

## Special Issue

# Modification Technologies, Interaction Mechanisms, and Functional Applications of Food-Derived Macromolecules

### Message from the Guest Editors

As known by many, macromolecules derived from food are the core functional components of food systems. However, natural food-derived macromolecules often exhibit inherent limitations, such as poor solubility, insufficient emulsifying stability, and weak acid–base tolerance. These limitations significantly restrict their applications in high-end food products, functional foods, and green additives. Employing precise modification techniques to optimize their structure and function, as well as comprehensively understanding their interaction mechanisms in complex systems, is significant for realizing the full potential of food-derived macromolecules. This Special Issue focuses on cutting-edge research regarding modification techniques, interaction mechanisms, and functional applications of food-derived macromolecules. It aims to promote interdisciplinary innovation, transform the functional limitations of natural macromolecules into application advantages, and provide theoretical and technical support for the sustainable development of the food industry.

### Guest Editors

Dr. Bin Liang

School of Food Engineering, Ludong University, Yantai, China

Dr. Chanchan Sun

School of Life Sciences, Yantai University, Yantai, China

Dr. Wenjie Sui

State Key Laboratory of Food Nutrition and Safety, College of Food Science and Engineering, Tianjin University of Science & Technology, Tianjin 300457, China

### Deadline for manuscript submissions

10 September 2026



## Foods

an Open Access Journal  
by MDPI

Impact Factor 5.1  
CiteScore 8.7  
Indexed in PubMed



[mdpi.com/si/271622](https://mdpi.com/si/271622)

*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).