

Special Issue

Emerging Processing Techniques and Their Impact on Physicochemical, Sensory, and Nutritional Properties of Foods

Message from the Guest Editors

Emerging processing techniques in the food industry have attracted the attention of researchers and industry due to their potential to improve the quality, safety, and nutritional value of food. These techniques include innovative technologies, such as ultrasound treatments, high-pressure pulsed electric fields, and minimal heat processing. The study of the impact of these techniques on the physico-chemical, sensory, and nutritional properties of food is crucial for the development of high-quality food products and for ensuring the health of consumers.

Emerging processing techniques represent a promising frontier in the food industry, offering the opportunity to improve the quality, safety, and nutritional value of food. However, to fully exploit the potential of these technologies, in-depth research is needed to clarify their mechanisms of action, assess their long-term impacts, and to adapt the processes for various food categories. Investments in research and development in this area will have a significant impact on public health and the sustainability of the food industry.

Guest Editors

Dr. Oana Bianca Oprea

Faculty of Food and Tourism, Transilvania University of Brasov,
Castelului 148, 500014 Braşov, Romania

Dr. Ignat Tolstorebrov

Department of Energy and Process Engineering, Faculty of Engineering,
8900 Trondheim, Norway

Deadline for manuscript submissions

20 August 2025



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/210294

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

mdpi.com/journal/

[appls](https://appls.mdpi.com)





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, CAPlus / SciFinder, and other databases.

Journal Rank:

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