Special Issue on
Novel Nanotechnologies and Nanomaterials for Food Processing, Analysis, and Preservation

CALL FOR PAPERS

Food processing and preservation is used to process raw agricultural produce into edible, safe, and healthy food products with suitable shelf life, which is essential for food security, especially with the increasing world population. Emerging processing technologies ensure microbial and chemical safety while also improving food quality and physical and sensory properties.

Nanomaterials have many potential applications in food processing and preservation, such as the development of fast and sensitive food detection technologies using nanosensors to detect harmful substances in food and monitor food quality, or the creation of packaging materials to protect food from contamination and oxidation, as well as increasing the mechanical strength and stability of packaging materials. Nanomaterials can also control the release rate of food active ingredients, such as antioxidants, antimicrobials, or preservatives, thereby extending the shelf life of food and maintaining stability as well as enhancing the nutritional quality of food. Nano-enzymes can be employed to catalyze reactions in food processing to improve reaction rate and efficiency. Nano-starters with high fermentation efficiency can be used to produce bread, alcohols, and dairy products, reducing the energy consumption of the fermentation process.

The aim of this Special Issue is to evaluate emerging nanotechnologies in food processing and preservation and to support the development of promising new viewpoints, new materials, and new methods. Original research articles and review articles are both welcome.

Potential topics include but are not limited to the following:

- ▶ Nanotechnologies for enhancing quality in food processing
- ▶ Nanotechnologies in improving food taste
- ▶ Nano-emulsifiers in food processing
- ▶ Advantages of nano-capsules in food processing
- ▶ Nano-films in food packaging
- ▶ Nano-adsorbent materials in food preservation
- ▶ Nano-biosensors for food quality analysis
- ▶ Nanotechnologies for enhancing food nutrition
- ▶ Nanotechnologies in sustainable food production
- ▶ Nanotechnologies for improving food shelf life

Authors can submit their manuscripts through the Manuscript Tracking System at https://review.wiley.com/submit?specialIssue=727428.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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