Special Issue

Optical Probes and Biosensors for Food Detection: Development and Applications

Message from the Guest Editors

Optical probe is a non-destructive technique that uses light to investigate the quality of food at molecular, cellular, tissue, and organ levels. Because of the importance of optical probes in food analysis, the innovatively designed optical-sensing techniques require a deep understanding of the optical, material, and environmental properties that affect the performance of optical probes. Meanwhile, exploring the interaction between the detection object and the optical probe is also key for optimizing the structure of an optical probe.

In addition to the structures, many portable instruments can be used to obtain and analyze the signal generated from optical probes, including fluorescence spectroscopy, Raman spectroscopy, and ultraviolet–visible spectroscopy.

Furthermore, the technology of optical probes is being increasingly and widely applied for monitoring chemical hazardous substances in food, including pesticides, heavy metals, mycotoxins, and veterinary drugs. Meanwhile, harmful microorganisms, such as parasite, fungus, bacteria, and virus, can also be analyzed using optical probes. This special issue welcomes submissions from relevant research scholars.

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Deadline for manuscript submissions

closed (20 April 2025)

Foods

an Open Access Journal by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed

mdpi.com/si/195564

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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.

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