

Supporting Information

Template synthesis of hierarchically structured MFI

zeolite with nanosheet frameworks and tailored structure

Baoyu Liu, Qianqian Duan, Chao Li, Zhihong Zhu, Hongxia Xi* and Yu Qian

School of Chemistry and Chemical Engineering, South China University of Technology,
Guangzhou, China 510640. E-mail: cehxxi@scut.edu.cn

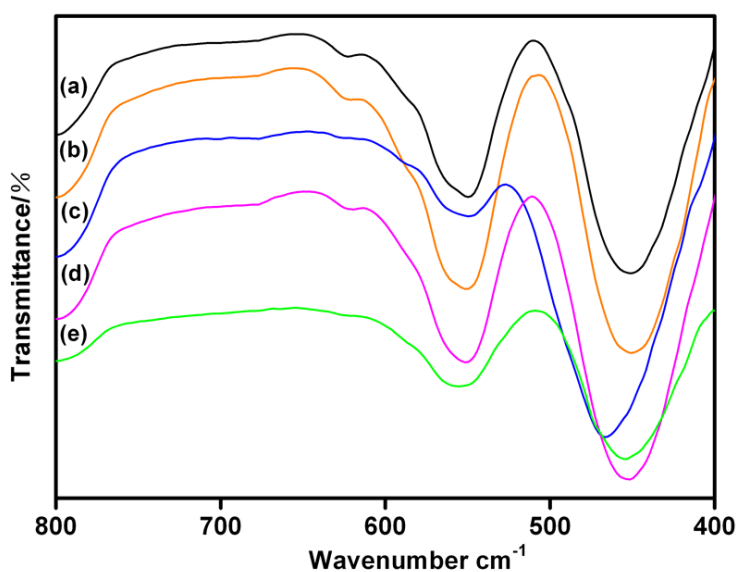


Figure. S1 IR spectra of calcined samples synthesized using (a) C₆₋₆-diphe, (b) C₆₋₁₀-diphe, (c) C₆₋₁₂-diphe, (d) C₄₋₁₀-diphe and (e) C₈₋₁₀-diphe surfactants.

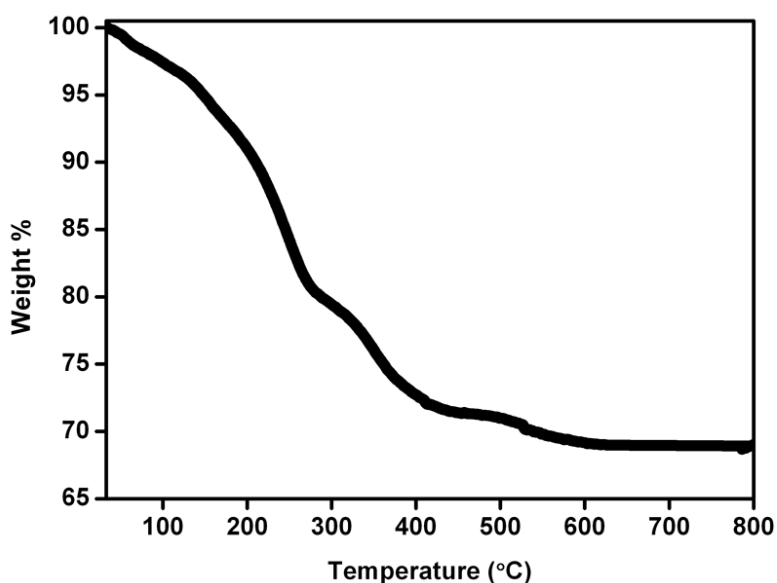


Figure. S2 TGA curve of as-synthesized MFI zeolite nanosheet with C₆₋₁₀-diphe surfactant.

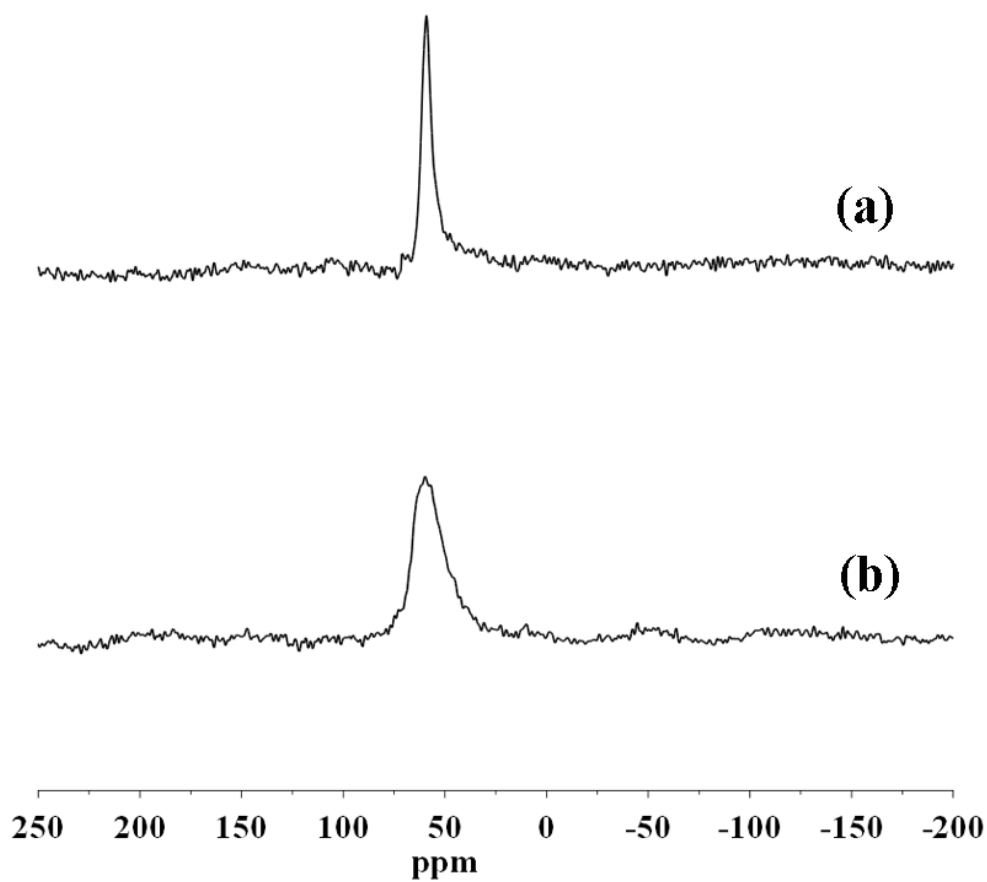


Figure. S3 ^{27}Al MAS NMR spectra of (a) as-synthesized and (b) calcined MFI zeolite nanosheet obtained with C_{6-12} -diphe surfactant.

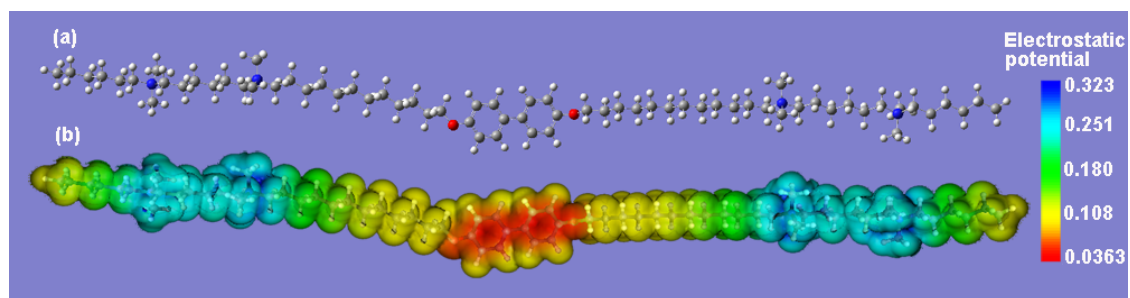


Figure. S4 (a) Optimized structure and (b) molecular electrostatic potential map of the C_{6-12} -diphe surfactant (atom legend: white = H; gray = C; blue = N; red = O).