

## Special Issue

# Fires and Modelling for Succession in Forests

### Message from the Guest Editor

Fire regimes are recurrent extreme perturbations that play a major role in forests. Post-fire vegetation dynamics are highly complex and encompass multiple processes. Alternative successional trajectories may result in sharp vegetation shifts and produce major losses in ecosystem service supplies. Trade-offs among fire resistance, post-fire regeneration, resilience to other stressors and plant competition play different roles. General frameworks and more detailed models for successional dynamic forecast and forest management should be developed. Understanding the interaction between global change drivers and successional dynamics is crucial to anticipate the vulnerability and fate of endangered forests.

This Special Issue is focused on experimental data or models on the processes affecting state transitions and community change following forest wildfires. Original articles and reviews related to this topic are welcome. Specific topics include but are not limited to: potential effects of the changing climate; the role of erosion processes; shifts in ecosystem services; fire-induced deforestation; competition models; non-linear models; exotic species invasions.

---

### Guest Editor

Prof. Dr. Rubén Díaz-Sierra  
Mathematical and Fluid Physics Department, National Distance  
Education University, Madrid, Spain

---

### Deadline for manuscript submissions

closed (10 December 2021)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/74468](https://mdpi.com/si/74468)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### 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, Inspec, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )