

Supporting information to article

Structure-catalytic properties relationship in Friedel Crafts alkylation reaction for MCM-36-type zeolites obtained by isopropanol-assisted pillaring

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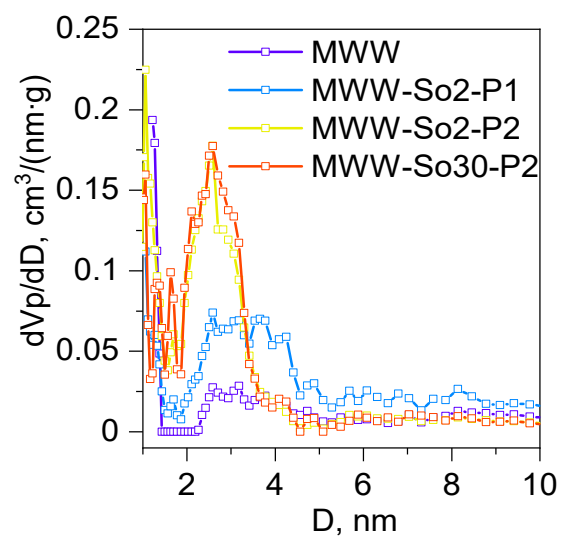


Figure S1. Pore size distribution for MWW zeolites under study calculated using NLDFT method.

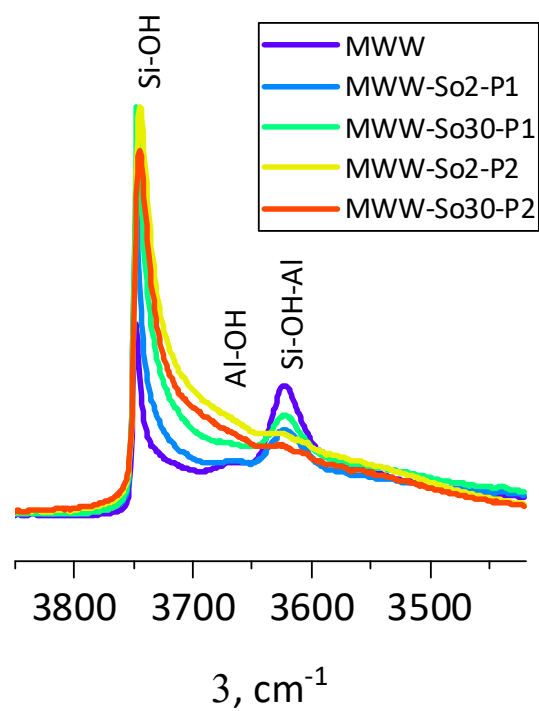


Figure S2. IR spectra in the OH region for MWW zeolites under study. All spectra at RT, normalized to a 10 mg pellet. Alternative representation of Figure 4 in the main paper.

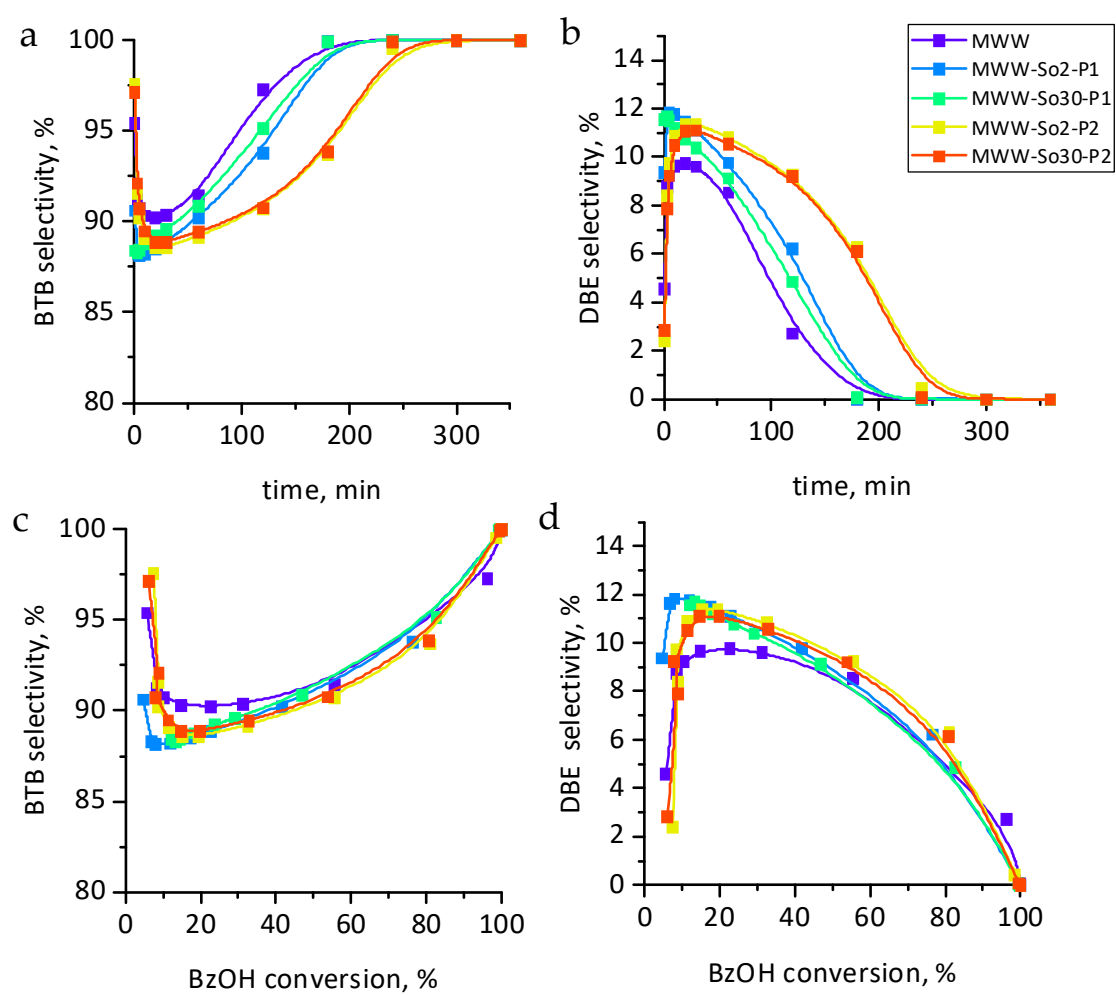


Figure S3. Dependence of the BTB and DBE selectivity on the reaction time (a,b) and BzOH conversion (c,d).

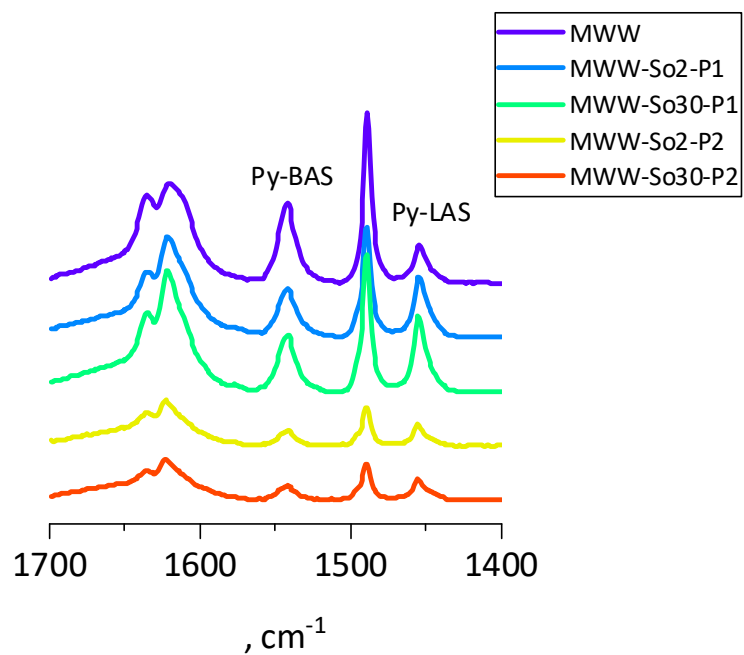


Figure S4. IR spectra of pyridine adsorbed on MWW zeolites under study. All spectra at 170 °C, normalized to a 10 mg sample. The IR maxima used to calculate the concentration of Brønsted acid sites (BAS) and Lewis acid sites (LAS) are marked as Py-BAS and Py-LAS.

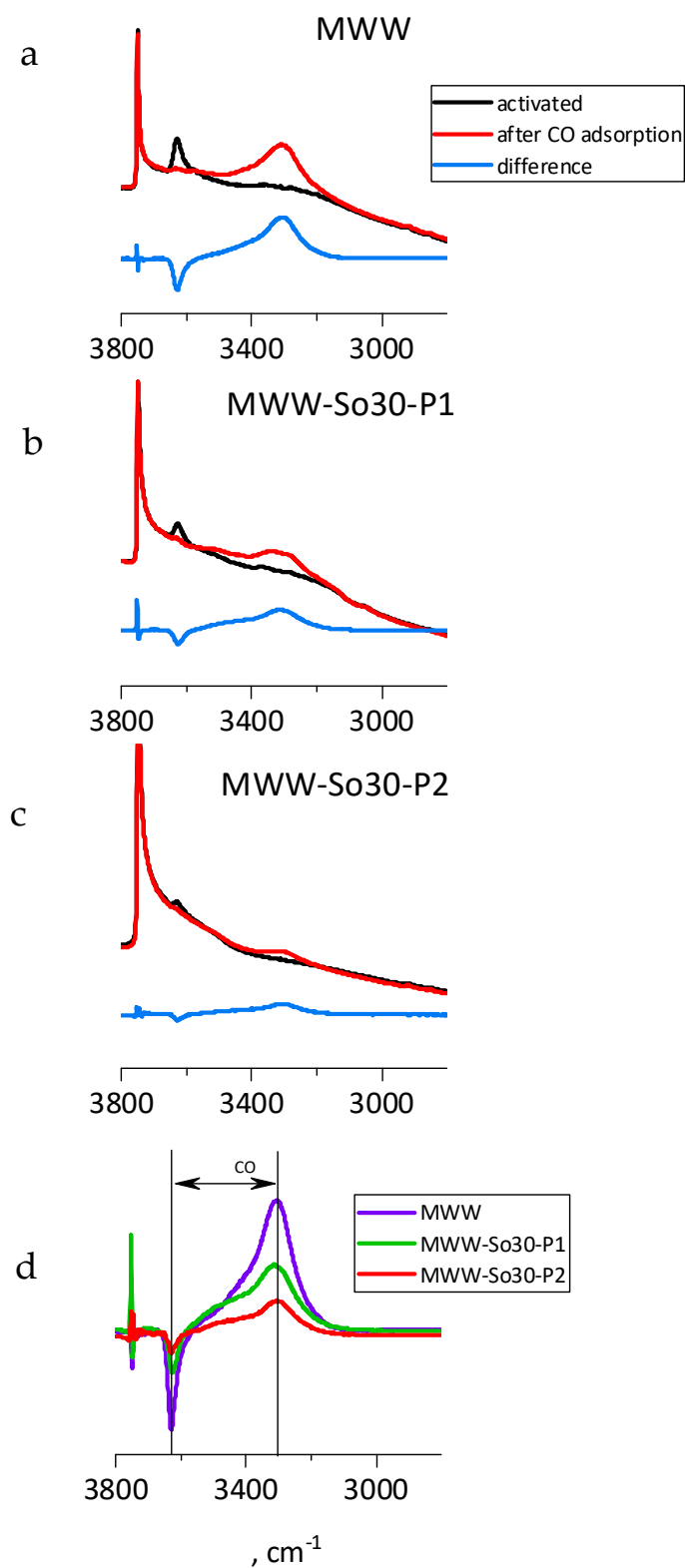


Figure S5. IR spectra of CO adsorbed on chosen MWW zeolites (, and). All spectra at $-100\text{ }^{\circ}\text{C}$, normalized to a 10 mg sample, (a) MWW; (b) MWW-So30-P1; (c) MWW-So30-P2; (d) difference spectra (activated sample minus after CO adsorption) for all three zeolites.

Table S1. The values of OH groups red shift upon CO adsorption ($\Delta\nu_{\text{CO}}$) and the intensities of pyridine 1540 cm^{-1} band after thermodesorption at 350 and 450 $^{\circ}\text{C}$, relative to the intensity after Py adsorption at 170 $^{\circ}\text{C}$ (I_{350}/I_{170} and I_{450}/I_{170})

sample	$\Delta\nu_{\text{CO}}$	I_{350}/I_{170}	I_{450}/I_{170}
MWW	325	0.813	0.500
MWW-So30-P1	312	0.870	0.536
MWW-So30-P2	325	0.857	0.643