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Supplementary Materials

Improvement of Alkali Metal Resistance for NH_3-SCR Catalyst Cu/SSZ-13: Tune the Crystal Size

Zexiang Chen [1], Meiqing Shen [1,2], Chen Wang [1,3], Jianqiang Wang [1], Jun Wang [1,*] and Gurong Shen [4,*]

[1] School of Chemical Engineering & Technology, Tianjin University, Tianjin 300072, China; tjuczx@tju.edu.cn (Z.C.); mqshen@tju.edu.cn (M.S.); chenwang87@tju.edu.cn (C.W.); jianqiangwang@tju.edu.cn (J.W.)

[2] Collaborative Innovation Centre of Chemical Science and Engineering (Tianjin), Tianjin 300072, China

[3] School of Environmental and Safety Engineering, North University of China, Taiyuan 030051, China

[4] School of Materials Science and Engineering, Tianjin University, Tianjin 300350, China

* Correspondence: wangjun@tju.edu.cn (J.W.); gr_shen@tju.edu.cn (G.S.)

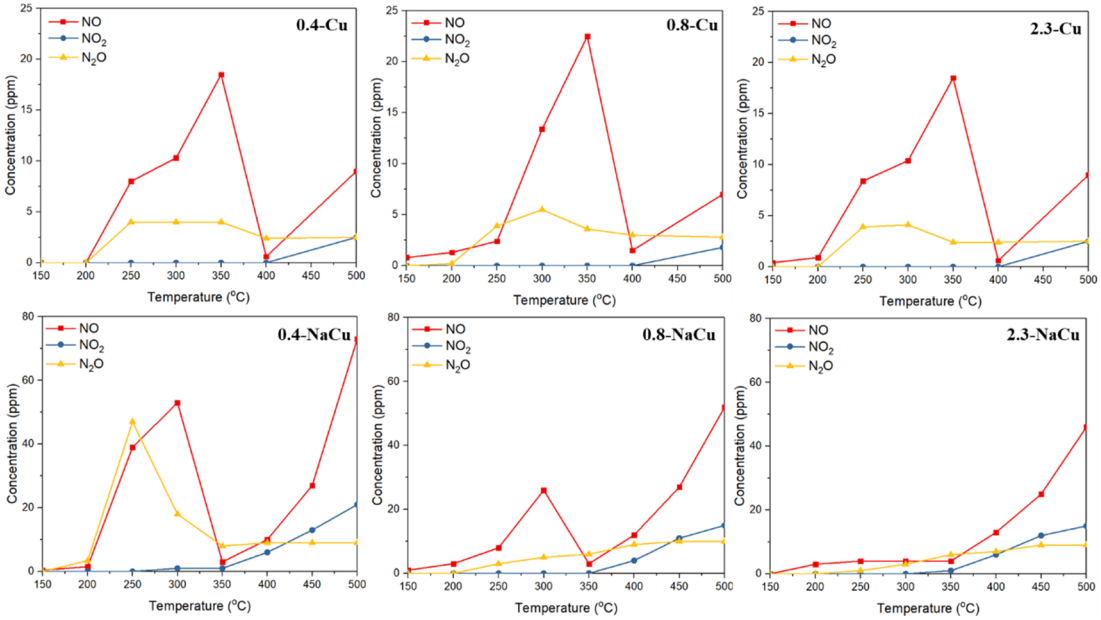

Figure S1. NOx and N_2O concentration evolution in the NH_3 oxidation.

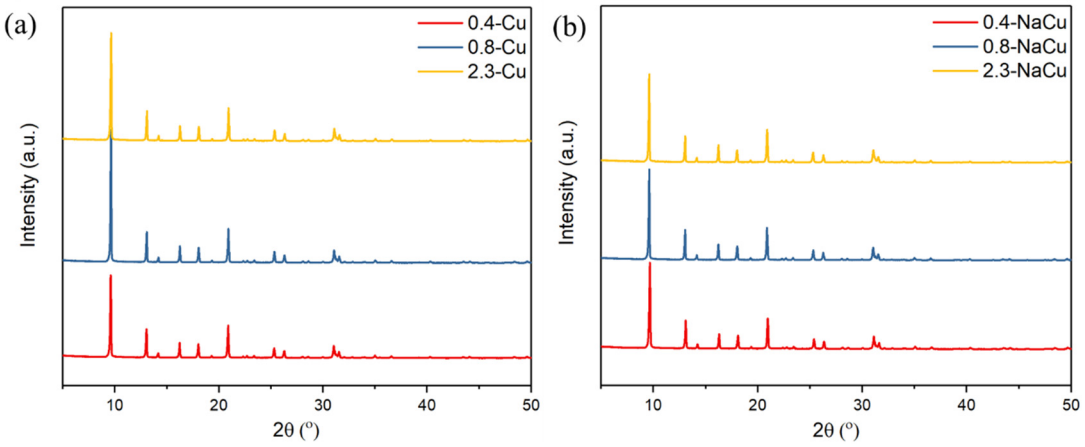

Figure S2. XRD patterns of Cu/SSZ-13 (**a**) before and (**b**) after Na poisoning.

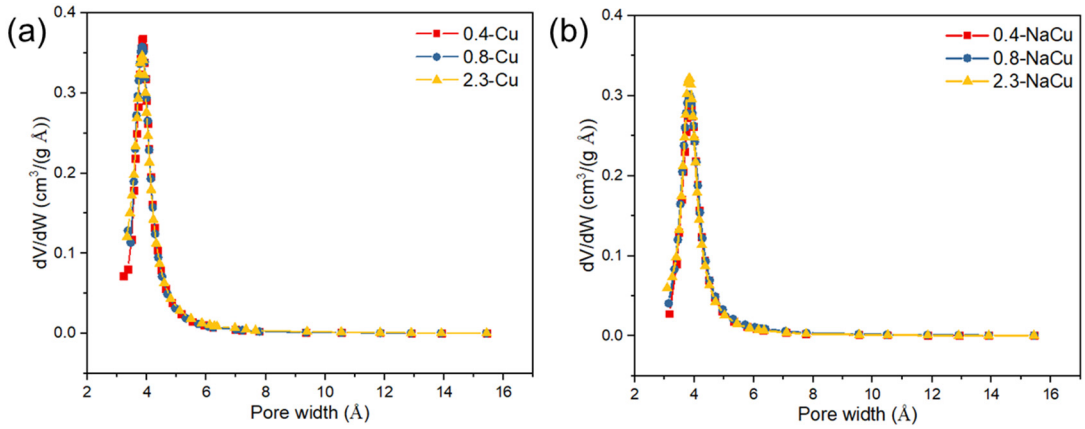

Figure S3. The micropore distribution of Cu/SSZ-13 (**a**) before and (**b**) after Na poisoning.

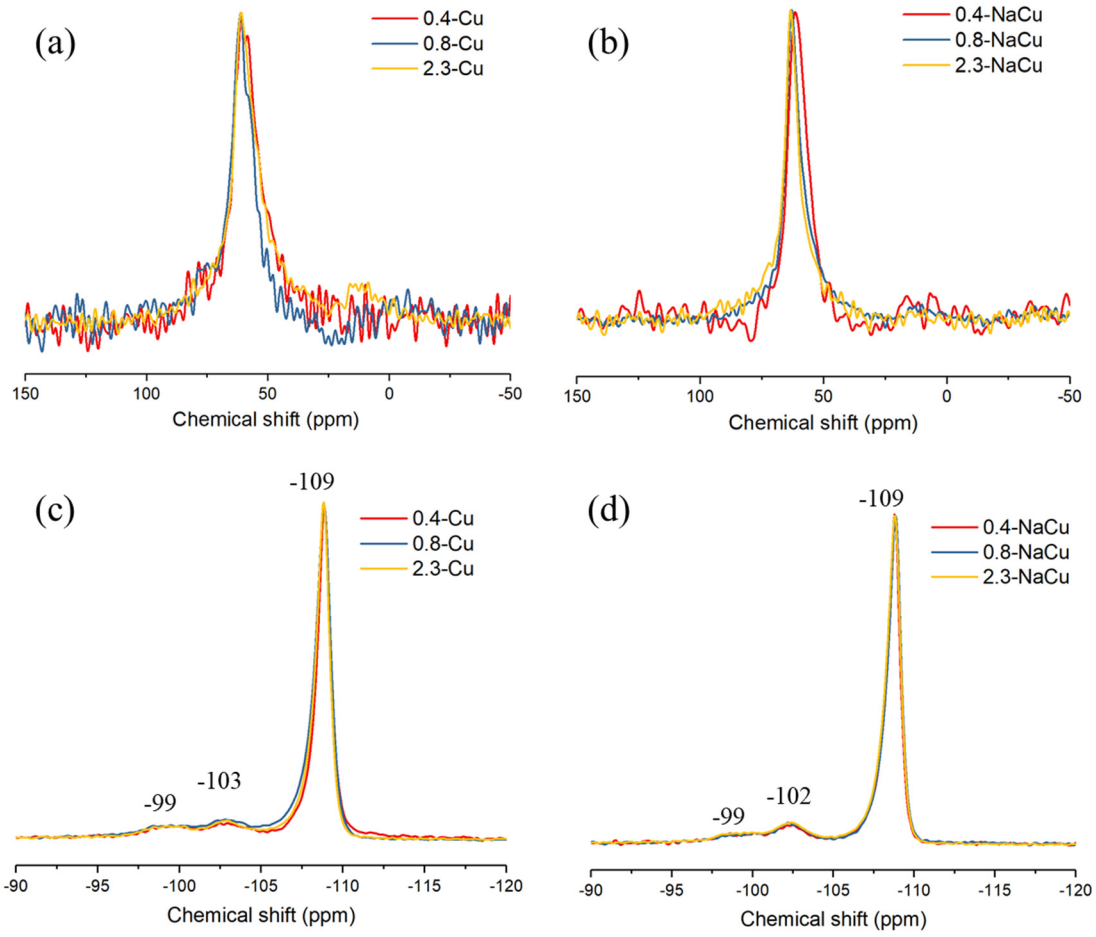

Figure S4. (**a-b**) ^{27}Al NMR spectra and (**c-d**) ^{29}Si NMR spectra of CuSSZ-13 before and after Na poisoning.

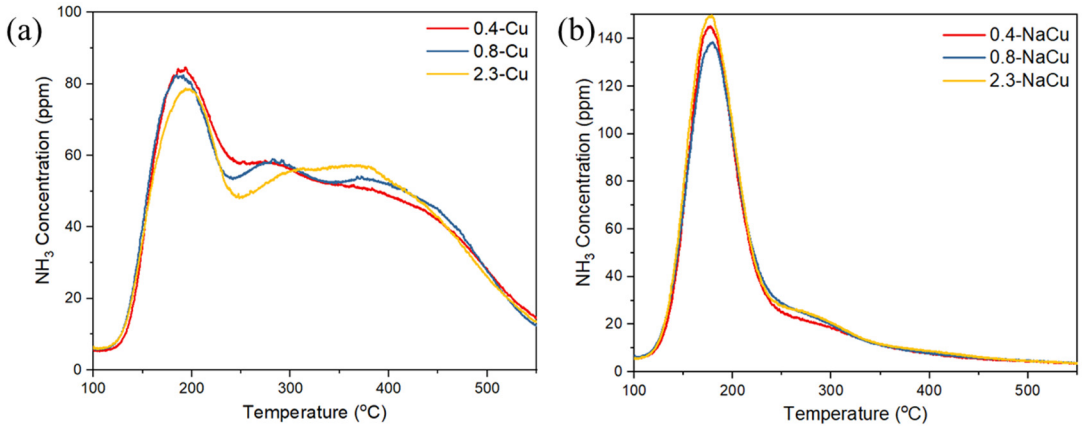

Figure S5. NH_3-TPD profiles of Cu/SSZ-13 with different crystal sizes (**a**) before and (**b**) after Na poisoning.

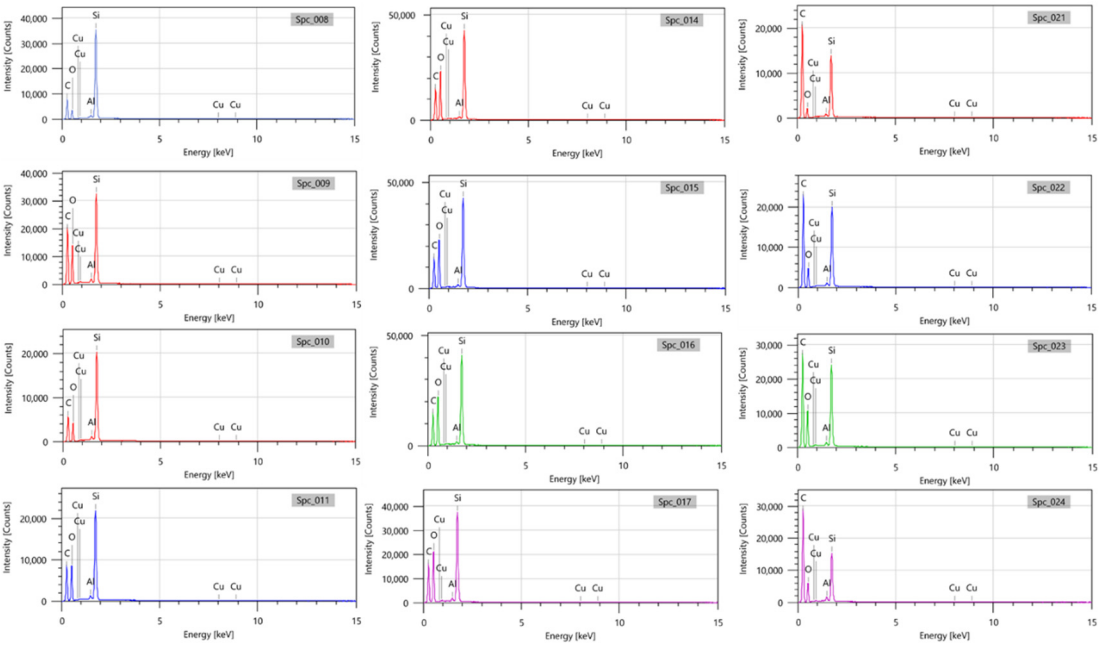

Figure S6. Point EDS spectra corresponding to the results in Figure 9.

Table S1. Element composition of Cu/SSZ-13 and Na-poisoned counterparts with different crystal sizes.

Samples	Si/Al molar ratio [1]	Cu content [2] (wt%)	Na [2] (wt%)
0.4-Cu	25.2	1.05	-
0.8-Cu	24.8	1.38	-
2.3-Cu	25.4	1.44	-
0.4-NaCu	-	1.04	2.05
0.8-NaCu	-	1.30	1.97
2.3-NaCu	-	1.36	2.09

1. Si/Al ratio is measured by XRF.

2. Cu and Na contents are measured by ICP.