

## Special Issue

# Rumen Microbiome and Fermentation Function Research

### Message from the Guest Editor

With the rapid advancement of animal husbandry, the challenge of animal feed shortage has become increasingly pronounced. To address this issue, the full utilization of existing feed resources, along with the increased development of unconventional feed sources, is crucial for the sustainable development of the feeding industry. The rumen microbiota play a vital role in the digestion of ruminants. These microorganisms ferment feed and provide fermentation end-products that are utilized by the host animals. Currently, many researchers are focusing on improving rumen microbiota and fermentation efficiency from a nutritional perspective. Additionally, the use of multi-omics approaches to elucidate the mechanisms underlying rumen microbial features and functions has emerged as a research hotspot. Therefore, the aim of this Special Issue is to publish high-quality studies on new feed resources, by-product materials, fermentation methods and microbiome function, encompassing both in vivo and in vitro studies. In addition, the submission of review and research manuscripts that focus on the development of other digestive systems of ruminants are also of interest.

### Guest Editor

Dr. Xingzhou Tian

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### Deadline for manuscript submissions

30 April 2026



## Life

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### Message from the Editor-in-Chief

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### Editor-in-Chief

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