Special Issue

Advances in Portable Biosensors and Antimicrobial Strategies for Food Safety

Message from the Guest Editors

Foodborne pathogens pose a tremendous threat to human health and cause substantial economic losses, making it crucial to develop sensitive and rapid detection and disinfection strategies. To date, numerous methods are available for detecting pathogens and antimicrobials with high sensitivity and specificity. For detection assays, conventional bacterial cultivation, molecular biological techniques, and enzyme-linked immunosorbent assay have been popular over the past decades. However, these methods either rely on expensive instruments or require a relatively long detection time, making them cumbersome for on-site analysis of pathogens in the food safety field. Advances in relation to portable biosensors, which focus on avoiding these problems, are currently under study. Additionally, the disinfection of foodborne pathogens employing biological, chemical, and physical strategies has been explored. Moreover, green, environmentally friendly, and sustainable sterilization methods are gaining increasing attention in the field of food safety.

Guest Editors

Dr. Yunlei Zhou

College of Biotechnology, Tianjin University of Science and Technology, Tianjin 300457, China

Prof. Dr. Huanshun Yin

College of Marine and Environmental Sciences, Tianjin University of Science and Technology, Tianjin 300457, China

Deadline for manuscript submissions

10 June 2026

Foods

an Open Access Journal by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed

mdpi.com/si/260435

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).