

Special Issue

Advances in Turbulent Combustion

Message from the Guest Editors

Turbulent combustion of gaseous and liquid fuels is widely used for energy conversion in stationary power generation, aviation, land and maritime transport, and the construction industry. Yet, our understanding of the fundamentals of turbulent burning and capabilities for predicting its major characteristics are still limited. There are numerous unresolved issues relevant to turbulent flames and both fundamental and applied studies of these issues are still relevant and highly necessary. This necessity is especially urgent due to the threat of global warming, which poses new challenges for combustion science. To adequately respond to challenges, both classical and new, combustion science and technology should rapidly be advanced by adopting all available research tools, combining experiments, theory, and numerical simulations and taking new opportunities. Accordingly, this Special Issue is intended to provide an international forum for researchers from industry and academia to present their ideas and the latest developments in the field of turbulent combustion, including developments of new research methods, both experimental and numerical.

Guest Editors

Prof. Dr. Andrei Lipatnikov

Department of Mechanics and Maritime Sciences, Chalmers University of Technology, 412 96 Gothenburg, Sweden

Prof. Dr. Alexey Burluka

Department of Mechanical and Construction Engineering, Northumbria University, Newcastle-upon-Tyne NE1 8ST, UK

Deadline for manuscript submissions

closed (31 January 2023)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/85785

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

mdpi.com/journal/

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





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)