci@mdpi.com X@Applsci