Special Issue

Research Progress on Electrochemical Sensors and Their Role in Food Analysis

Message from the Guest Editors

The demand for analytical methods in food analysis continues to grow, driven by the need for high sensitivity and rapid execution. Within this context, electrochemical sensors have gained significant attention due to their ability to detect specific compounds and contaminants in food matrices with high efficiency.

Recent research has focused on enhancing electrochemical sensing performance through the development of advanced materials such as composites, nanomaterials, metal–organic frameworks (MOFs), biosensors, and aptamers. These materials have contributed to improved sensitivity, broader linear ranges, and lower detection limits, making them highly effective in food quality and safety applications.

Additionally, the integration of chemometric tools and artificial intelligence (AI) with electrochemical techniques has led to novel strategies for data interpretation, enabling robust classification, discrimination, and identification of multiple analytes in food samples.

Guest Editors

Dr. Luis A. Romero-Cano
Grupo de Investigación en Materiales y Fenómenos de Superficie, Departamento de Biotecnológicas y Ambientales, Universidad Autónoma de Guadalajara, Av. Patria 1201, Zapopan 45129, Mexico

Dr. Xinai Zhang
School of Food and Biological Engineering, Jiangsu University, Zhenjiang, China

Deadline for manuscript submissions

31 January 2026

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).