Special Issue

Microbial Cell Factories for Sustainable Biomass Protein Production

Message from the Guest Editors

The continuous increase in the global population and the strong demand for protein intake have resulted in an urgent demand for innovative, unconventional, and alternative proteinaceous feed sources. Synthetic biology and bio-manufacturing represent an emerging and revolutionary technological field that spans multiple disciplines. Therefore developing a feed microbial cell factory based on synthetic biology to convert renewable carbon sources into high-value protein feed is an attractive approach for promoting the production of livestock, improving the quality of food and feed, reducing the use of antibiotics, lowering production costs, and achieving sustainable development in the breeding industry. In this Special Issue, we welcome the submission of original research and review articles focusing on the following topics: using gene editing and metabolic engineering to modify microorganisms, utilizing fermentation engineering to synthesize target biomass proteins; using bioinformatics techniques to explore efficient degradation of lignocellulose; improving the utilization of mixed sugars and non-protein nitrogen transformation ability of yeast and other fungi, etc.

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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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