

Special Issue

Stable Isotope Applications in Forest Ecosystems

Message from the Guest Editors

In this Special Issue, we invite studies developing applications of stable isotopes in forest ecology, adaptive forest management, tree physiology, and ecohydrology. In particular, we encourage studies enquiring into:

- Water vapor fluxes and carbon storage of forests, and their potential feedbacks on climate;
- Present and future shifts in tree responses to climate change toward water saving, and their effects on the magnitude and nature of climate-vegetation feedbacks;
- The upscaling of annual and intra-annual tree-ring isotopic signals to entire ecosystems benchmarking vegetation models of varying complexity;
- Temporal changes in the proportion of wood components in tree rings in relation to climate fluctuations and isotope-based retrievable climate signals;
- Stand dynamics under competition or disturbances (pests, forest fires), and assessment of forest management strategies to cope with them;
- Tree physiological responses using stable isotopes in combination with emerging tree-ring proxies;
- Long-term physiological responses of forest trees to elevated CO₂ and climate change across the globe, particularly in less explored areas.

Guest Editors

Prof. Dr. Jordi Voltas

Joint Research Unit CTFC-Agrotecnio, Universitat de Lleida, Lleida, Spain

Dr. Juan Pedro Ferrio

Estación Experimental Aula Dei, Consejo Superior de Investigaciones Científicas (EEAD-CSIC), 50059 Zaragoza, Spain

Dr. Tatiana A. Shestakova

Woodwell Climate Research Center, MA, USA

Deadline for manuscript submissions

closed (30 June 2021)



Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/63026

Forests
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
forests@mdpi.com

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





Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



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



About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

Journal Rank:

JCR - Q2 (Forestry) / CiteScore - Q1 (Forestry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).