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Nanomaterials and Nanotechnology in Food: Applicability, Functionality, and Safety—2nd Edition

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Deadline for manuscript submissions:

closed (31 October 2025)

Message from the Guest Editors

Dear Colleagues,

Food safety is a main research hotspot in food science and a global public health concern. Contaminants in food, such as foodborne pathogenic micro-organisms, pesticides, veterinary drug residues, toxins, and illegal additives that are produced during food processing and preservation, threaten human health.

The applications of nanomaterials and nanotechnology in food science and engineering have received increasing attention. Some typical applications include nanocatalyst-based electrochemical/colorimetric/fluorescent sensing platforms, nanocatalyst-based advanced oxidation processes, nanomaterial-embedded packaging films and other novel electro-/photo-catalysis techniques in food science. Furthermore, training complex models based on artificial intelligence (AI) frameworks enables the prediction of intricate relationships and the execution of more complex tasks.

Here, we cordially invite authors to contribute original research articles or review articles covering the most recent progress in the application of nanomaterials and nanotechnology in food, as well as food safety analytical methods based on traditional machine learning or deep learning approaches.



mdpi.com/si/203472

Special Issue



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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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