

## Special Issue

# Predictive Modelling for Improving Quality and Safety of Fermented Foods

### Message from the Guest Editor

Fermented foods are gaining special attention due to the complex interaction mechanisms between microorganisms (indigenous microbiota as well as starter cultures) and food matrices. These foods are covering a wide range of products with special valuable cultural heritage in most regions. The present Special Issue “Predictive Modelling for Improving Quality and Safety of Fermented Foods” will cover topics related to the mathematical modelling of probiotic, pathogenic, and spoilage bacteria, process risk models, intervention strategies, and methods for the determination of food quality and the safety of fermented products. The role of functional foods, probiotic bacteria and yeasts, and biofilm formation are also included to gain knowledge about the biological mechanisms occurring during product fermentation. Lastly, the identification of microbial diversity using metagenomic approaches is of interest. **Keywords:** lactic acid bacteria; yeast; microbial interaction; predictive modelling; risk assessment

### Guest Editor

Prof. Dr. Antonio Valero

Department of Food Science and Technology, University of Córdoba,  
14014 Cordoba, Spain

### Deadline for manuscript submissions

closed (30 September 2020)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/36091](https://mdpi.com/si/36091)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[appls@mdpi.com](mailto:appls@mdpi.com)

[mdpi.com/journal/  
appls](https://mdpi.com/journal/appls)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )