

## Special Issue

# Monitoring Wildfire Dynamics with Remote Sensing

### Message from the Guest Editors

Forest fires are one of the most devastating factors in most vegetation zones worldwide, including forests and grasslands. Drones, unmanned aerial vehicle (UAV), and remote sensing technology can be extremely useful in estimating the risk of forest fires across wide areas. This Special Issue invites submissions for papers that cover all elements of aerial image/video capture and processing, as well as advanced artificial intelligence-based fire detection systems. The following topics are included, but are not limited to:

- Building mathematical models for fire propagation in forest environment relying on sensors data.
- Automatic detection and localization of flames based on machine learning algorithms over RGB and hyperspectral images/videos
- Real-time wildfire monitoring and forecasting frameworks.
- Measure of Wildfire risk to support decision-making.
- Mapping of wildfire based on Multitemporal Multispectral satellite data and probabilistic mathematical models.
- Data treatment of internet of things (IoT) Sensor Networks for Decision Support in wildFire management.

**We look forward to receiving your contributions.**

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### Guest Editors

Dr. José M. P. do Nascimento

Dr. Houda Harkat

Dr. Saad Dosse Bennani

Dr. Hasmath Farhana Thariq Ahmed

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### Deadline for manuscript submissions

closed (31 December 2024)



## Fire

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## 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.

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### Editor-in-Chief

Dr. Grant Williamson  
School of Biological Sciences, University of Tasmania, Private Bag 55,  
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