



forests

an Open Access Journal by MDPI



Mathematical Modeling of Forest Fire Initiation and Spread

Guest Editors:

Prof. Dr. Valeriy Perminov

Department of Control and
Diagnostic, Tomsk Polytechnic
University, 634050 Tomsk, Russia

Dr. Denis Kasymov

Department of Physical and
Computational Mechanics,
National Research Tomsk State
University, 634050 Tomsk, Russia

Prof. Dr. Egor Loboda

Department of Physical and
Computational Mechanics,
National Research Tomsk State
University, 634050 Tomsk, Russia

Deadline for manuscript
submissions:

closed (10 February 2024)

Message from the Guest Editors

The most promising methods for studying forest fires are mathematical modeling methods. For this Special Issue, we invite contributions using mathematical modeling methods and studying the initiation and spread of forest fires. Contributed papers may focus on any aspects of forest fire initiation and spread in any fire-prone forests across the range of fire types. Examples of potential topics related to the mathematical modeling of forest fires include the influence of the forest fuel type and state, meteorological conditions, relief of terrains and others factors influencing the rate of fire spread and fire contour configurations. Papers with mathematical models dedicated to studying the prevention and control of forest fires are also welcome. For example, the study of the processes of spreading forest fires in the presence of fire breaks or barriers, the spread of oncoming fire during extinguishing, when fire-extinguishing agents are exposed to the fire front, etc.



mdpi.com/si/161670

Special Issue



forests



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Cate Macinnis-Ng

Department of Biological Sciences, Faculty of Science, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand

Prof. Dr. Giacomo Alessandro Gerosa

Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

Message from the Editorial Board

Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access.

Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

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), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

Journal Rank: JCR - Q1 (*Forestry*) / CiteScore - Q1 (*Forestry*)

Contact Us

Forests Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/forests
forests@mdpi.com
[X@Forests_MDPI](https://twitter.com/Forests_MDPI)