

Special Issue

Advances in NIR Spectroscopy Analytical Technology in Food Industries

Message from the Guest Editors

The concept of Industry 4.0 has prompted a reorganization of the control systems to optimize the production, guaranteeing safer food. Process Analytical Technology, a.k.a. PAT. Near Infrared Spectroscopy (NIRS) serves the PAT approach as promising process analyser among e-sensing technologies, thanks to its ability in fingerprinting materials and simultaneously analysing different physicochemical phenomena occurring along the process. The implementation of NIRS Analytical Technology in Food Industries offers some obvious advantages which include controlled and optimized utilization of raw materials, reduction in process cycle time, replacement of slow and costly laboratory testing, and, most importantly, it enables continuous learning, envisioning process and product innovation. This Special Issue is dedicated to bridge the gap between NIRS potentials and its actual implementation as Analytical Technology in Food Industries. The goal is to close the control loop providing an efficient and automated processing management that could contribute to the minimisation of the environmental footprint of food processing.

Guest Editors

Prof. Dr. Ernestina Casiraghi

Department of Food, Environmental and Nutritional Sciences (DeFENS),
Università degli Studi di Milano, Via Celoria, 2, 20133, Milano, Italy

Dr. Silvia Grassi

Department of Food, Environmental and Nutritional Sciences (DeFENS),
Università degli Studi di Milano, Via G. Celoria 2, 20133 Milan, Italy

Deadline for manuscript submissions

closed (10 December 2021)



Foods

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/58178

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 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).