

## Electronic Supplementary Materials to:

### **A mesoporous aluminosilicate prepared by simply coating fibrous $\gamma$ - AlOOH on the external surface of SBA-15 for catalytic hydrocarbon cracking**

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Fig. S1. Small- (left) and wide- (right) angle XRD patterns of the steamed Al<sub>2</sub>O<sub>3</sub> (a),  
steamed SBA-Al<sub>2</sub>O<sub>3</sub> (b), and steamed SBA/Al<sub>2</sub>O<sub>3</sub>-imp (c).

Fig. S2. NH<sub>3</sub>-TPD profiles of the catalysts before (solid line, top) and after (dash line,  
bottom) steaming at 800 °C for 4 h: Al<sub>2</sub>O<sub>3</sub> (a), SBA-Al<sub>2</sub>O<sub>3</sub> (b), and comparison  
SBA/Al<sub>2</sub>O<sub>3</sub>-imp sample (c).

Fig. S3. CO<sub>2</sub> evolution during TPO of the coked catalysts before (solid line, top) and  
after (dash line, bottom) steaming at 800 °C for 4 h: Al<sub>2</sub>O<sub>3</sub> (a), SBA-Al<sub>2</sub>O<sub>3</sub> (b), and  
SBA/Al<sub>2</sub>O<sub>3</sub>-imp (c).

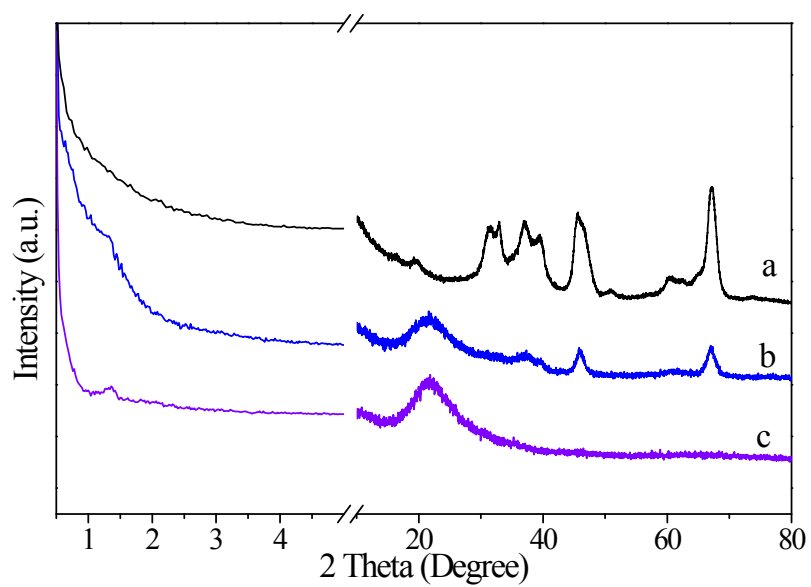


Fig. S1. Small- (left) and wide- (right) angle XRD patterns of the steamed  $\text{Al}_2\text{O}_3$  (a), steamed SBA- $\text{Al}_2\text{O}_3$  (b), and steamed SBA/ $\text{Al}_2\text{O}_3$ -imp (c).

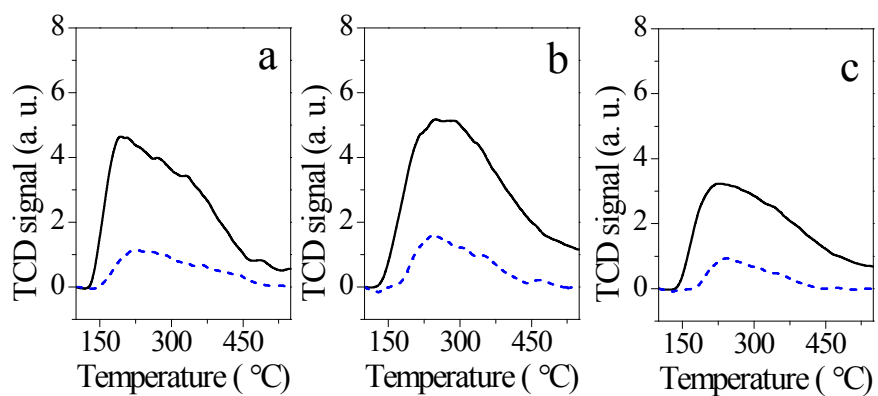


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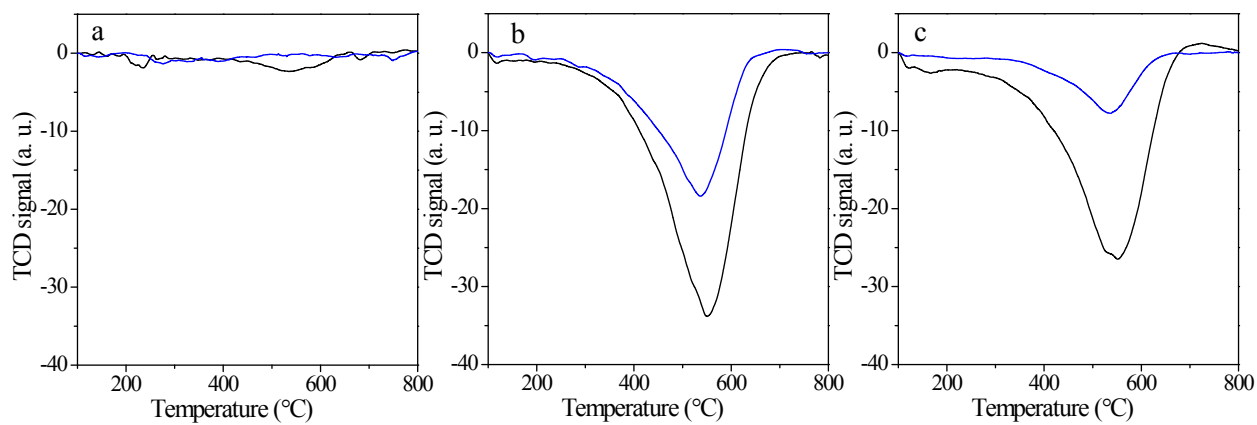


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