

Special Issue

Novel Approaches for Aerodynamics, Aeroacoustics, Thermoacoustics and Thermal Fluids

Message from the Guest Editor

Dear Colleagues and Researchers, The strong and practical demands from aerospace industries motivate development and research on aerodynamics, aeroacoustics, thermo-acoustics and thermal fluids. This poses new technical challenges in the advancement of novel numerical approaches as well as creative experimental methodologies. Thus, this Special Issue intends to collect novel ideas as well as numerical and experimental findings/results in the field of aerospace engineering and industrial thermal systems from t design, simulation, optimization and theoretical findings to practical applications. Areas relevant to aerospace engineering include but are not limited to aerodynamics; propulsion; aeroacoustics; thermodynamics; heat transfer; novel data-processing algorithms; computational fluid dynamics; lab-scale experiments; and artificial intelligence as well as deep/machine learning and their application in aerospace engineering. The supersonic and hypersonic aerial vehicles that can achieve extremely high flight speed in the context of hybrid and/or novel detonation propulsion systems and the high-fidelity computing and modelling of supersonic devices are also topics of interest.

Guest Editor

Prof. Dr. Dan Zhao

Department of Mechanical Engineering, University of Canterbury,
Christchurch 8140, New Zealand

Deadline for manuscript submissions

closed (30 November 2023)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/123184

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

[mdpi.com/journal/
appls](https://mdpi.com/journal/appls)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)