

Special Issue

Combustion and Fluid Mechanics, Advance in Fire Safety Science

Message from the Guest Editors

The present Special Issue aims to address the recent efforts and advances in fire safety science. The topics of interest for this Special Issue include but are not limited to the following topics, both bringing together experimental investigations and numerical model development:

- Thermal decomposition of solid fuel, thermophysical properties, and model of pyrolysis
- Flaming ignition process
- Fluid mechanics in fire, diffusion and aerolic phenomenon
- Gaseous combustion, finite and non-finite chemistry
- Solid / gas interactions and couplings
- Flame propagation and characteristics
- Gaseous emissions and their impact
- Wall / Flame interaction and description, convective models
- Influence of the ventilation on the fire characteristics
- Radiative thermal exchange and radiation models
- Extinction process and its description
- Specific case of charring material thermal decomposition and combustion
- Smoldering combustion and its characteristics
- Advance in facade fire
- Advance in timber combustion

Guest Editors

Prof. Dr. Thomas Rogaume

Institut Pprime (UPR 3346 CNRS), Université de Poitiers, ISAE-ENSMA, 86861 Poitiers, France

Dr. Benjamin Batiot

Institut Pprime (UPR 3346 CNRS), Université de Poitiers, ISAE-ENSMA, 86861 Poitiers, France

Deadline for manuscript submissions

closed (20 February 2022)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/62676

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

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





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, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

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