Special Issue

Detecting, Mapping, and Characterizing Wildfires Using Remote Sensing Data

Message from the Guest Editors

Wildfires have a profound influence on ecosystem structure and function, energy feedbacks to the climate system, regional socioeconomic conditions, and future land use planning. Quantifying wildfires remains challenging, with large uncertainties, although considerable efforts have been devoted to detecting fire occurrences, mapping burned areas, and characterizing fire behaviors during the last several decades. Therefore, this Special Issue aims to collect articles concerning the quantification of wildfires using observations from satellites, airborne sensors, and unmanned aerial vehicles. The specific topics include:

- New algorithms of detecting actively burning fires and mapping burned areas, particularly in areas dominated by small and/or cool fires and frequently obscured by clouds.
- Evaluation and validation of existing and emerging fire products using fine resolution fire observations and ground-based fire measurements.
- Characterization of fire behaviors at landscape scale.
- Characterization of diurnal cycles of fire activity and long-term fire regimes at regional and global scales.
- Examination of long-term variations of regional and global fire activities.

Guest Editors

Dr. Fangjun Li

Geospatial Sciences of Excellences, Department of Geography & Geospatial Sciences, South Dakota State University, 1021 Medary Ave, Wecota Hall 115, Brookings, SD 57007, USA

Dr. Xiaoyang Zhang

Geospatial Sciences Center of Excellence, South Dakota State University, Brookings, SD 57007, USA

Deadline for manuscript submissions

closed (31 March 2023)



Fire

an Open Access Journal by MDPI

Impact Factor 2.7 CiteScore 3.9



mdpi.com/si/79603

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



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)