Electronic Supplementary Information (ESI)

Rational design of 3D hierarchical foam-like Fe_2O_3@CuO_x monolith catalysts for selective catalytic reduction of NO with NH_3

*Cheng Fang, Liyi Shi, Hang Hu, Jianping Zhang and Dengsong Zhang**

Research Center of Nano Science and Technology, School of Material Science and Engineering, Shanghai University, Shanghai 200444, China.

* Corresponding authors: Fax: *+86-21-66136079*; E-mail: dszhang@shu.edu.cn

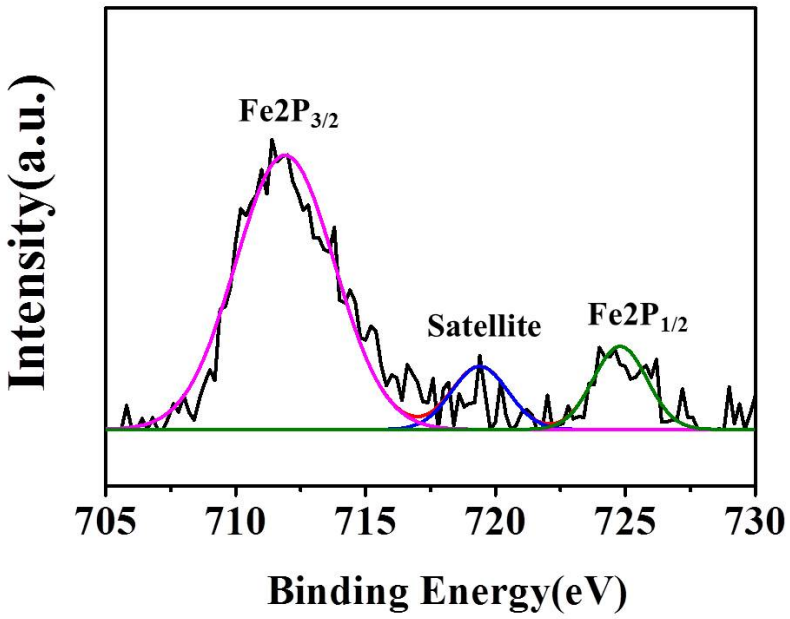

Fig S1. XPS spectra for Fe 2p of the Fe_2O_3@CuO_x foam.

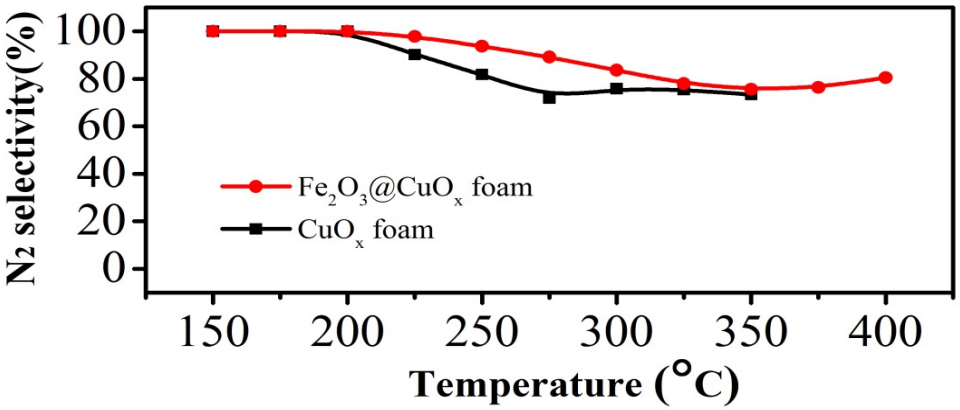

Fig S2. Plots of N_2 selectivity of the catalysts *vs.* temperature.

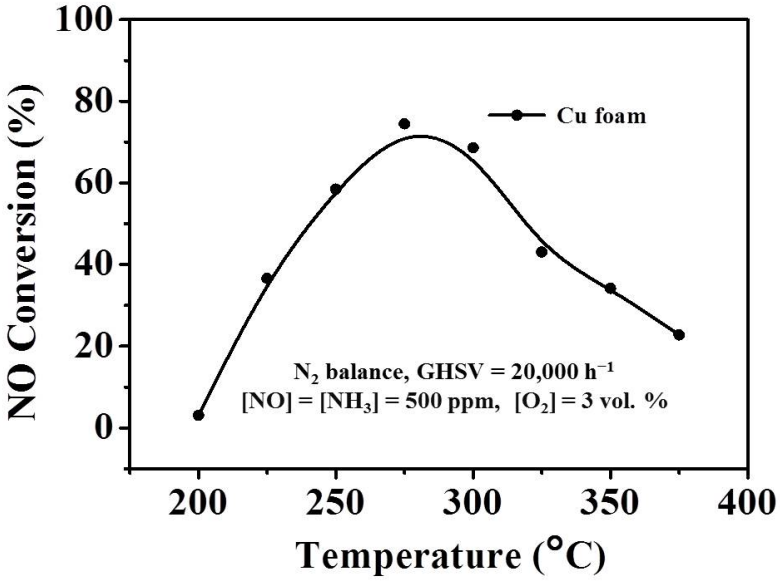

Fig S3. Plot of NO conversion of the Cu foam *vs.* temperature.

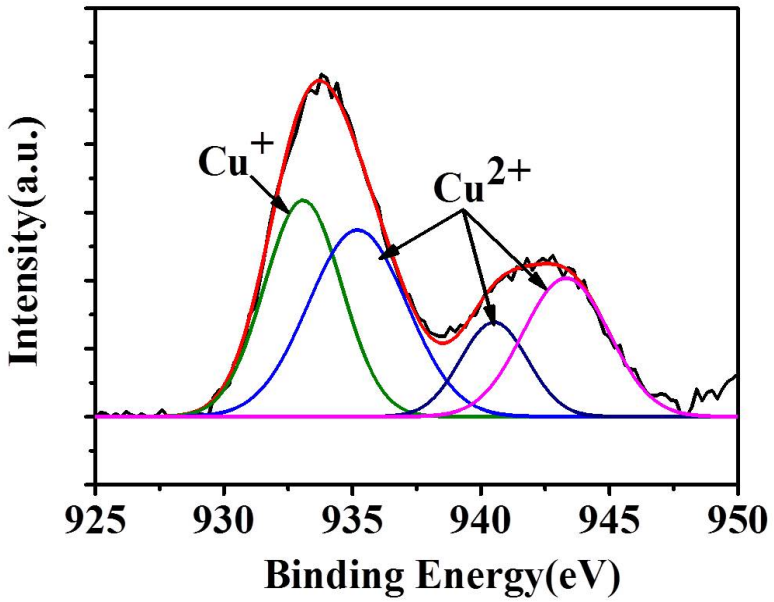

Fig S4. XPS spectra for Cu 2p of the used Fe_2O_3@CuO_x foam.

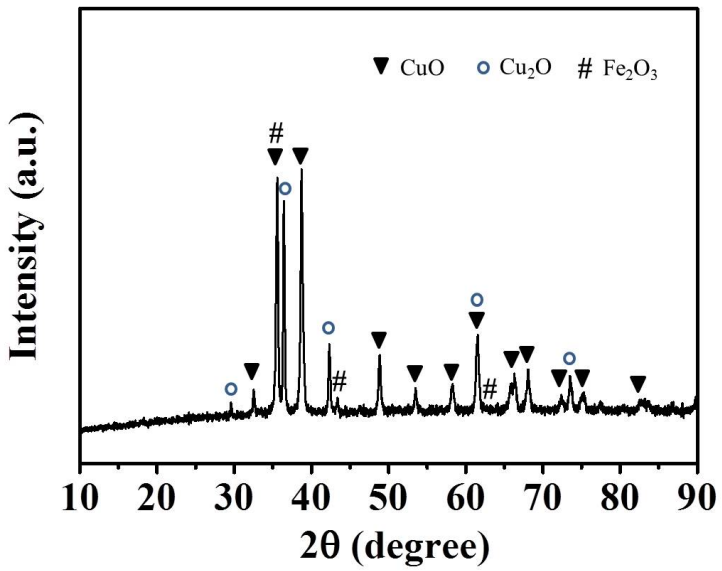

Fig S5. XRD pattern of the used Fe_2O_3@CuO_x foam.

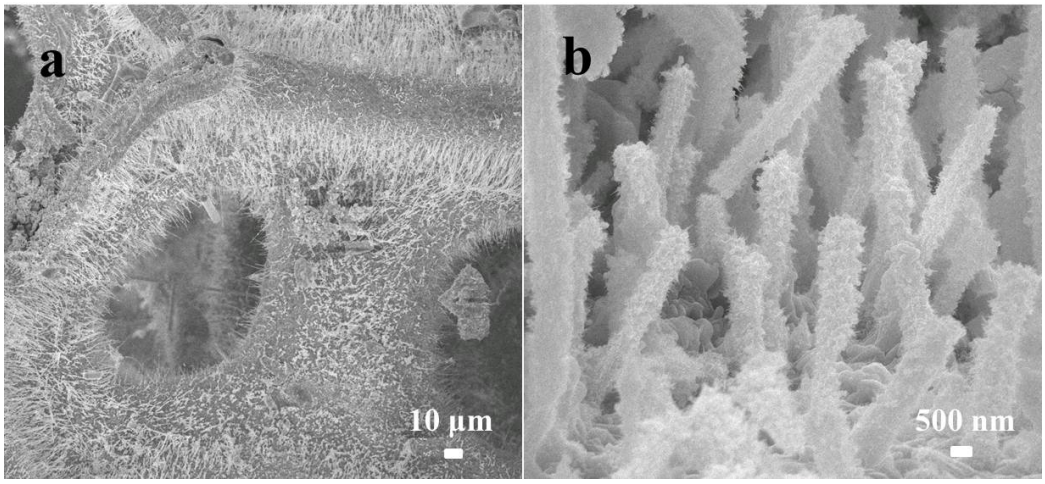

Fig S6. Low resolution (a) and high resolution (b) SEM images of the Fe_2O_3@CuO_x foam after the 6.5 h NH_3-SCR duration test under the coexistence of 8 vol. % H_2O and 250 ppm SO_2.

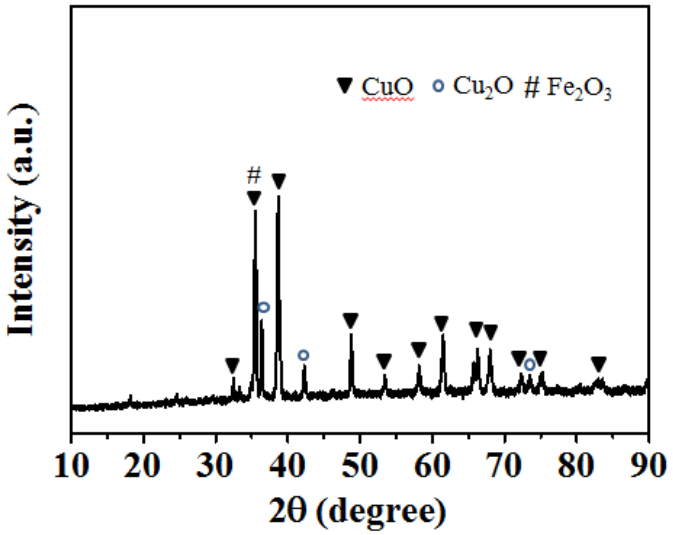

Fig S7. XRD pattern of the Fe_2O_3@CuO_x foam after the anti-toxicity test.