

Special Issue

Sustainable Thermal Management: Innovations in Biomass-Derived and Green Materials

Message from the Guest Editor

This Special Issue, “Sustainable Thermal Management: Innovations in Biomass-Derived and Green Materials”, is dedicated to advancing the frontier of eco-friendly alternatives. We seek to showcase the latest breakthroughs in the design, synthesis, characterization, and application of thermal materials derived from renewable and waste resources. By harnessing the unique hierarchical structures and tunable properties of biomass, we can pave the way for a new generation of high-performance, low-carbon thermal management solutions that align with a sustainable future involving energy-efficient buildings, advanced electronics cooling, and renewable energy storage applications.

We invite the submission of original research articles, comprehensive reviews, and insightful perspective papers. The topics of this Special Issue include, but are not limited to, the following:

Thermal insulation;
Thermal energy storage;
Molecular solar thermal systems;
Radiative cooling;
Evaporative cooling;
Photothermal energy conversion;
Electrothermal energy conversion;
Magneto-thermal conversion;
Thermal interface material;
Personal thermal management materials;
Energy-efficient buildings.

Guest Editor

Prof. Dr. Haiyue Yang

Key Laboratory of Bio-Based Material Science and Technology of Ministry of Education, Material Science and Engineering College, Northeast Forestry University, Harbin 150040, China

Deadline for manuscript submissions

31 December 2026



Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 8.9



mdpi.com/si/258516

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

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





Sustainability

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 8.9



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



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,
Columbus, OH 43210, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1
(Geography, Planning and Development)