

Catalysis of Cellulose Conversion Through Hydrolysis of Glucose Unit by Exfoliation of Hydrotalcite

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Cellulose is an abundant raw material for biomass conversion. It is a bio-polymer consisted of glucose unit. It can be converted into many platform molecules through hydrolysis of glucose unit. The catalytic performances of several acid catalysts are widely studied. It was found that cellulose conversion and possibly the reaction pathways vary with the types of catalyst. While cellulose over some solid acid catalyst produces 5-hydroxymethyl furan, the main product in the presence of solid base catalyst is different. As a result, in this research, cellulose conversion over base catalysts consisting of the exfoliation of LDH is also studied.

Keywords: Cellulose, LDH, Exfoliation.

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