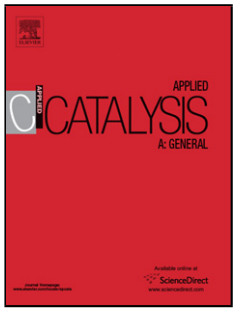

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Crucial Role of Support in Glucose Selective Conversion into 1,2-Propanediol and Ethylene Glycol over Ni-based Catalysts: A Combined Experimental and Computational Study

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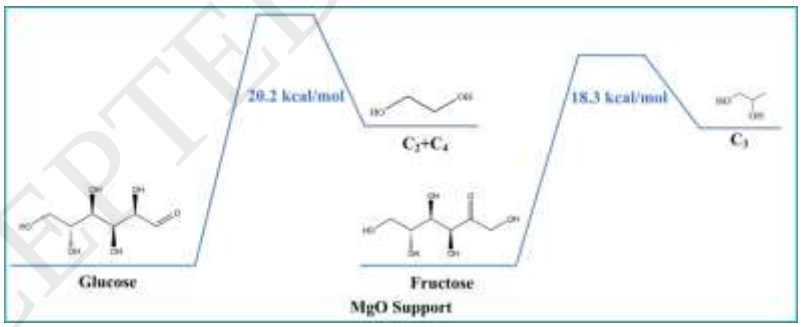
Graphical abstract



The MgO support in the Ni catalyst favors the formation of C_3 products over C_2 and C_4 products from glucose.

Highlights

- Selective hydrogenation of glucose into 1,2-PDO and EG over MgO and ZnO supported Ni catalysts were investigated by ^{13}C NMR and DFT calculations.