

## Special Issue

# Computational Insights into Fire Safety: Modelling, Simulation, and Innovative Solutions

### Message from the Guest Editors

In this Special Issue, we aim to bring together cutting-edge research that uses computational approaches to address various aspects of fire safety. From Computational Fluid Dynamics (CFD) modelling of fire events and hazard scenarios to the development and evaluation of fire-retardant materials using Molecular Dynamics (MD), we aim to collect diverse contributions that advance the field. By harnessing the power of simulation, modelling techniques and data-driven approaches, we can gain valuable insights into fire behaviour, fire dynamics and the effectiveness of fire safety measures.

### Guest Editors

Dr. Hengrui Liu

School of Mechanical and Manufacturing Engineering, University of New South Wales, Sydney, NSW 2052, Australia

Dr. Anthony Chun Yin Yuen

Department of Building Environment and Energy Engineering, The Hong Kong Polytechnic University, Hong Kong SAR, China

### Deadline for manuscript submissions

closed (25 December 2024)



## Fire

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.7  
CiteScore 3.9



[mdpi.com/si/176637](https://mdpi.com/si/176637)

*Fire*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
fire@mdpi.com

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

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





# Fire

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.7  
CiteScore 3.9



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



## About the Journal

### Message from the Editor-in-Chief

*Fire* is an international open-access journal about the science, policy, and technology of fires and how they interact with communities and the environment. *Fire* seeks to provide a forum to help the fire science community convey how we can live with fire in a changing world. *Fire* seeks submissions from interdisciplinary studies that take a pyrogeography perspective of fires occurring in natural, cultural, and industrial landscapes and how they interact with communities in the science-policy interface. *Fire's* Editorial Board are widely recognized international leaders. The journal emphasizes quality and innovation and has a rigorous peer-review process. I strongly recommend *Fire* for the rapid publication of your innovative research publications and case studies.

---

### Editor-in-Chief

Dr. Grant Williamson  
School of Biological Sciences, University of Tasmania, Private Bag 55,  
Hobart, TAS 7001, Australia

---

### 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), AGRIS, PubAg, and other databases.

#### Journal Rank:

JCR - Q1 (Forestry) / CiteScore - Q1 (Forestry)