

## Special Issue

# Emerging Thermal and Non-Thermal Technologies for Food Preservation and Sustainable Food Processing

### Message from the Guest Editors

This Special Issue aims to provide an in-depth understanding of the latest technologies and trends regarding food preservation using thermal technologies, such as moderate electric fields/ohmic heating, radio frequency heating, microwave heating, and non-thermal preservation methods such as pulsed electric fields, pulsed light, irradiation, high pressure processing, cold plasma, etc. Topics covered in this Special Issue include, but are not limited to, the following:

- Innovative food preservation and processing technologies;
- Hardle approaches to preservation methods;
- Microbial inactivation during food processing;
- Sustainable processing of foods to minimize energy consumption;
- Emerging thermal and non-thermal technologies and equipment for food processing;
- Impacts of thermal or non-thermal food processing quality and safety of foods;
- The use of science-based digital tools in improving food preservation of foods;
- Synergistic effects of combined preservation methods.

---

### Guest Editors

Dr. Tesfaye Bedane

School of Agriculture and Food Science, University College Dublin (UCD), D02 YN77 Dublin, Ireland

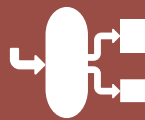
Prof. Dr. Long Chen

College of Mechanical and Electronic Engineering, Northwest A&F University, Yangling 712100, China

---

### Deadline for manuscript submissions

31 August 2026



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/220371](https://mdpi.com/si/220371)

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

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





# Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



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



## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Giancarlo Cravotto  
Department of Drug Science and Technology, University of Turin, Via P.  
Giuria 9, 10125 Turin, 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, AGRIS, and other databases.

#### Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))