SUPPLEMENTARY INFORMATION

A reflux system to SBA-15 synthesis for selective hydrogenation of cinnamyl aldehyde

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1. Synthesis of SBA-15H

4 g P123 was dissolved in the mixture of 30 mL H_2O and 120 mL 2 M HCl solution. This homogeneous mixture was stirred for 2 h under room temperature. After stirring, 8.5 g TEOS was then added into the solution dropwise and stirred for 20 h. The resulting gel was transferred into a autoclave and heated at 120 °C overnight. The target SBA-15H was obtained by calcination of the precursor under stagnant air in a muffle oven at 500 ºC for 12 h (heating ramp of 1 °C min^{-1}).

2. Characterization

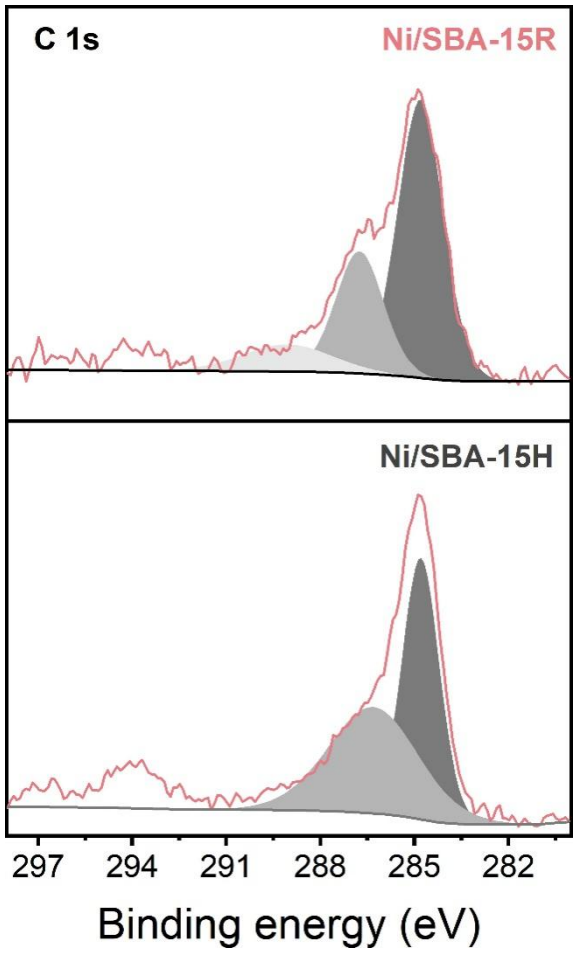

Figure S1. C 1s XPS profiles for Ni/SBA-15R and Ni/SBA-15H

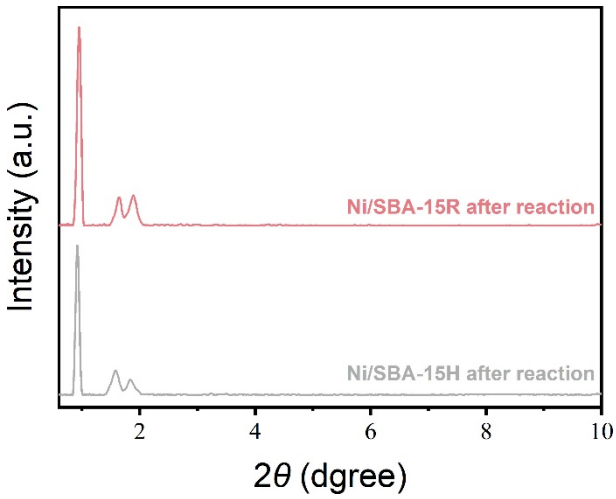

Figure S2. Low-angle XRD patterns for Ni/SBA-15R and Ni/SBA-15H after reaction.

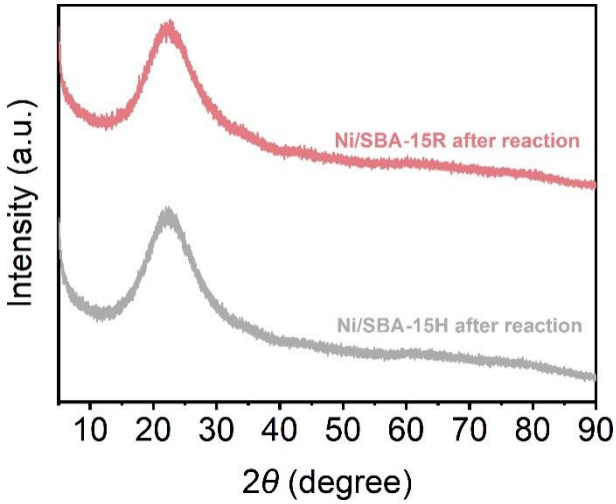

Figure S3. High-angle XRD patterns for Ni/SBA-15R and Ni/SBA-15H after reaction.

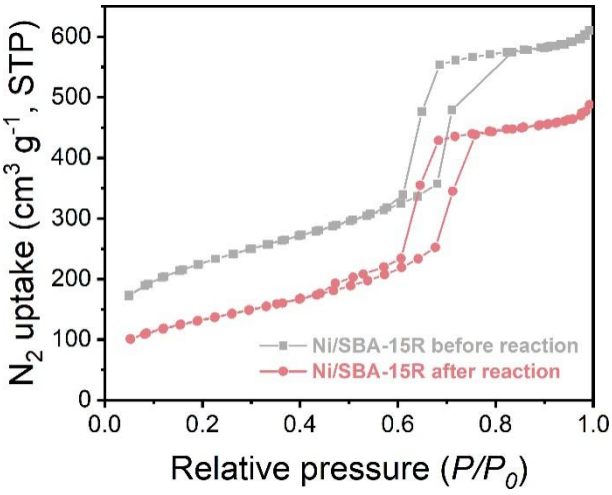

Figure S4. Comparison of N_2 sorption isotherm for Ni/SBA-15R before and after reaction.

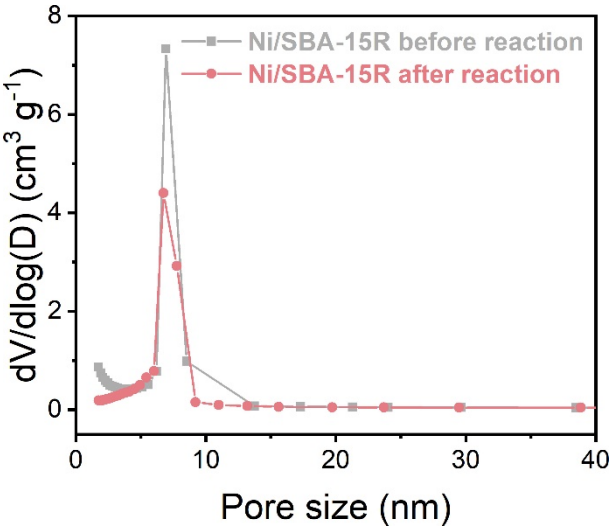

Figure S5. Comparison of pore size distribution for Ni/SBA-15R before and after reaction.

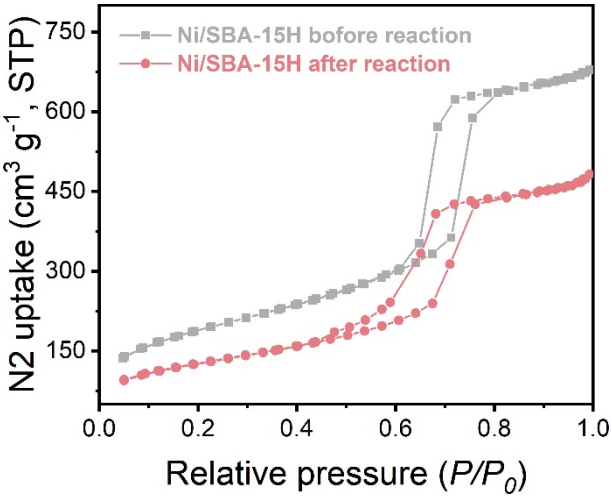

Figure S6. Comparison of N_2 sorption isotherm for Ni/SBA-15H before and after reaction.

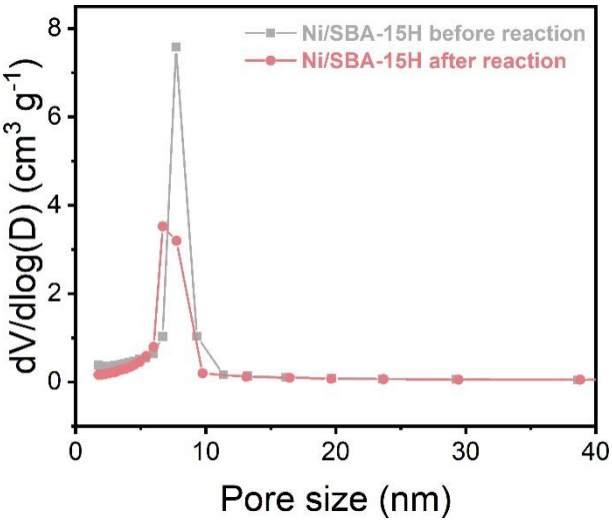

Figure S7. Comparison of pore size distribution for Ni/SBA-15H before and after reaction.

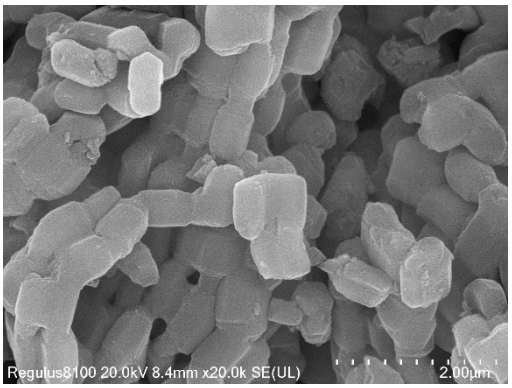

Figure S8. SEM imagines of Ni/SBA-15R after reaction.

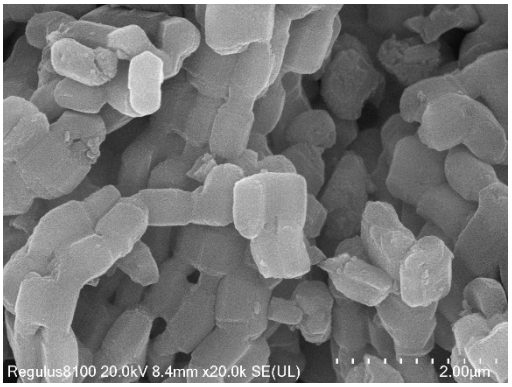

Figure S9. SEM imagines of Ni/SBA-15H after reaction.

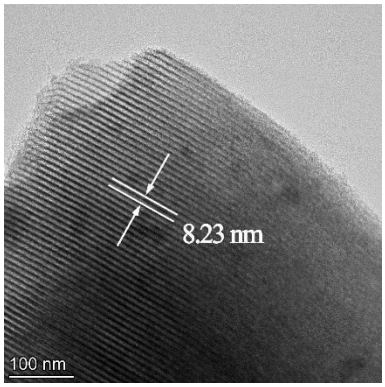

Figure S10. TEM imagines of Ni/SBA-15R after reaction.

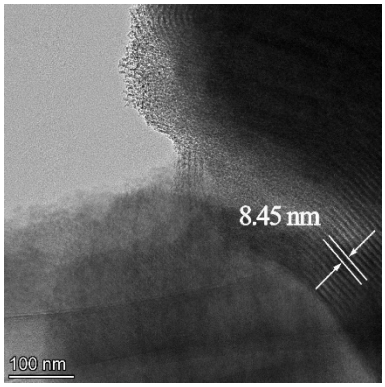

Figure S11. TEM imagines of Ni/SBA-15H after reaction.