

Electronic Supplementary Information

Chemical modification of crystal-like mesoporous phenylene-silica with amino group

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Catalytic activity assay

The Knöevenagel condensation reaction was performed under an argon atmosphere. A toluene solution (40 mL) containing benzaldehyde (10 mmol) and malononitrile (10 mmol) was added to a flask and heated to 60 °C. The catalyst (0.10 g) was then introduced and the reaction mixture was continuously stirred. Aliquots were taken by syringe and analyzed using a Shimadzu GC-8A gas chromatograph equipped with a flame ionization detector using an Rtx-5 column. After the reaction, the catalyst was recovered by filtration and washing with toluene and acetone and drying under vacuum. The catalytic activity of recycled catalyst was also assessed under identical condition.

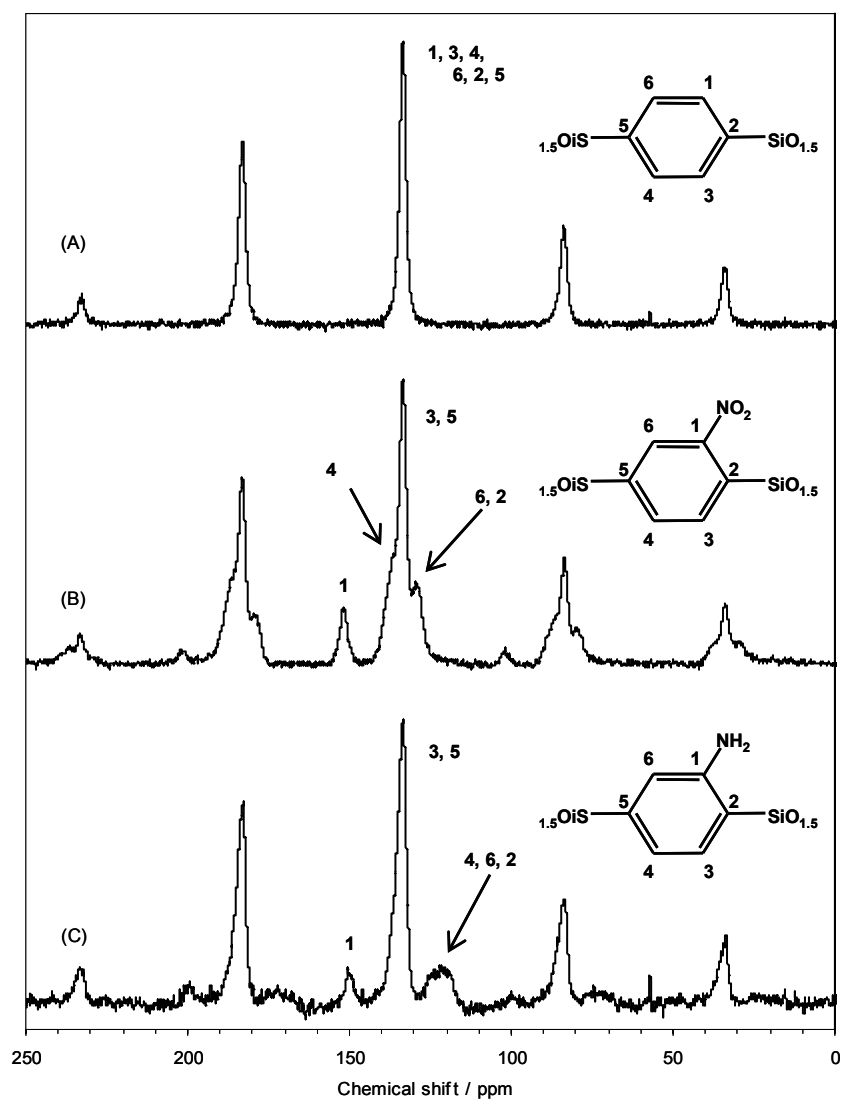


Fig. S1. ^{13}C CP/MAS NMR spectra of (A) Ph-HMM, (B) NO_2 -Ph-HMM, and (C) NH_2 -Ph-HMM

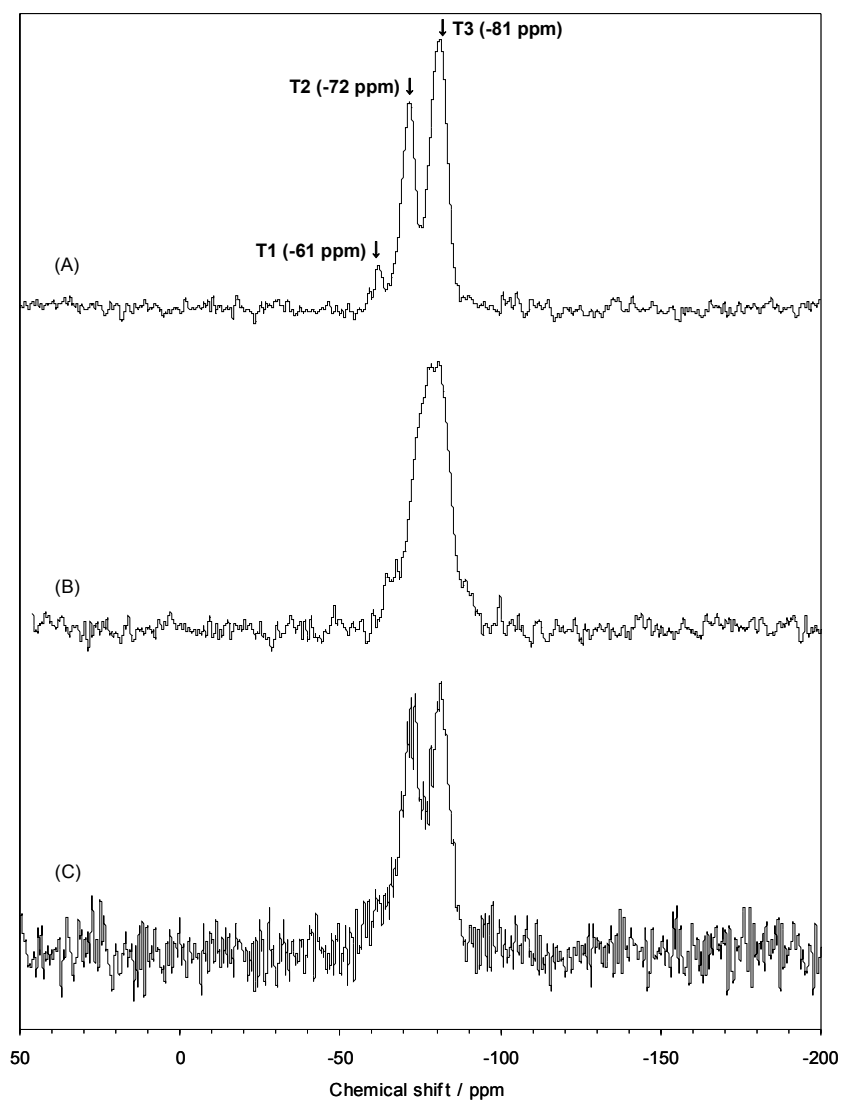


Fig. S2. ^{29}Si MAS NMR spectra of (A) Ph-HMM, (B) $\text{NO}_2\text{-Ph-HMM}$, and (C) $\text{NH}_2\text{-Ph-HMM}$

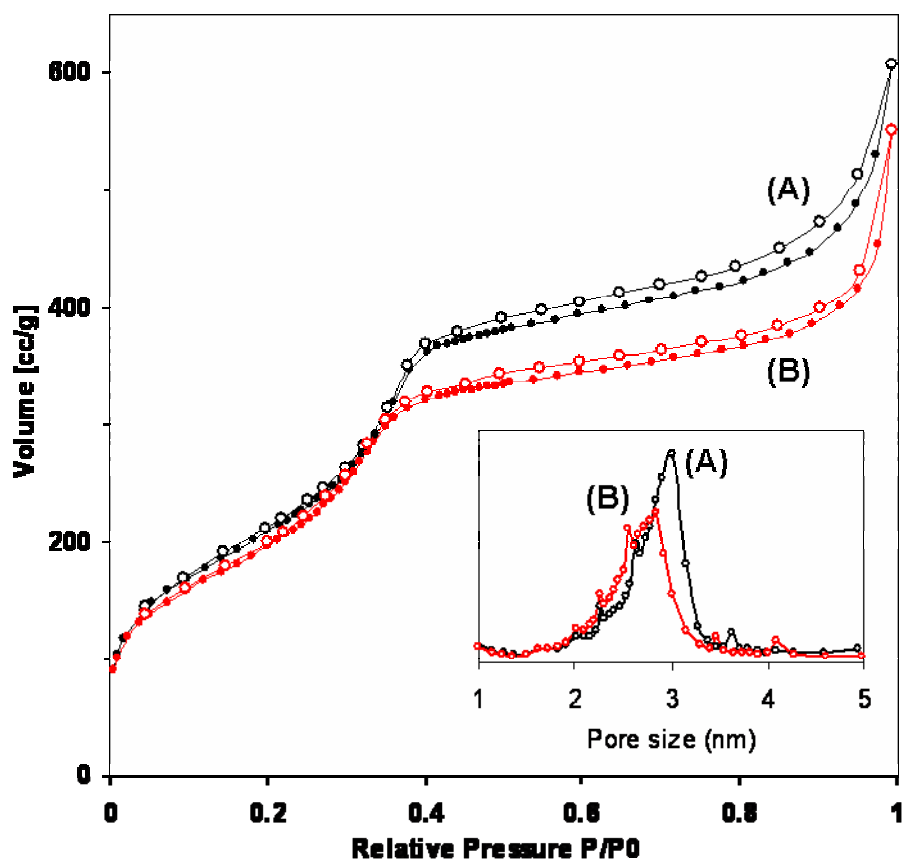


Fig. S3. Nitrogen adsorption (filled)-desorption (empty) isotherms of (A) Ph-HMM and (B) NH₂-Ph-HMM. (Inset) Pore size distribution calculated from adsorption isotherm.