Special Issue

Photovoltaic and Electrical Fires: 2nd Edition

Message from the Guest Editors

PV systems and their electrical components are exposed to extreme environments over long periods, thus, the issues of electrical faults and wiring aging are exacerbated, increasing the risk of PV and electrical fires. Additionally, the complex structures of PV systems, high voltages continuous currents in electrical wiring, and the insignificant smoke or flame in the early stages of a PV fire pose major challenges for photovoltaic fire detection and prevention.

The SI will comprehensively explore PV and electrical fires, including the behaviors and mechanisms of their occurrence, as well as evolutionary detection and prevention technology and risk assessment methods, to provide new ideas for improving the safety of PV and electrical systems, thus promoting the widespread application of PV technology in a safer environment. Potential topics include but are not limited to the following:

Ignition mechanism of PV module;
Flame spread behavior of PV panel or array;
Detection and prevention technology for PV fires;
Risk assessment for PV fires;
Mechanisms of electrical fault and electrical fire;
Evolution law of electrical fire;
Detection and control technology for electrical fire.

Guest Editors

Prof. Dr. Ying Zhang

Prof. Dr. Xiaoyu Ju

Dr. Yang Li

Dr. Wang Zhang

Dr. Kaixuan Tang

Deadline for manuscript submissions

closed (30 June 2025)

Fire

an Open Access Journal by MDPI

Impact Factor 2.7
CiteScore 3.9

mdpi.com/si/218585

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

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)