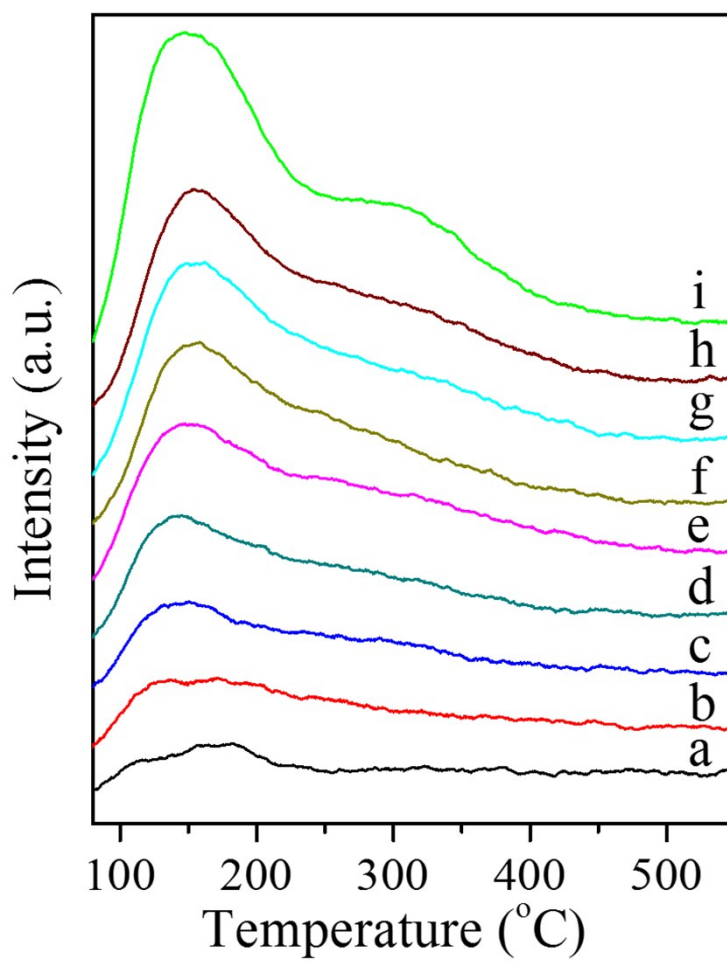
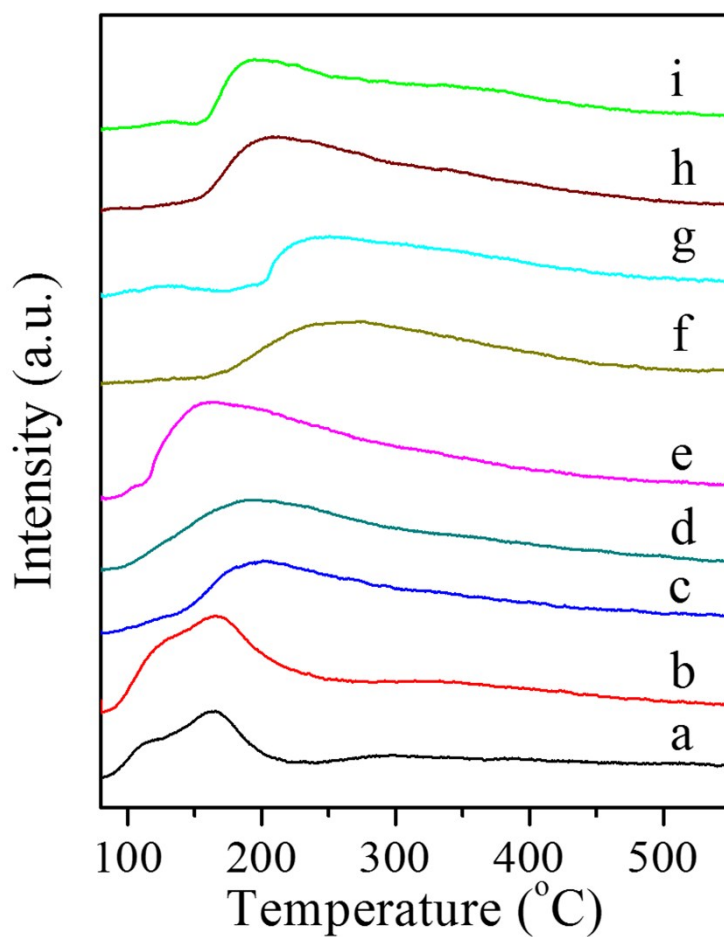


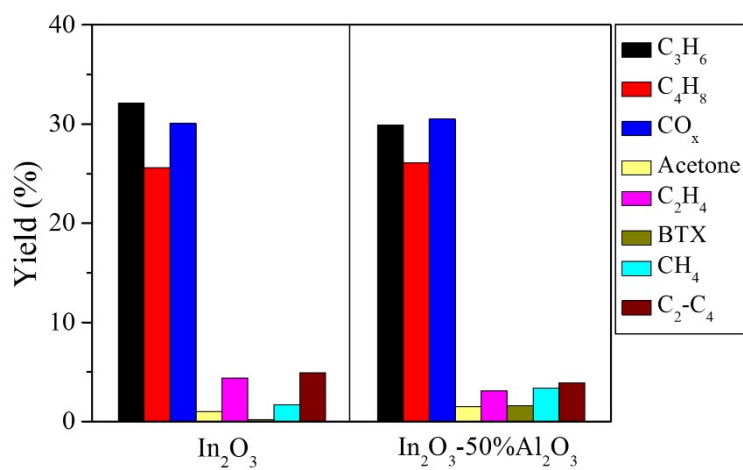
## Supporting Information



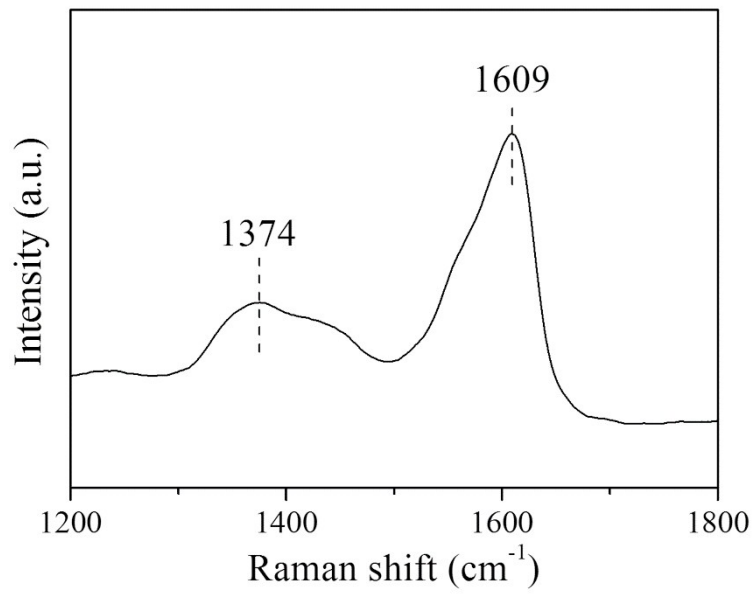
**Fig. S1** NH<sub>3</sub>-TPD profiles of In<sub>2</sub>O<sub>3</sub>-Beta composites. (a) In<sub>2</sub>O<sub>3</sub>, (b) In<sub>2</sub>O<sub>3</sub>-10%Beta, (c) In<sub>2</sub>O<sub>3</sub>-20%Beta, (d) In<sub>2</sub>O<sub>3</sub>-30%Beta, (e) In<sub>2</sub>O<sub>3</sub>-40%Beta, (f) In<sub>2</sub>O<sub>3</sub>-50%Beta, (g) In<sub>2</sub>O<sub>3</sub>-60%Beta, (h) In<sub>2</sub>O<sub>3</sub>-70%Beta, (i) Beta.



**Fig. S2** CO<sub>2</sub>-TPD profiles of In<sub>2</sub>O<sub>3</sub>-Beta composites. (a) In<sub>2</sub>O<sub>3</sub>, (b) In<sub>2</sub>O<sub>3</sub>-10%Beta, (c) In<sub>2</sub>O<sub>3</sub>-20%Beta, (d) In<sub>2</sub>O<sub>3</sub>-30%Beta, (e) In<sub>2</sub>O<sub>3</sub>-40%Beta, (f) In<sub>2</sub>O<sub>3</sub>-50%Beta, (g) In<sub>2</sub>O<sub>3</sub>-60%Beta, (h) In<sub>2</sub>O<sub>3</sub>-70%Beta, (i) Beta.



**Fig. S3** Product distribution over  $\text{In}_2\text{O}_3$  and  $\text{In}_2\text{O}_3$ -50% $\text{Al}_2\text{O}_3$  catalysts for ethanol conversion. Reaction conditions: reaction temperature, 460 °C; WHSV of ethanol, 0.2  $\text{h}^{-1}$ ; time-on-stream, 3 h.



**Fig. S4** Raman spectrum of spent In<sub>2</sub>O<sub>3</sub>-50%Beta composite after the stability test.