

## Ethanol Conversion into Butadiene over Zr-containing Molecular Sieves doped with Silver

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### Supporting information

#### Experimental Section

TG experiments over used catalysts were performed on “TA SDT Q600” instrument. Temperature programmed oxidation was carried out in a flow of air (100ml/min) in the temperature range of 293-1073 K with the rate of heating of 10 K/min.

#### Catalyst characterisation

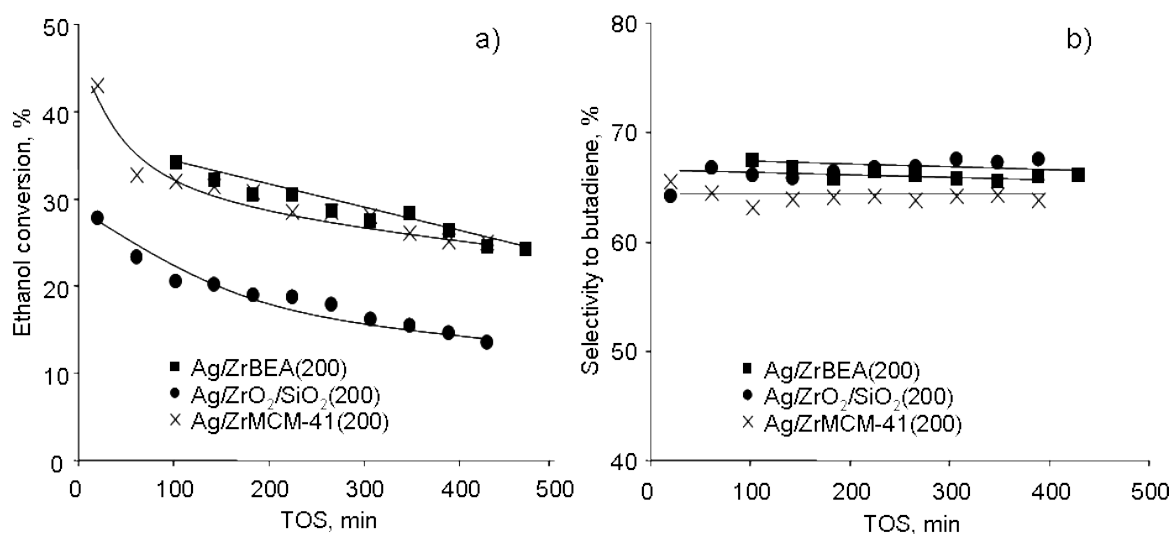


Figure S1. Conversion of ethanol (a) and selectivity towards butadiene (b) for Ag/ZrBEA(200), Ag/ZrMCM-41(200) and Ag/ZrO<sub>2</sub>/SiO<sub>2</sub>(200) versus time on stream (T = 593K, WHSV = 0.32 g/g·h).

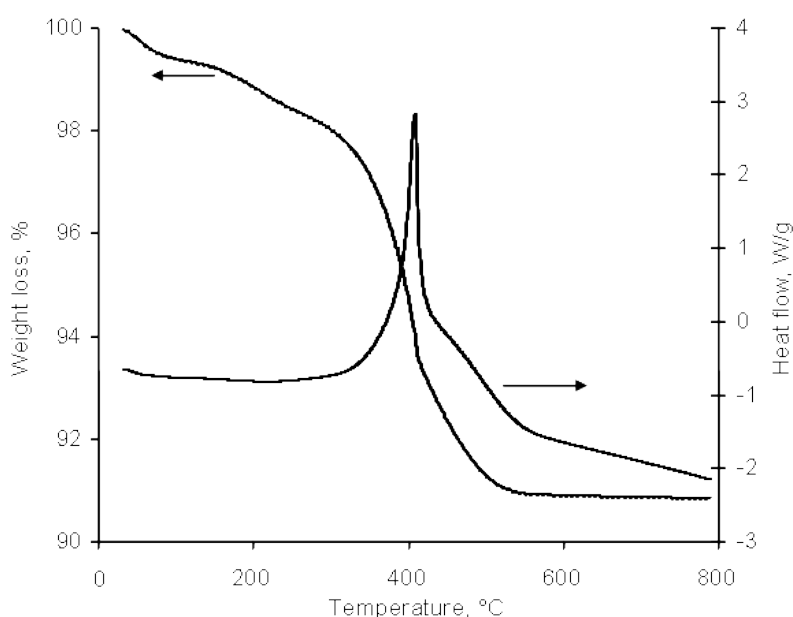


Figure S2. TG-DTA curves for deactivated Ag/ZrBEA(100) catalyst