

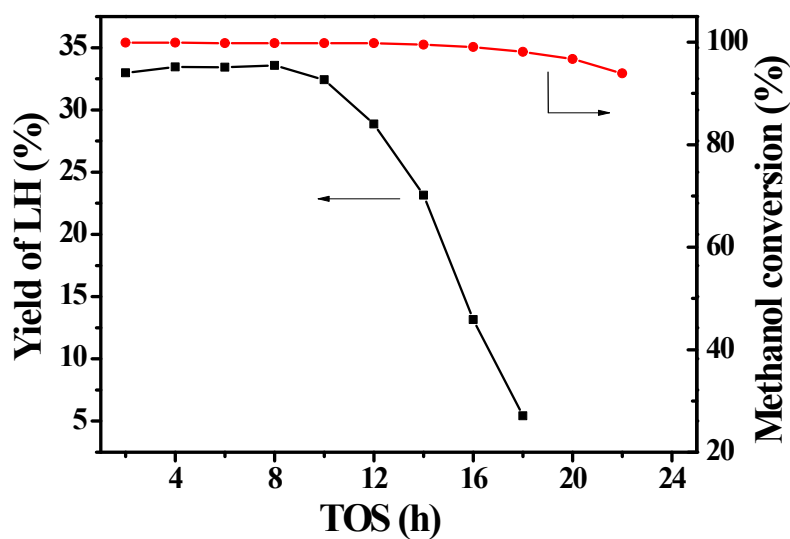
Supporting Information

Methanol to gasoline over zeolite ZSM-5: Improved catalyst performance by treatment with HF

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Fig. S1 Catalytic performance of ZSM-5 treated with NaOH.



The treatment of NaOH is as follows:¹⁻³ 120 mL of 0.2 M NaOH were stirred magnetically at 300 rpm and heated to 65 °C by means of an oil bath. Afterwards, 4 g ZSM-5 was added. The resulting mixture was left to react under reflux for 30 min. After desilicating, the zeolite suspension was cooled down immediately using an ice water bath, and filtered. The filtration cake was washed with deionized water until a neutral pH value was obtained and finally dried at 120 °C overnight. The dried sample was transformed into ammonium form by three-fold ion exchange with 1.0 M NH_4NO_3 at 80 °C for 2 h. Afterwards, the sample was again filtrated, washed, and dried overnight. Eventually, the dried sample was converted into the hydrogen form through calcination at 550 °C for 6 h.

References

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