

Supporting Information

Enhancing Hydrostability and Catalytic Performance of MOF-5 by Hybridizing with Attapulgite, A Natural Clay

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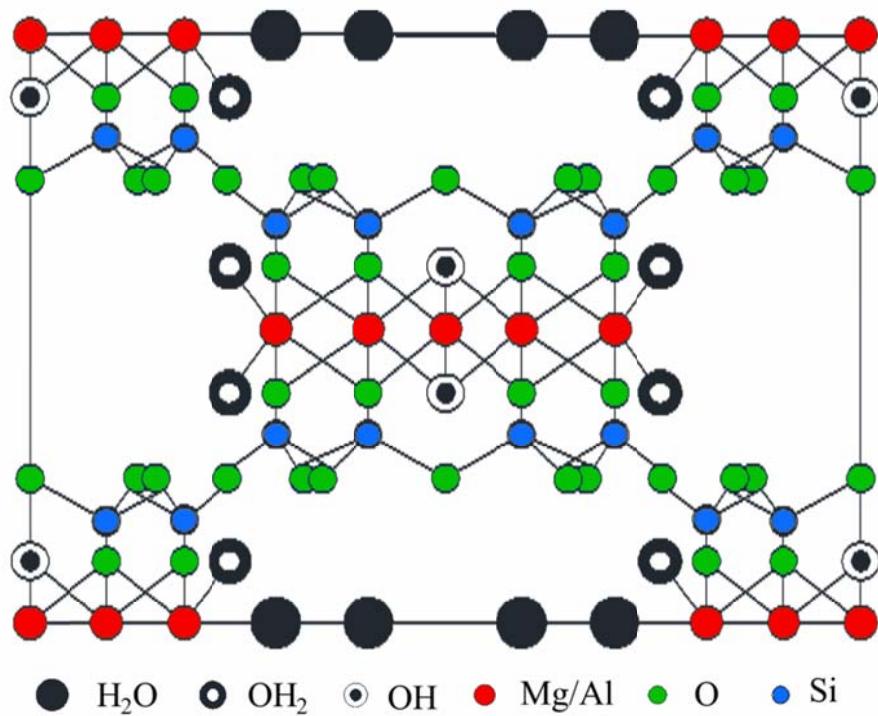


Fig. S1 Crystal structure of attapulgite.

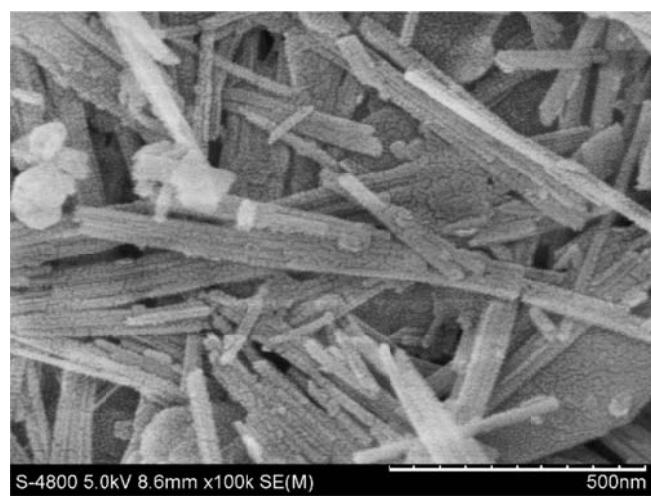


Fig. S2 A typical SEM image of attapulgite.

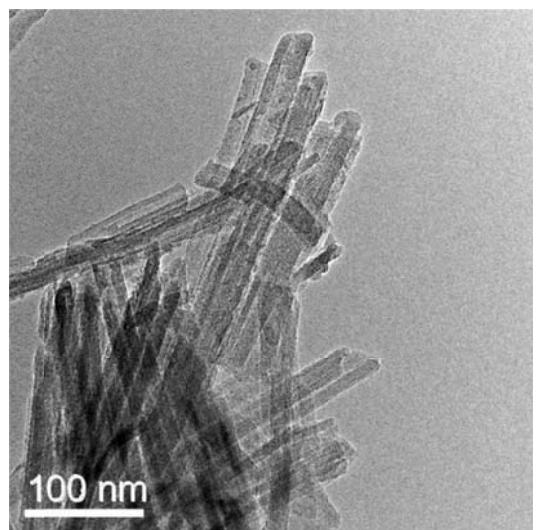


Fig. S3 A typical TEM image of attapulgite.

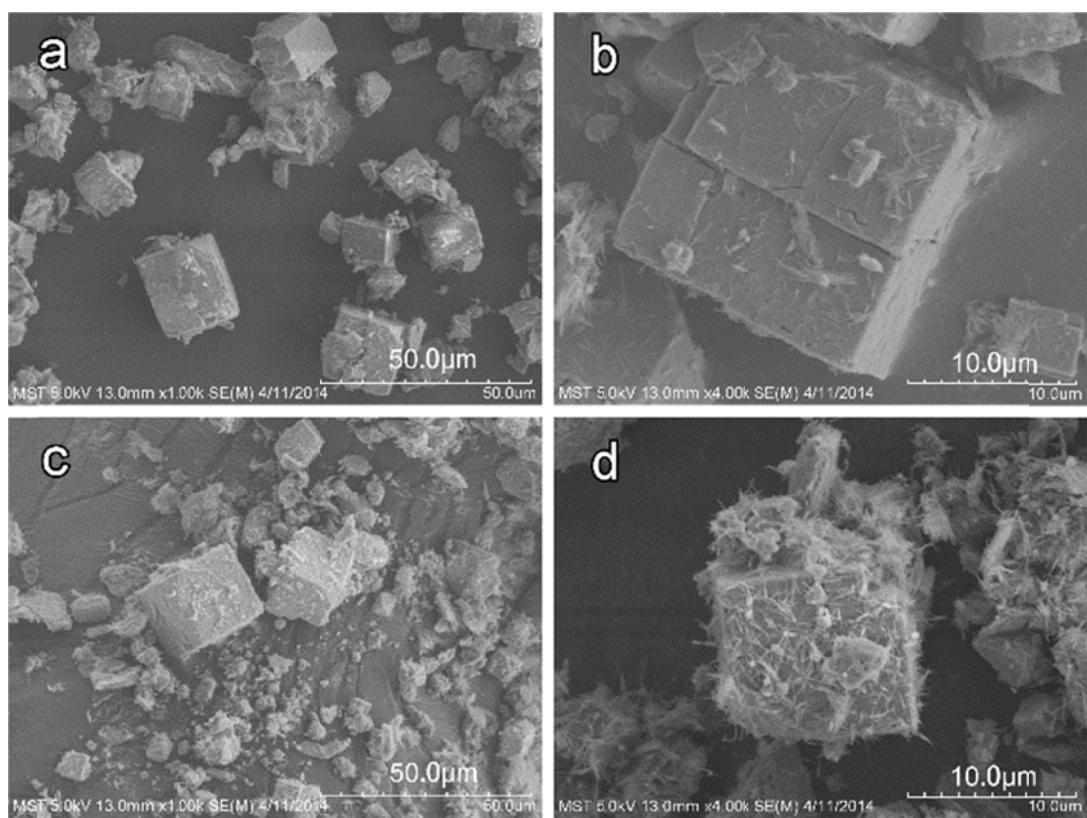


Fig. S4 SEM images of (a, b) MA-2 and (c, d) MA-4.

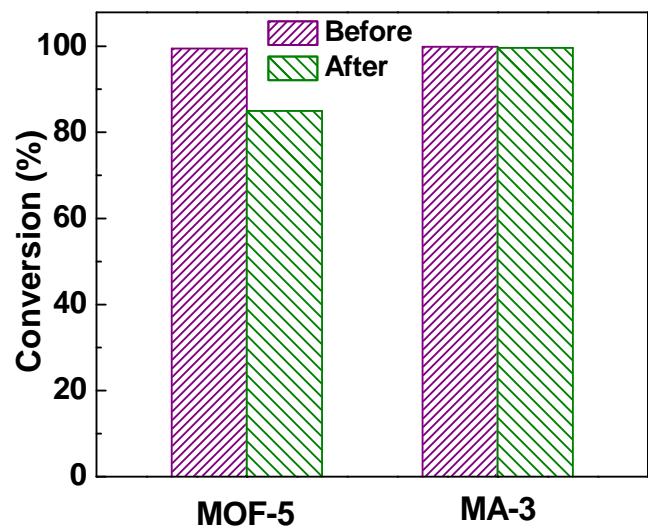


Fig. S5 Friedel-Crafts alkylation of benzyl bromide with toluene over MOF-5 and MA-3 before and after exposure to humid atmosphere for 3 h.

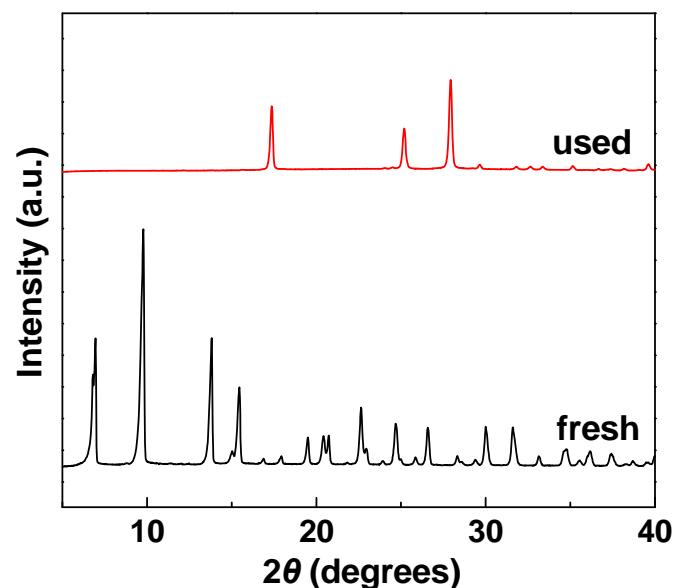


Fig. S6 XRD patterns of the fresh catalyst MOF-5 and the catalyst recovered after six runs.

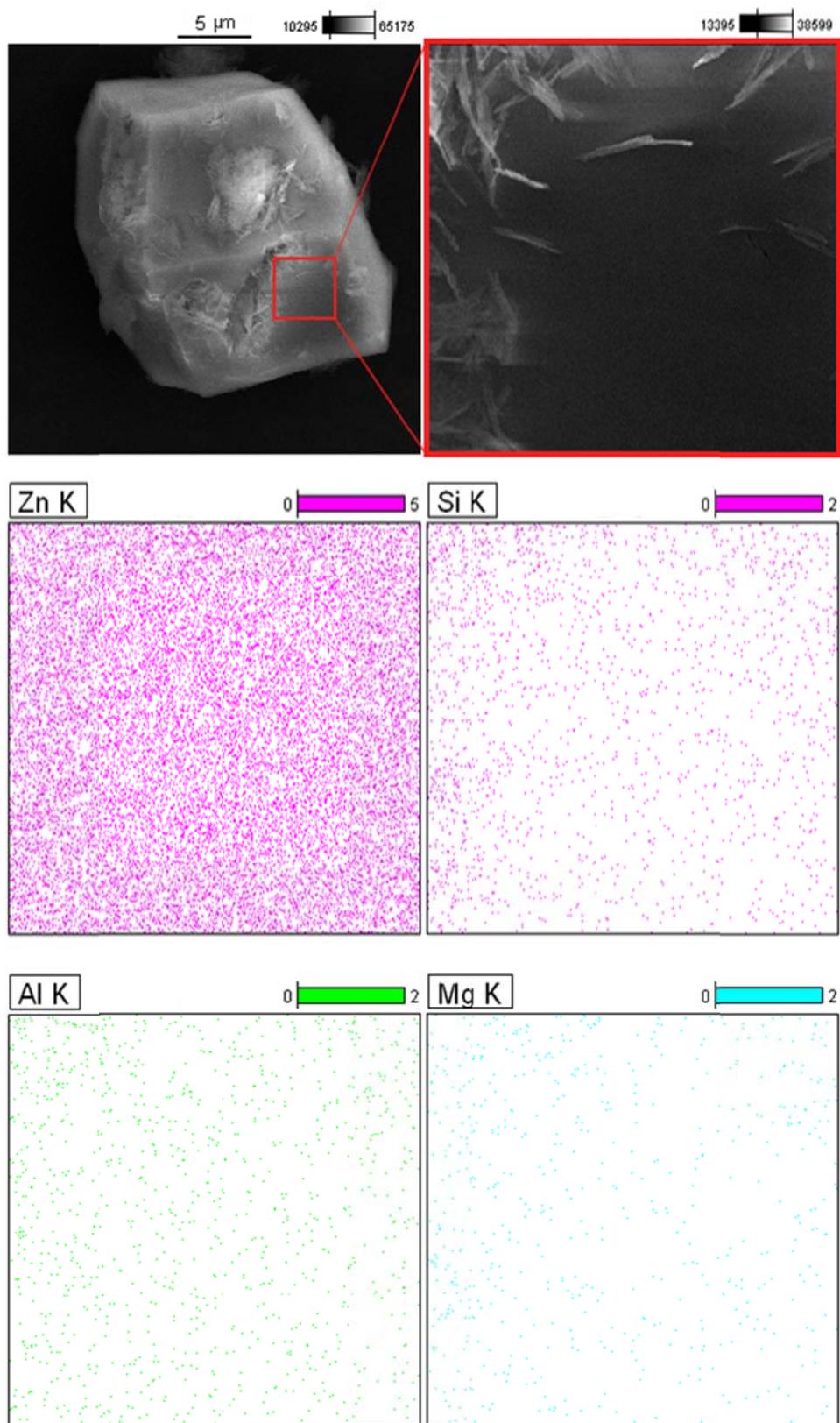


Fig. S7 Elemental mapping of the hybrid material MA-3.

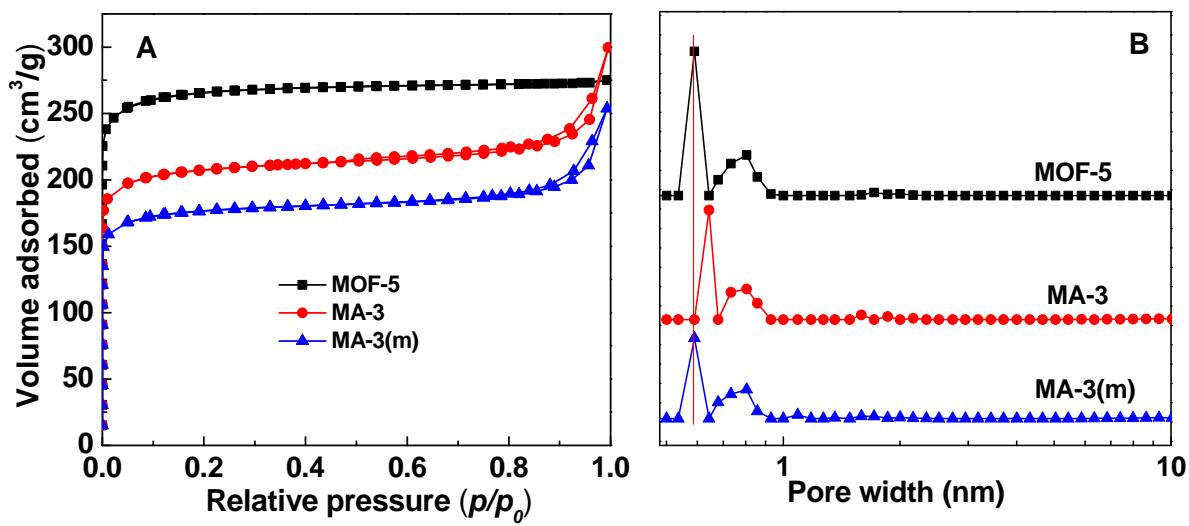


Fig. S8 (A) N_2 adsorption-desorption isotherms at 77 K and (B) pore size distributions of MOF-5, MA-3, and MA-3(m).

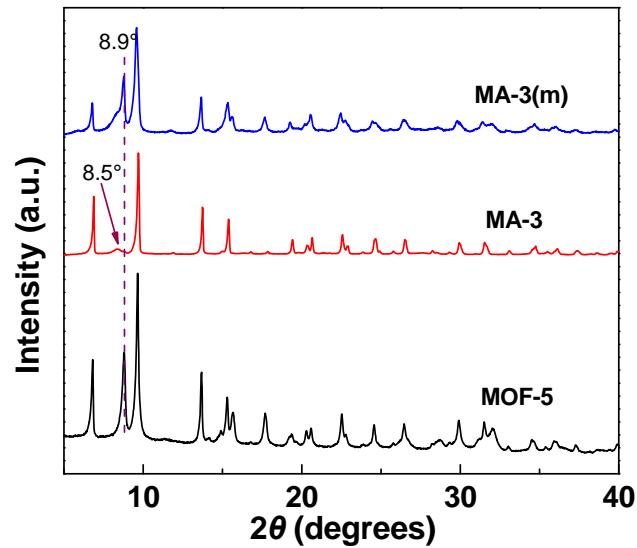


Fig. S9 XRD patterns of MOF-5, MA-3, and MA-3(m) after exposure to humid atmosphere for 3 h.