Special Issue

Cutting-Edge Technologies for Preventing Microbial Contamination in the Food Industry

Message from the Guest Editors

Microbial contamination threatens the food industry, impacting the economy and public health. Therefore, cutting-edge technologies have been developed to improve food quality and safety while reducing the impact on food properties. Advanced technologies like non-thermal methods (cold plasma, ozonization, pulsed electric fields, high-pressure processing) reduce contamination while preserving food quality. Natural compounds and antimicrobial packaging, incorporating bioactive materials, extend shelf life and control contamination. Bacteriophage-based biocontrol targets pathogens without harming food microbiota. Smart surfaces (e.g., silver nanoparticles, enzyme-based coatings) reduce microbial adhesion. These innovations minimize chemical preservatives, meet regulations, and address consumer demands, ensuring a safe, sustainable food supply chain.

Guest Editors

Prof. Antonello Paparella

Dr. Annalisa Serio

Dr. Francesca Maggio

Deadline for manuscript submissions

30 September 2025

Foods

an Open Access Journal by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed

mdpi.com/si/232687

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

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

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 14.9 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).