

Electronic Supplementary Information

From ill-resolved atomic to ZSM-5 type of ordering in mesoporous lamellar aluminosilica nanoparticles

Kun Zhang^a, Yimeng Wang^{a*}, Bélen Albela^b, Li Chen^a, Mingyuan He^a, and Laurent Bonneviot^b

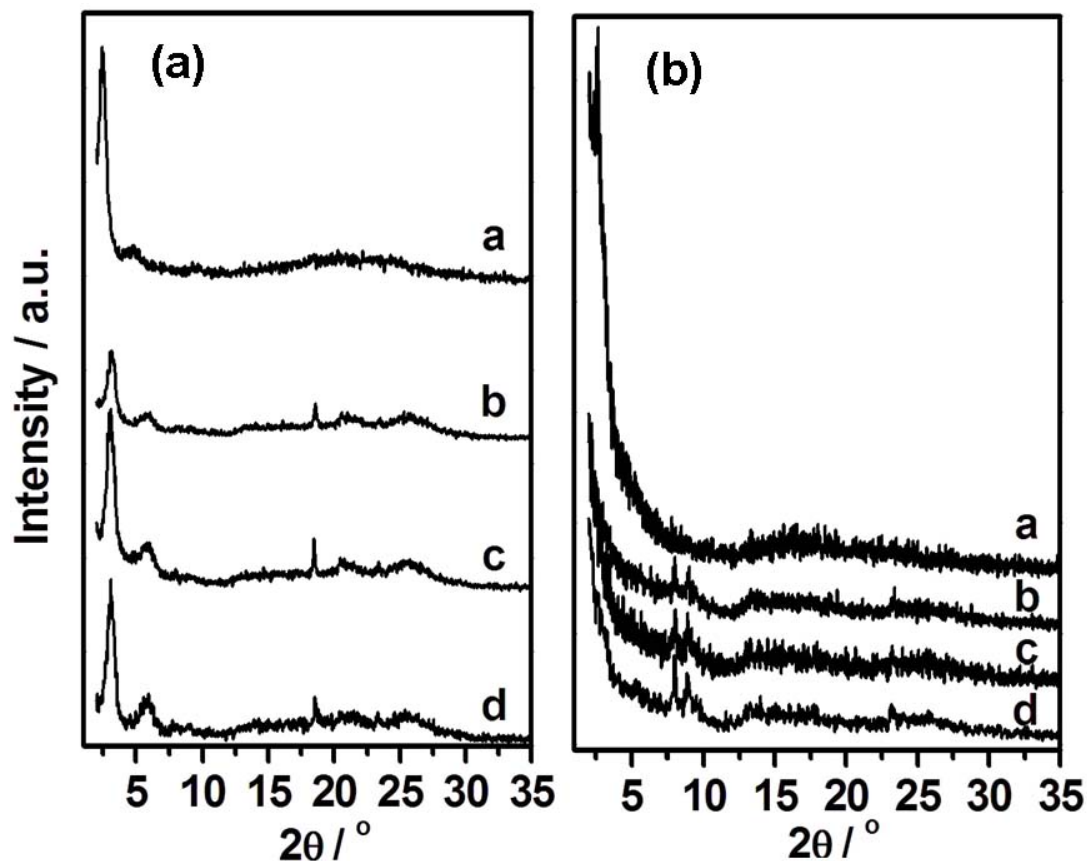


Fig. S1. Powder XRD patterns of lamellar silicate-surfactant mesophases, LMS-Al(II): for (a) 1, (b) 3, (c) 5 and (d) 7 days before (left) and after (right) calcination. Note the peak centered at 18.0° is attributed to physically adsorbed surfactant.

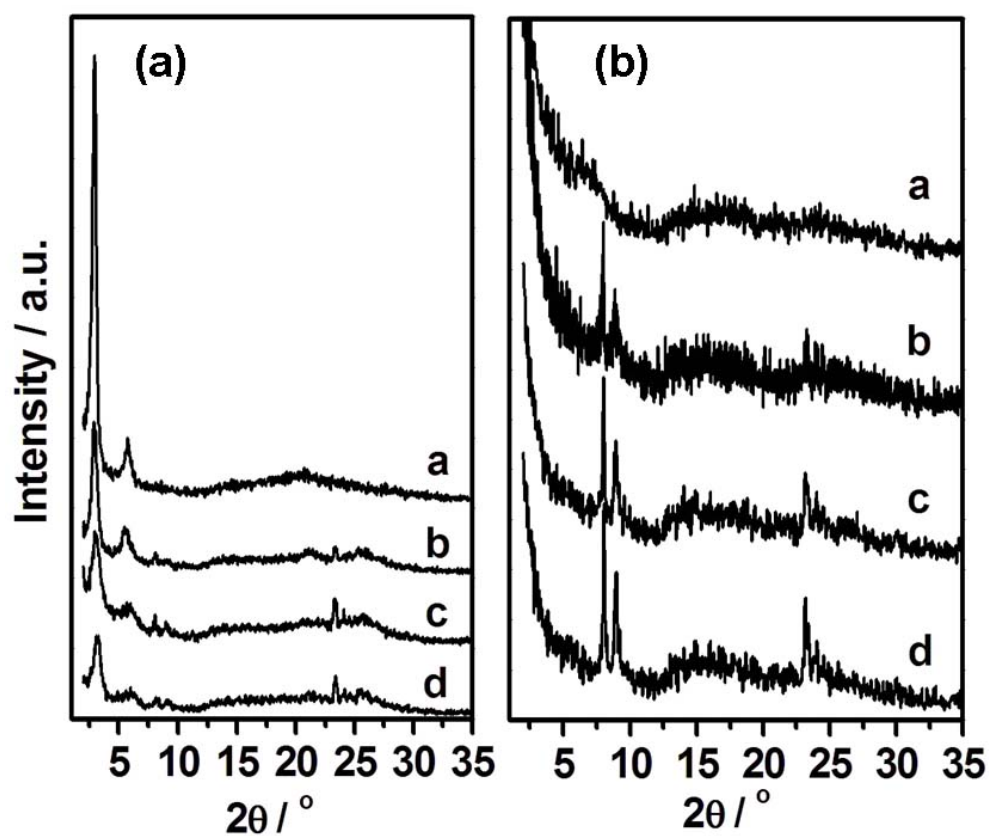


Figure S2. Powder XRD patterns of lamellar silicate-surfactant mesophases, LMS-Al(III): for (a) 1, (b) 3, (c) 5 and (d) 7 days before (left) and after (right) clacination.

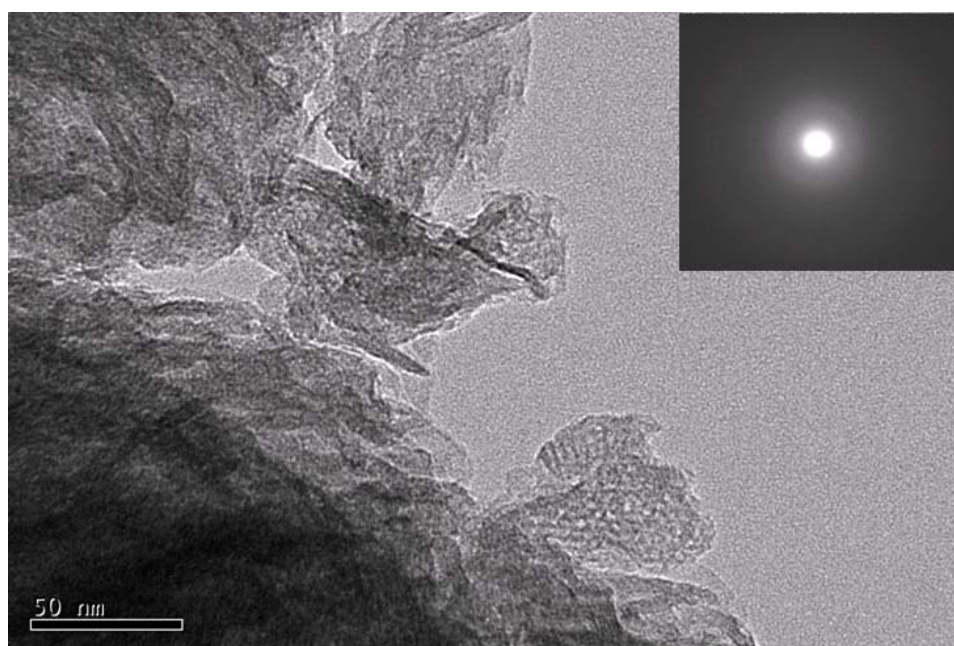


Figure S3. TEM micrograph and corresponding SAED pattern (inset) for samples synthesized at 140 °C used $\text{Al}(\text{NO}_3)_3$ as Al source for 3 days.

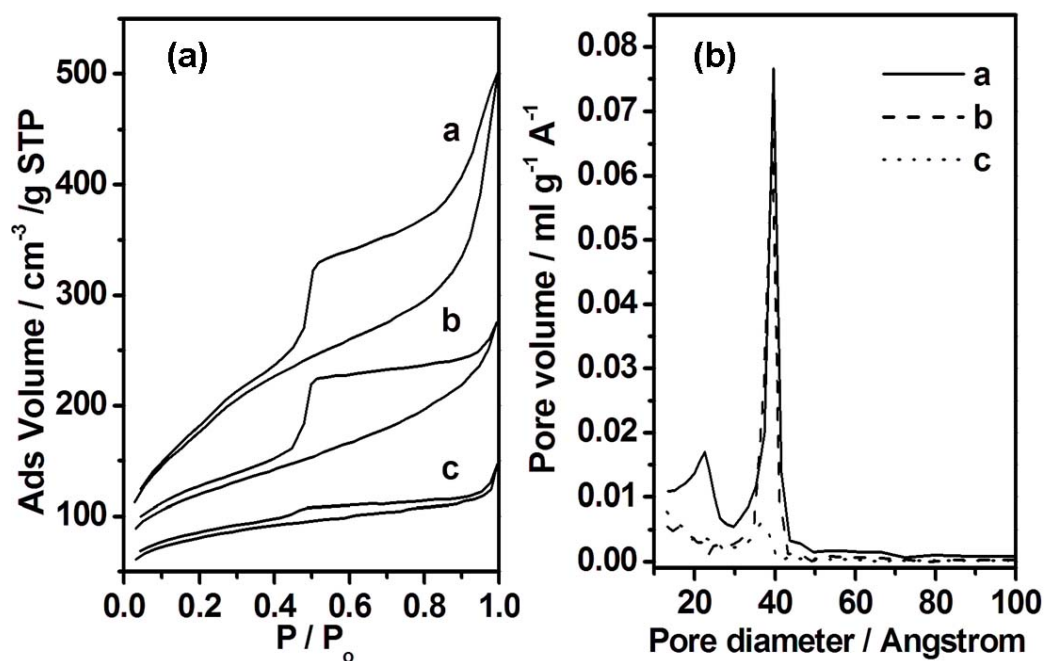


Figure S4. Nitrogen physisorption isotherms (left) and pore size distribution plot calculate by BJH method from desorption branch (right) of calcined lamellar mesophase. Samples (a) and (b) were synthesized at 140 °C used Al(OH)₃ as Al source for 1 and 3 days, respectively. Samples (c) was synthesized at 140 °C was used Boehmite as Al source for 1 day.