

Special Issue

Catalysis in Biomass Valorization

Message from the Guest Editors

Utilization of biomass for the production of energy and value-added chemicals became, in the previous decade, a very active area of research, leading to a number of industrial breakthroughs in the development of future biorefineries. The role of catalysis in the implementation of sustainable technologies for the conversion of non-edible biomass into biofuels and chemicals is vital. We invite contributions related to the use of catalysis for the valorization of biomass of different types (lignocellulosic, algal biomass, vegetable oils, etc.) into fuels, platform chemicals, and other value products (e.g., catalysis in synthesis of pharmaceuticals from extractives). The scope of this Special Issue also covers the preparation and characterization of catalysts. Papers on molecular insights in the processing of biomass with different catalysts (homogeneous, enzymatic, and heterogeneous) are strongly encouraged. Moreover, contributions related to catalytic reaction and reactor engineering, industrial demonstrations, and technoeconomic analysis of catalytic processes for biomass valorization are welcome.

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Deadline for manuscript submissions

closed (20 May 2022)



Catalysts

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CiteScore 6.8



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