

Supporting Information

Polymer Porous Interfaces with Controllable Oil Adhesion Underwater

Liping Heng, Tianqi Guo, Bin Wang*, Yuqi Zhang* and Lei Jiang

Prof L. P. Heng, Dr T. Q. Guo, Prof L. Jiang

School of Chemistry and Environment, Beihang University, Beijing 100191, China.

E-mail: henglp@iccas.ac.cn

Prof B Wang

School of Environment, Tsinghua University, Beijing 100084, China

Prof Y. Q. Zhang

College of Chemistry and Chemical Engineering, Yan'an University, Yan'an, Shaanxi, 716000, P. R. China

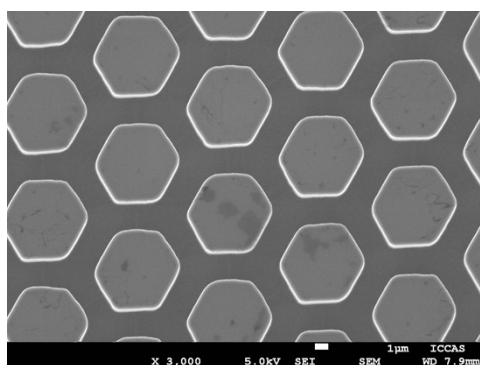


Figure S1 SEM images of hexagonal silicon pillar templates with 5 µm diameter. The distance between two pillars is 2 µm.

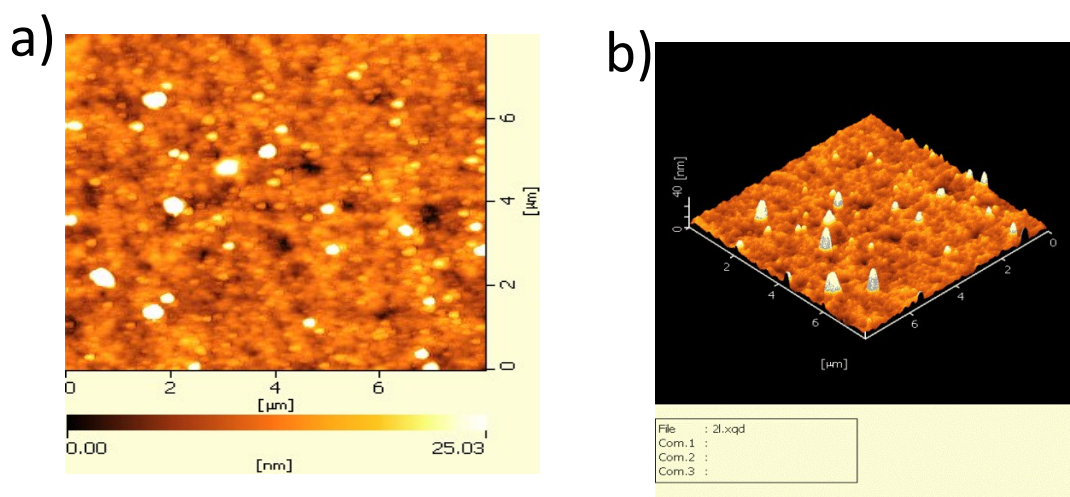


Figure S2 AFM images of clay platelets on silicon substrate. The average length and thickness of the clay platelets are 200-300 nm and 10-30 nm, respectively.

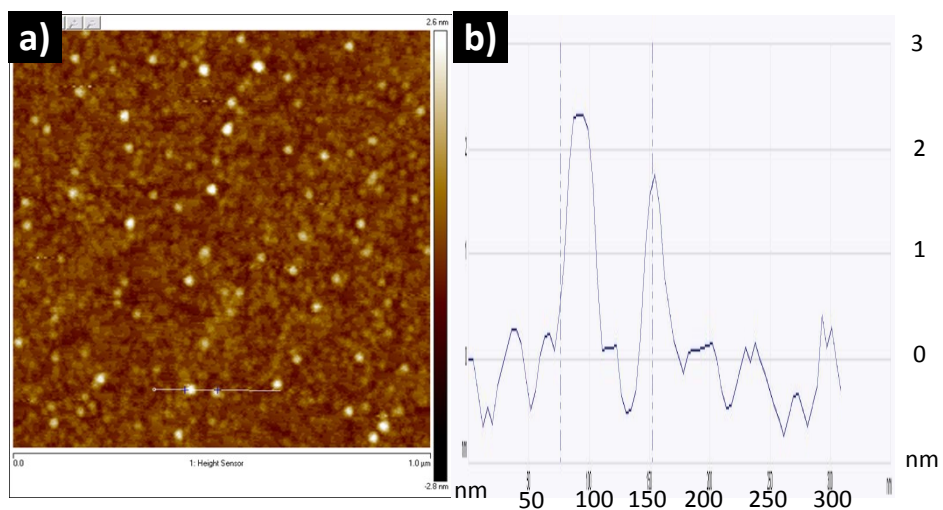


Figure S3 AFM images of clay platelets after dispersion on silicon substrate. The average length and thickness of the clay platelets were 30-60 nm and 1-3 nm, respectively.

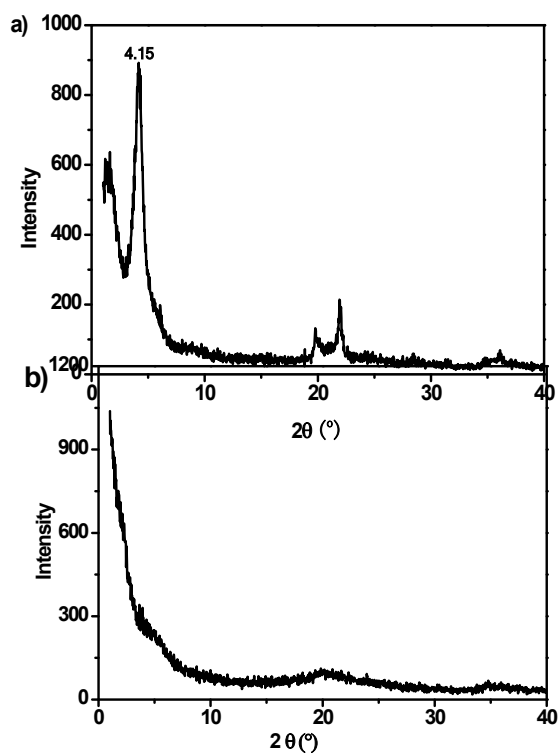


Figure S4 Typical X-ray diffraction profiles for dried materials of a) ordered layer PAA/MMT porous film; b) disordered PAA/MMT porous film. The spacing of MMT is 3.26 nm ($2\theta=4.15^\circ$) in the ordered layer PAA/MMT porous film, indicating the formation of clay-polymer-clay intercalation structure