

Supporting

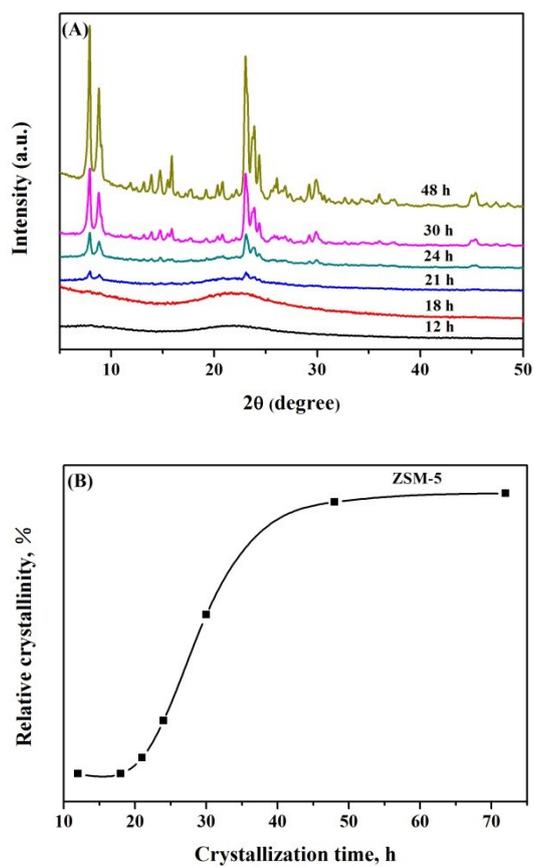


Fig. S1. The wide angle XRD patterns (A) and the relative crystallinity (B) of ZSM-5.

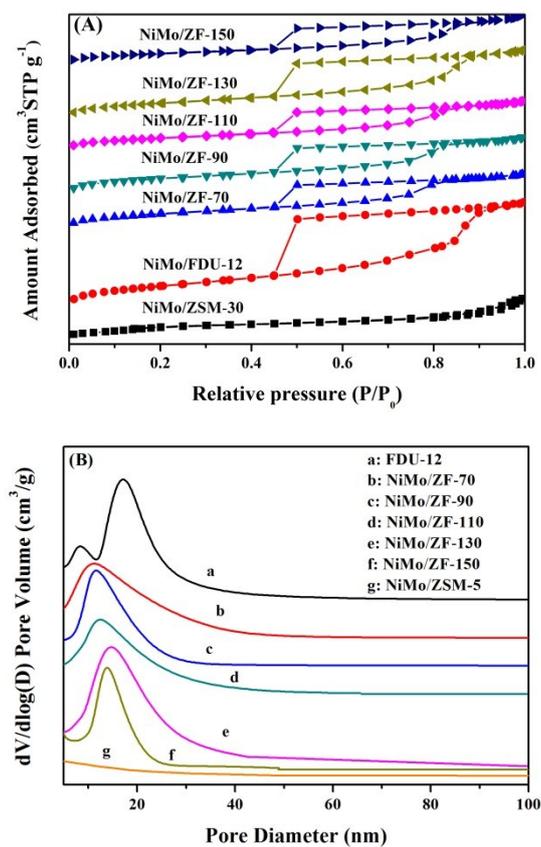


Fig. S2. N₂ adsorption-desorption patterns (A) and pore size distributions (B) of different catalysts.

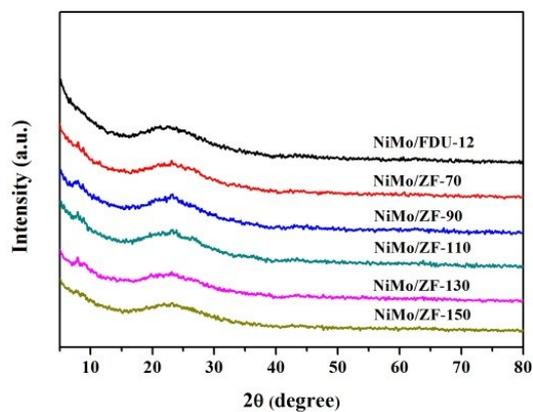


Fig. S3. XRD patterns of NiMo supported catalysts at wide angle region.

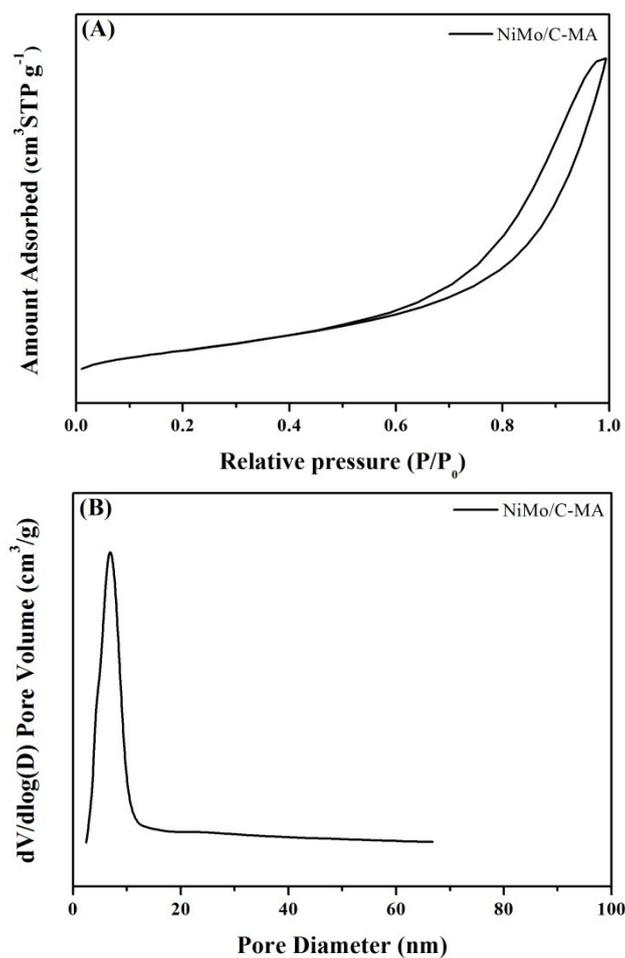


Fig. S4. N₂ adsorption-desorption patterns (A) and pore size distributions (B) of the catalyst NiMo/C-MA.

Table 1. The structure parameters of the catalyst NiMo/ γ -C.

Samples	$S_{\text{BET}}^{\text{a}}$ (m ² ·g ⁻¹)	$V_{\text{mes}}^{\text{b}}$ (cm ³ ·g ⁻¹)	$V_{\text{mic}}^{\text{c}}$ (cm ³ ·g ⁻¹)	$d_{\text{BJH}}^{\text{d}}$ (nm)
NiMo/ γ -C	205.05	0.36	0.009	6.31

Note: a: Calculated by BET method.

b: Calculated using BJH method.

c: Calculated using the t-plot method.

d: Mesopore diameter was calculated using BJH method.