Optimization of Cu-$Ce_{0.8}Zr_{0.2}O_2$ catalyst for low temperature water gas shift reaction

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In our previously result, CeO_2-ZrO_2 mixed oxides supported Cu catalysts exhibited good performance at high gas hourly space velocity (GHSV) in the low temperature water gas shift (LTS) reaction. In this study, LTS reaction has been carried out at a very high GHSV of 150,494 h^{-1} over Cu-$Ce_{0.8}Zr_{0.2}O_2$ catalyst prepared by a co-precipitation method. Cu loading was optimized to obtain highly active co-precipitated Cu-$Ce_{0.8}Zr_{0.2}O_2$ catalysts for LTS.