

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 2.7
CiteScore 3.9



mdpi.com/si/167941

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

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)