

Special Issue

Application of Near-Infrared Spectroscopy in Food Quality and Safety

Message from the Guest Editors

An increasing demand for high-quality food requires the quality and safety monitoring of food products and the application of fast detection methods for the determination of undesired substances in food. During the last 20 years, near-infrared spectroscopy (NIRs) has emerged as a rapid, nondestructive, and environmentally friendly method for the evaluation of the complexity of food matrices regarding composition, microstructure, and biological activity. The information arising from the interaction between the food structure and electromagnetic radiation could be explained via the use of chemometrics. The term chemometrics refers to a multidisciplinary approach, highly used for the analysis of large, complex chemical data using mathematical and statistical methods. This Special Issue will include papers with the rapid detection of food contaminants, food quality monitoring, data analysis and the development of mathematical models using chemometrics and machine learning algorithms based on near-infrared spectra obtained from food products, identification of the authenticity, quality, bio-functional and nutritional aspects of food based on its geographical and botanical origin.

Guest Editors

Dr. Tamara Jurina

Department of Process Engineering, Faculty of Food Technology and Biotechnology, University of Zagreb, Pierottijeva 6, 10000 Zagreb, Croatia

Dr. Ana Jurinjak Tušek

Faculty of Food Technology and Biotechnology, University of Zagreb, Pierottijeva 6, 10 000 Zagreb, Croatia

Deadline for manuscript submissions

closed (31 July 2025)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/187395

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

[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)





Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)



About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)