Special Issue

Production and Application of Microbial Lignocellulose— Degrading Enzymes

Message from the Guest Editors

Within the framework of a sustainable circular economy, cellulolytic enzymes play a key role through their conversion of lignocellulosic plant biomass, allowing for successful applications in biorefineries. Microbial biodiversity offers a wealth of opportunities in screening for new robust lignocellulose-degrading enzyme activities. In this respect, metagenomic approaches are used to assess the microbial communities in unexplored environments as a potential reservoir of novel genes. In this Special Issue, we invite submissions exploring:

- Molecular mechanisms of cellulase gene regulation and expression;
- Metagenomic studies for the identification of novel cellulases;
- Fermentative strategies for the production of lignocellulose-degrading enzymes;
- Lignocellulose-degrading enzymes and their application to bioprocesses.

We are looking forward to receiving your contribution.

Guest Editors

Dr. Silvia Crognale

Department of Innovation of Biological Systems, Food and Forestry DIBAF, Tuscia University, 01100 Viterbo VT, Italy

Dr. Eleonora Carota

Department of Innovation of Biological Systems, Food and Forestry DIBAF, Tuscia University, Viterbo VT, Italy

Deadline for manuscript submissions

closed (31 March 2021)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/33479

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



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)

