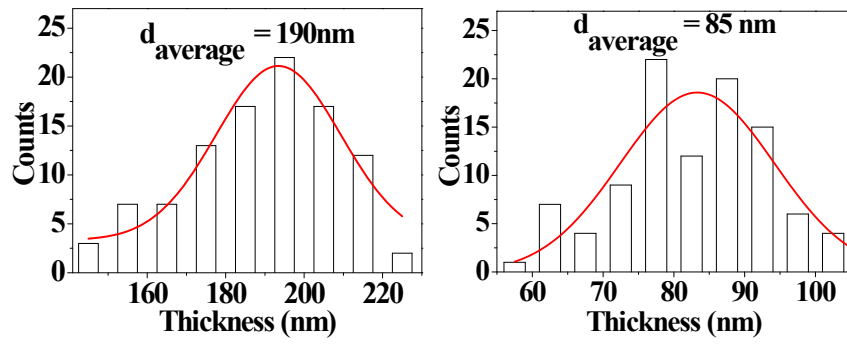


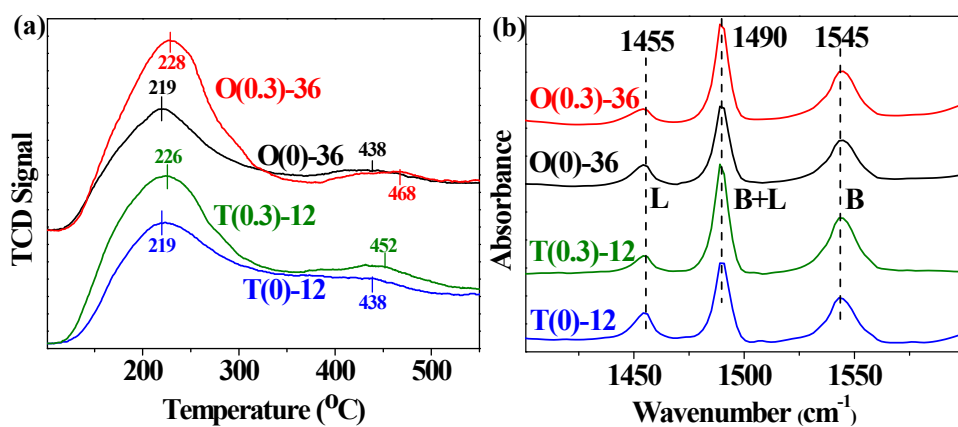
**Table S1.** The source of reagents in this work <sup>a</sup>

Reagent	Manufacturer	Content (wt.%)
Tetraethylorthosilicate (TEOS)	Tianjin Kermel Chemical Reagents Company	≥ 98.0
Tetrapropylammonium hydroxide (TPAOH) solution	Shanghai Bangcheng Chemical Reagents Company	25
Al(NO <sub>3</sub> ) <sub>3</sub> ·9H <sub>2</sub> O	Beijing Chemical Reagents Company	≥ 99.0
Tetramethylguanidine (TMG)	Sass Chemical Reagents Company	98
Tetramethylurea (TMU)	Beijing Bailingwei Technology Co., Ltd.	98
NaOH	Tianjin Kaixin Chemical Industry Co., Ltd.	≥ 96.0
NH <sub>4</sub> NO <sub>3</sub>	Shanghai Chemical Reagents Factory	≥ 99.0
Methanol	Tianjin Kermel Chemical Reagents Company	≥ 99.5

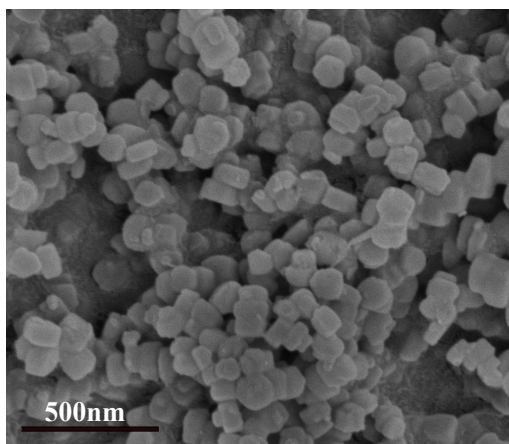
<sup>a</sup> All of the reagents were used without purification.



**Fig. S1** Thickness distributions of the O(0.3)-36 and T(0.3)-12.  
Note: the data came from the statistics of 100 particles.



**Fig. S2** NH<sub>3</sub>-TPD profiles (a) and Py-FTIR spectra (b) of the samples synthesized with and without TMG addition.



**Fig. S3** SEM image of the ZSM-5 zeolite synthesized using TMU as additive.

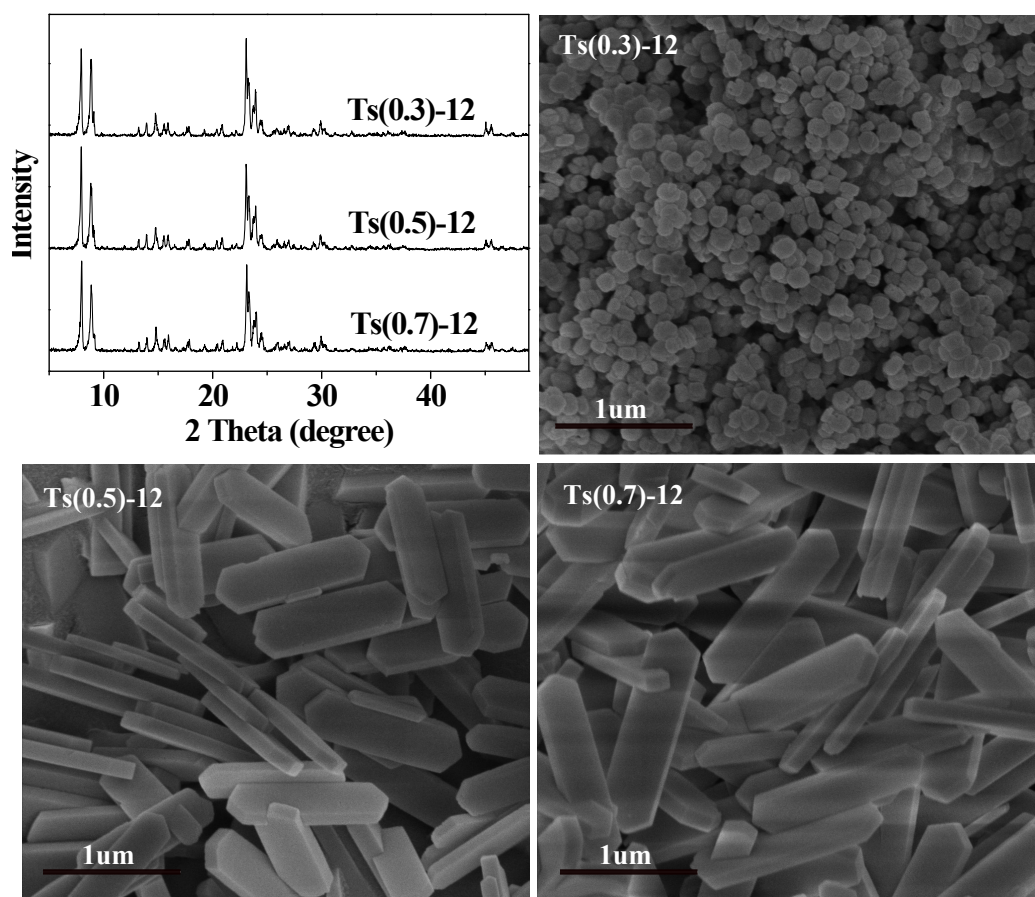


Fig. S4 XRD patterns and SEM images of the as-synthesized Ts(x)-12 samples.