

Special Issue

Wood Materials: Preservation and Modification

Message from the Guest Editors

Wood is a construction product characterized by a high strength to weight ratio, low heat conductivity and easy machinability. It also binds carbon and thus contributes to reducing the CO₂ content in the atmosphere.

However, despite its many positive features, wood also has some disadvantages, such as low dimensional stability, low resistance to wood-degrading fungi and flammability. In the past few decades, some studies have aimed to improve wood quality through physical, chemical and biological modifications, among other strategies. However, there are still many problems to be solved. This Special Issue will focus on new techniques and the optimization of processing parameters for wood preservation and modification. Changes in relevant wood properties, including dimensional stability, biological durability, mechanical properties and multi-scale fire retardancy, are of interest. Moreover, submissions detailing advanced characterization techniques that have application potential in the field of wood preservation and modification are also welcome.

Guest Editors

Dr. Xinzhou Wang

College of Materials Science and Engineering, Nanjing Forestry University, Nanjing, China

Dr. Jiangtao Shi

College of Materials Science and Engineering, Nanjing Forestry University, Nanjing 210037, China

Deadline for manuscript submissions

closed (25 April 2024)



Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/160253

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 17.1 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).