Electronic Supplementary Information

Constructing mesoporous solid superbases by a dualcoating strategy

Xiao-Yan Liu, Lin-Bing Sun,* Feng Lu, Tian-Tian Li and Xiao-Qin Liu*

State Key Laboratory of Materials-Oriented Chemical Engineering, College of Chemistry and Chemical Engineering, Nanjing University of Technology, Nanjing 210009, China.

E-mail: lbsun@njut.edu.cn; liuxq@njut.edu.cn

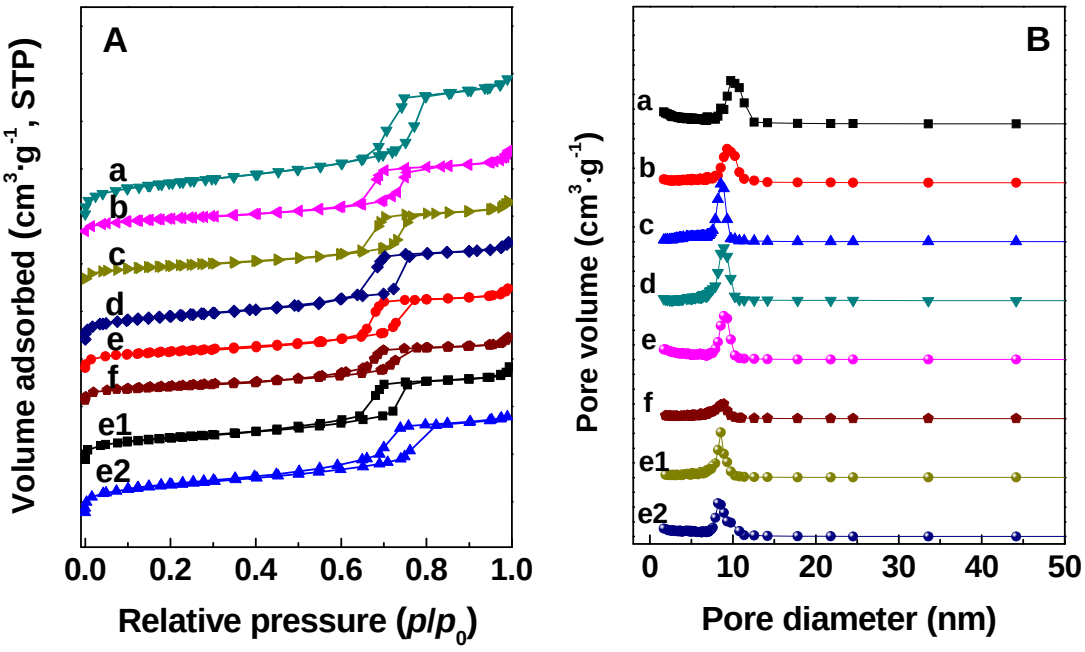

Fig. S1 (A) N_2 adsorption-desorption isotherms and (B) pore size distributions of (a) SBA-15, (b) ZS(A)-5, (c) ZS(A)-10, (d) ZS(A)-20, (e) ZS(A)-30, (f) ZS(A)-40, (e1) ZS(I)-30, and (e2) ZS(G)-30 samples.

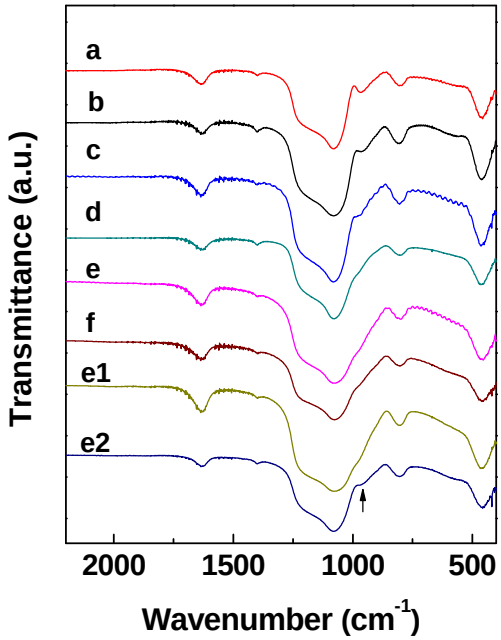

Fig. S2 IR spectra of (a) SBA-15, (b) ZS(A)-5, (c) ZS(A)-10, (d) ZS(A)-20, (e) ZS(A)-30, (f) ZS(A)-40, (e1) ZS(I)-30, and (e2) ZS(G)-30 samples.

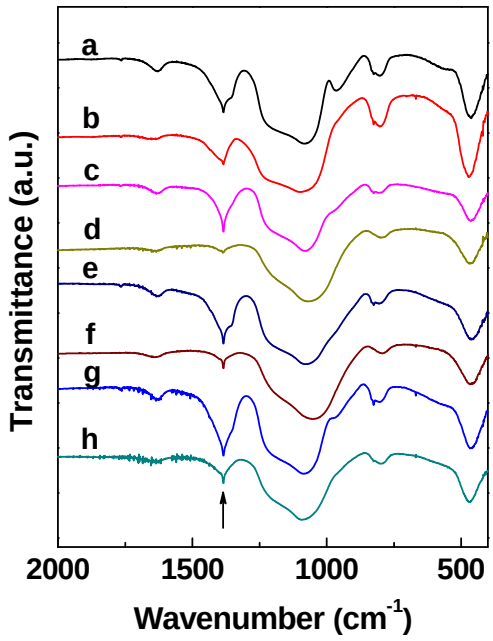

Fig. S3 IR spectra of KS (a) before and (b) after activation, KZS(A)-30 (c) before and (d) after activation, KZS(I)-30 (e) before and (f) after activation, and KZS(G)-30 (g) before and (h) after activation.

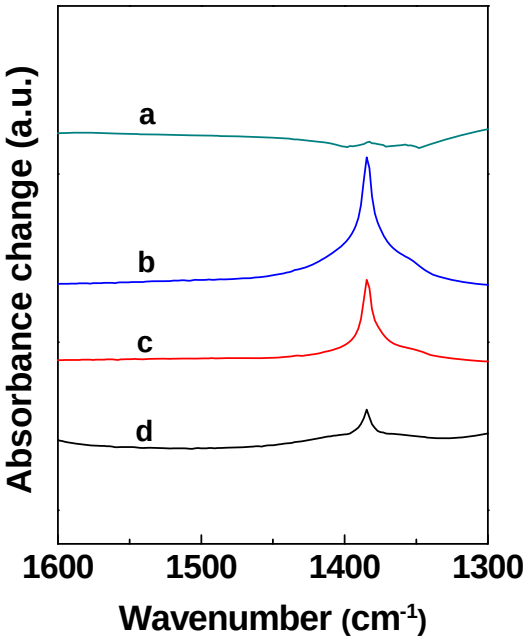

Fig. S4 Difference spectra of (a) KS before and after activation, (b) KZS(A)-30 before and after activation, (c) KZS(I)-30 before and after activation as well as (d) KZS(G)-30 before and after activation.

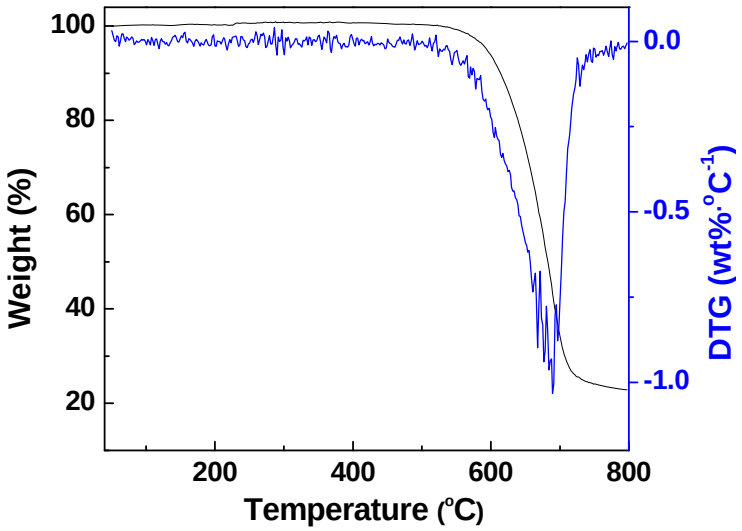

Fig. S5 TG and DTG curves of KNO_3.