

SUPPLEMENTARY INFORMATION

Preparation of ZrO₂ via Microwaved-Assisted Hydrothermal Method and its Catalytic Performance for *n*-Pentanal Self-Condensation

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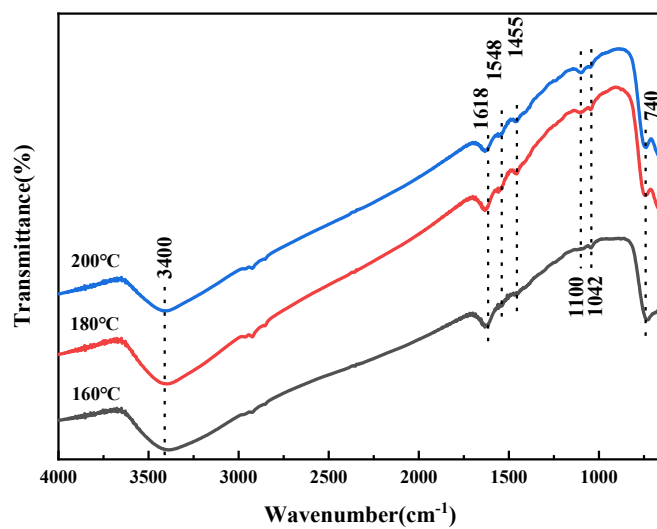


Fig. S1 FTIR spectra of ZrO_2 prepared at different microwave temperature (pH=3)

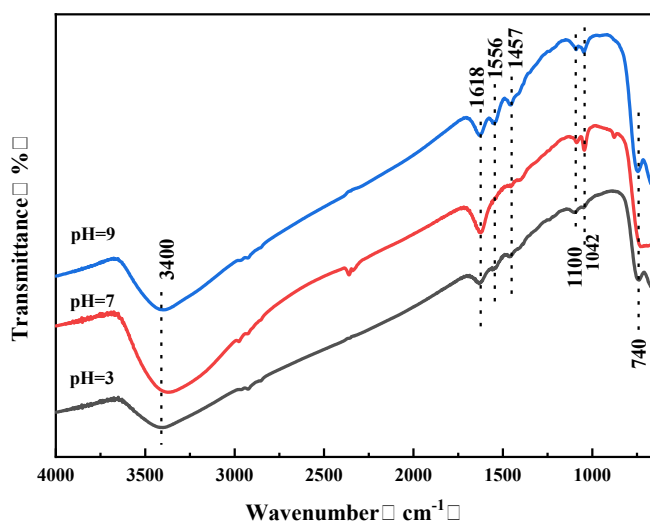


Fig. S2 FTIR spectra of ZrO_2 prepared under different pH value (microwave temperature=200 °C)

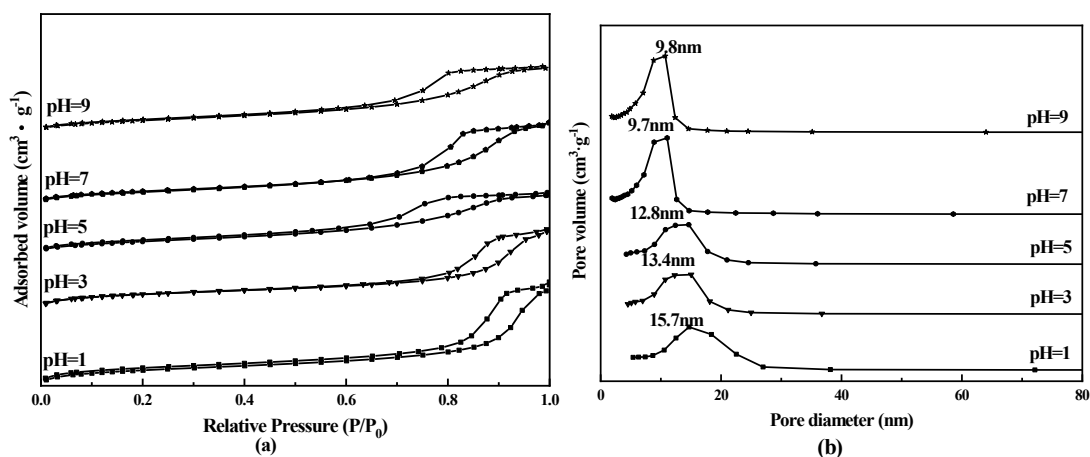


Fig. S3 N_2 adsorption-desorption isotherm and pore size distribution of ZrO_2 samples prepared at different pH value (microwave temperature=200 °C)

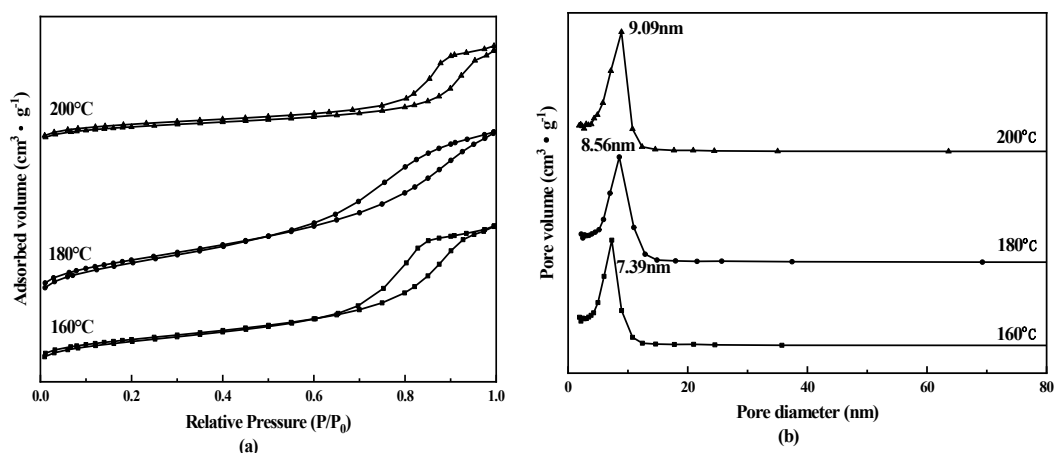


Fig. S4 N_2 adsorption-desorption isotherms and pore size distribution of ZrO_2 samples prepared at different microwave temperature (pH=3)

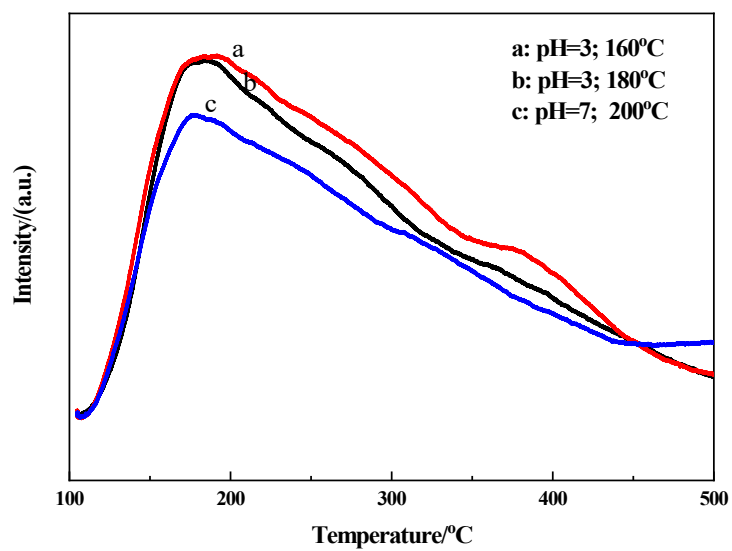


Fig. S5 NH₃-TPD curves of different ZrO₂ samples

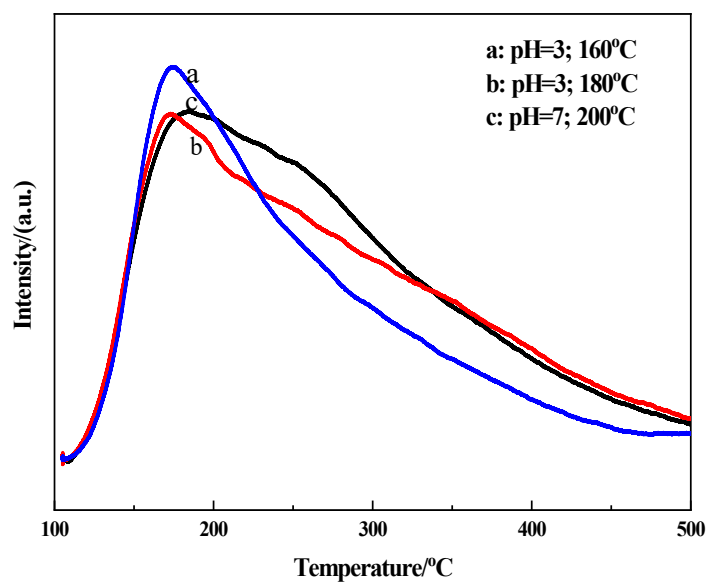


Fig. S6 CO₂-TPD curves of different ZrO₂ samples

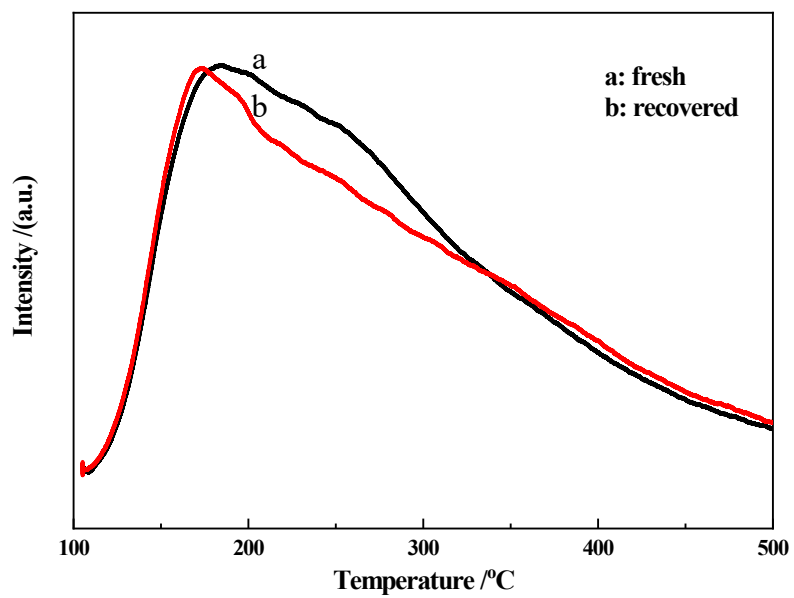


Fig. S7 NH₃-TPD curves of the fresh and the recovered ZrO₂ catalysts

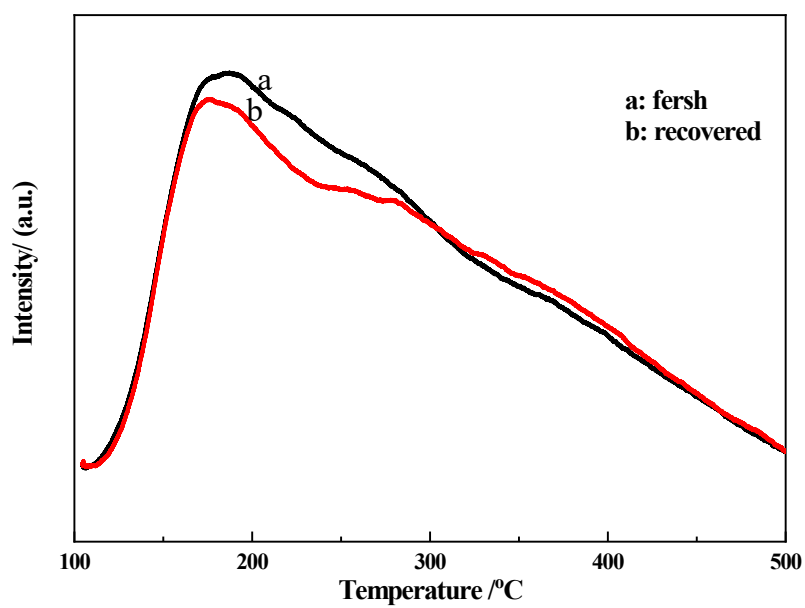


Fig. S8 CO₂-TPD curves of the fresh and the recovered ZrO₂ catalysts