

## Special Issue

# State-of-the-Art on Hydrogen Combustion

### Message from the Guest Editors

The aim of the Special Issue is to gather comprehensive data about the kinetics and gasdynamics of hydrogen combustion. Nowadays, hydrogen is considered as a prospective energy carrier, so the issues arise concerning the effective and safe use, storage and transport. To get a clear understanding how to develop the strategy of hydrogen energy it is important to understand how the hydrogen combustion and explosion develop both under controlled conditions inside combustors and in the course of accidents. The scope of the Special Issue includes the issues related but not limited to:

- hydrogen oxidation kinetics;
- hydrogen explosion;
- hydrogen combustion including deflagration and turbulent combustion;
- hydrogen detonation;
- concentration flammability limits;
- control of hydrogen combustion;
- experimental study of hydrogen combustion;
- numerical study of hydrogen combustion.

---

### Guest Editors

Prof. Dr. Alexey D. Kiverin

Joint Institute for High Temperatures of the Russian Academy of Sciences, Izhorskaya St. 13 Bd. 2, 125412 Moscow, Russia

Dr. Pavel N. Krivosheyev

A.V. Luikov Heat and Mass Transfer Institute of the National Academy of Sciences of Belarus, Minsk, Belarus

---

### Deadline for manuscript submissions

closed (30 November 2024)



## Fire

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 3.1



[mdpi.com/si/167941](https://mdpi.com/si/167941)

*Fire*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[fire@mdpi.com](mailto:fire@mdpi.com)

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





# Fire

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 3.1



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



## About the Journal

### Message from the Editor-in-Chief

---

#### 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 - Q2 (Forestry)