Special Issue

Research Progress of Nuclear Magnetic Resonance (NMR) and Foodomics for Food Adulteration and Traceability Analysis

Message from the Guest Editor

The integrated use of statistical methods and NMR data represents a powerful and reliable tool in food sciences. These methods are widely used for quality characterization, authenticity, adulteration, and traceability assessment of products such as olive oil, milk, honey, and wine. Among several instrumental techniques available for determining foodstuff chemical profiles, such as GC-MS, UV-Vis, Raman, NIR, and Mass Spectrometry, NMR is one of the most successful high-throughput techniques employed for biomarker detection, food characterization, and/or botanical and geographical origin discrimination, thanks to its ability to simultaneously detect various components, the possibility of automation, and cost-effective screening per analysis. Coupled with chemometrics, NMR spectroscopy is used to characterize the specific chemical profiles of different matrices whilst also identifying the most important discriminating compounds. This Special Issue aims to provide an overview of the current state and future developments in research on NMR-based foodomics for foodstuff traceability and authenticity assessment.

Guest Editor

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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.

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