

Special Issue

New Advances in the Application of Cold Plasma Technology in Food Processing

Message from the Guest Editor

Cold plasma technology has emerged as a cutting-edge, non-thermal approach in food processing, offering innovative solutions beyond microbial inactivation. Recent advances have expanded its applications to (i) the extraction of bioactive compounds; (ii) the texturization of food proteins to develop innovative matrices; (iii) the functionalization of food-contact materials to improve antimicrobial properties and barrier performance; and (iv) the inactivation of harmful foodborne toxins, such as mycotoxins, without compromising food quality. Although its industrial implementation is still in the early stages, several pilot-scale systems have been developed, and the technology is gradually being adopted in niche sectors such as fresh produce, packaging, and ingredient processing. Continued research, along with advances in scalability and cost-efficiency, are driving its transition from laboratory to industry. Cold plasma thus holds great promise as a sustainable and transformative tool in food processing to satisfy food requirements in future.

Guest Editor

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Deadline for manuscript submissions

31 March 2026



Foods

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed



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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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