

Special Issue

Advanced Intelligent Detection and Processing Technology and Equipment for Food Safety and Quality

Message from the Guest Editors

The escalating global demand for food and agricultural products, along with rising quality expectations, has driven the need for advanced food processing and detection technologies. While innovative approaches, such as numerical optimization, spectral imaging, and sensor networks, show potential for enhancing productivity and reducing waste, challenges remain in scalability, cost-effectiveness, and robustness. Future research should focus on simplifying system complexity and enhancing deployability in commercial environments. This Special Issue welcomes original research on advanced processing technologies that improve food quality, as well as novel analytical methods and chemometric tools for safety monitoring and quality assessment. Contributions may include, but are not limited to: emerging food processing techniques for quality enhancement; innovative detection strategies and data analysis for safety inspection; and predictive modeling, process control, optimization, and AI/ML applications in food systems. Research articles may cover non-destructive quality evaluation methods and processing technologies such as near-infrared spectroscopy and machine vision.

Guest Editors

Dr. Yawen Xiao

Prof. Dr. Anqi Li

Dr. Yanlong Han

Dr. Yang Liu

Deadline for manuscript submissions

closed (31 December 2025)



Foods

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/244571

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

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





Foods

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, *Foods* has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

Editor-in-Chief

Prof. Dr. Arun K. Bhunia

1. Department of Food Science, Purdue University, West Lafayette, IN 47907, USA
2. Department of Comparative Pathobiology, Purdue University, West Lafayette, IN 47907, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, FSTA, AGRIS, PubAg, and other databases.

Journal Rank:

JCR - Q1 (Food Science and Technology) / CiteScore - Q1 (Health Professions (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).