Special Issue

Advanced Research on Lignin and Nanostructured Lignin: Biodegradation, Properties and Applications

Message from the Guest Editors

The design of novel processes for the valorization of lignin plays a key role in circular economy and green chemistry. Among them, the biodegradation of lignin is an important tool for the transformation of the starting material in order to produce high added fine chemicals, facilities, and commodities. In addition, present-day innovative nanotechnology has increased the chemical potentiality of biodegraded lignin by opening the way for the preparation of nanostructures characterized by improved chemophysical, rheological, and electrochemical properties. This Special Issue focuses on the following topics:

- frontiers in the production of added value compound by microbial degradation of lignin (including biofuel);
- role of redox enzymes or lignin-degrading auxiliary enzymes for the production of commodities and aromatic compounds;
- fractionation process of biodegraded lignin and successive nanotechnology and nano-biotechnology applications;
- application of biodegraded lignin in material sciences and biosensors;
- application of biodegraded lignin in biocatalysis and biomedical devices.

Guest Editors

Dr. Eliana Capecchi

Dr. Davide Piccinino

Prof. Dr. Raffaele Saladino

Deadline for manuscript submissions

closed (31 May 2024)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/149381

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

mdpi.com/journal/polymers

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/journal/polymers

MDPI

About the Journal

Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

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, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)