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Electronic Supplementary Information

Free–standing and bridged–amine functionalized periodic mesoporous organosilica films

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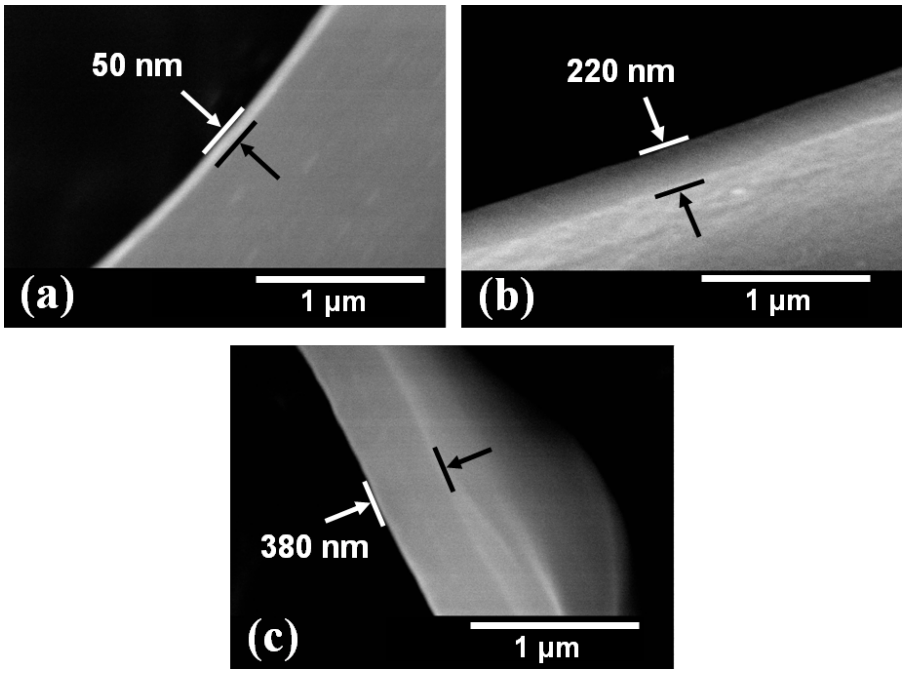

Fig. S1 SEM images of the magnified edge part of the as–synthesized free–standing BAF–PMO films grown at the air–water interface at 95 ^{o}C for (a) 2.5 h, (b) 24 h, and 48 h with the reaction mixture of 1.0 BTEE : 0.05 BTMSPA : 0.57 C_{16}TABr : 2.28 NaOH : 336 H_2O.

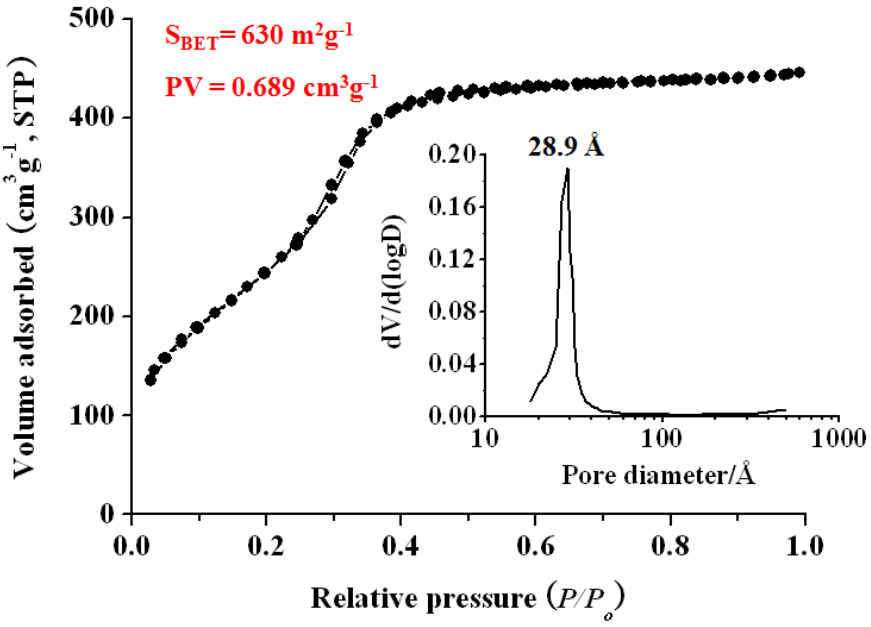

Fig. S2 Nitrogen adsorption–desorption isotherms for the surfactant–extracted BAF–PMO film synthesized at 95 ^oC for 8 h with the reaction mixture of 1.0 BTEE : 0.05 BTMSPA : 0.57 $C_{16}TABr$: 2.28 NaOH : 336 H_2O. Inset shows the pore size distribution obtained using adsorption branch by BJH method. S_{BET} and PV denote the specific surface area that was obtained from the adsorption branch of the isotherm by employing the Brunauer−Emmett−Teller (BET) method and the pore volume, respectively.

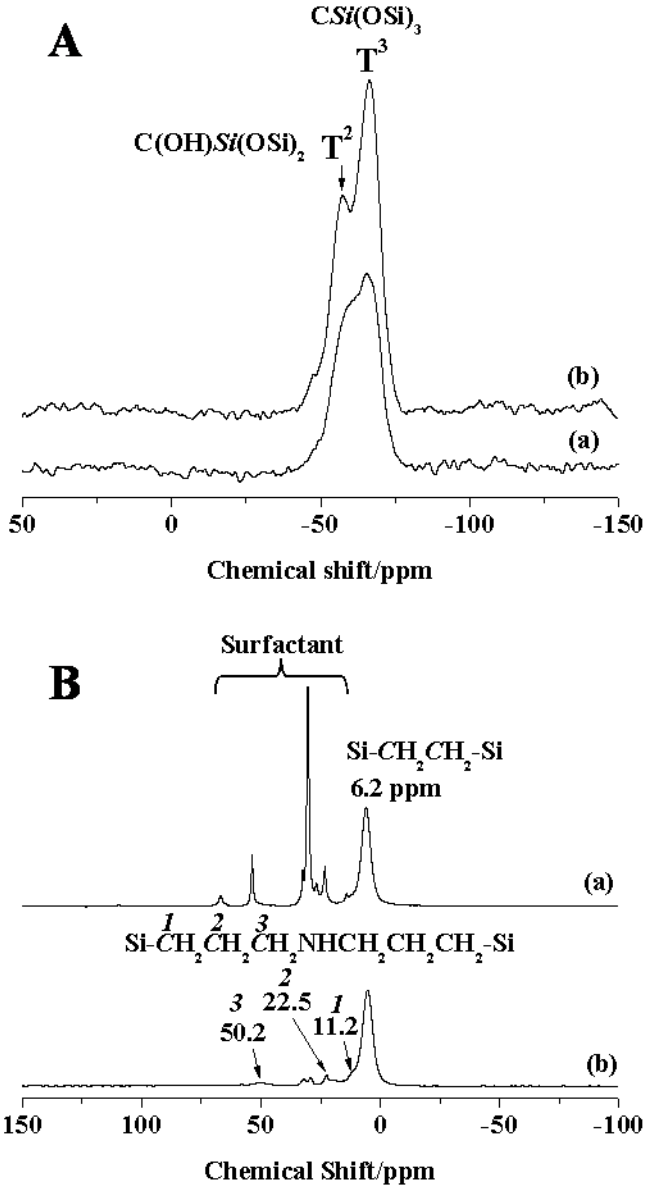

Fig. S3 ^{29}Si MAS NMR spectra of A(a) the as–synthesized BAF–PMO film, A(b) surfactant–extracted BAF–PMO film and B(a) ^{13}C cross–polarization (CP) MAS NMR spectrum of as–synthesized BAF–PMO film, B(b) surfactant–extracted BAF–PMO film.