

Supplementary Information

Non-linear effects of Cu loading on the structure and low-temperature CO oxidation activity of CuO/Al₂O₃ catalysts: Insights from ToF-SIMS

Yujing Ji[†], Shufang Zhao[†], Chan-Cuk Hwang^{††}, Young Dok Kim^{†*}, Hyun Ook Seo^{§*}

[†] Department of Chemistry, Sungkyunkwan University, Suwon, 16419, Republic of Korea

^{††} Beamline Research Division, Pohang Accelerator Laboratory, Pohang, 37673, Republic of Korea

[§] Department of Chemistry and Energy Engineering, Sangmyung University, Seoul, 03016, Republic of Korea

*** Corresponding Author:**

ydkim91@skku.edu (Y.D. Kim)

hyun.ook.seo@smu.ac.kr (H. O. Seo)

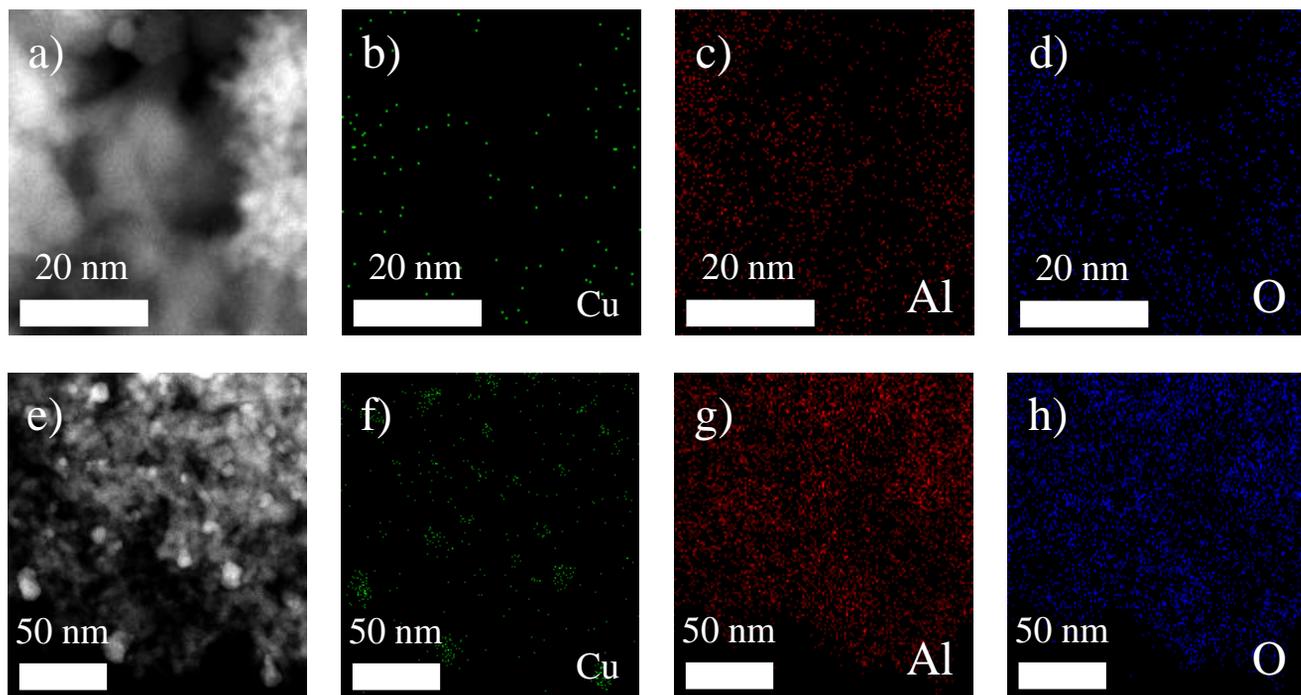


Figure S1. TEM and TEM-EDS mapping images of a-d) 1-Cu and e-h) 2-Cu samples; a, e) TEM images, b, f) Cu-K, c, g) Al-K, and d, h) O-K EDS mapping images.

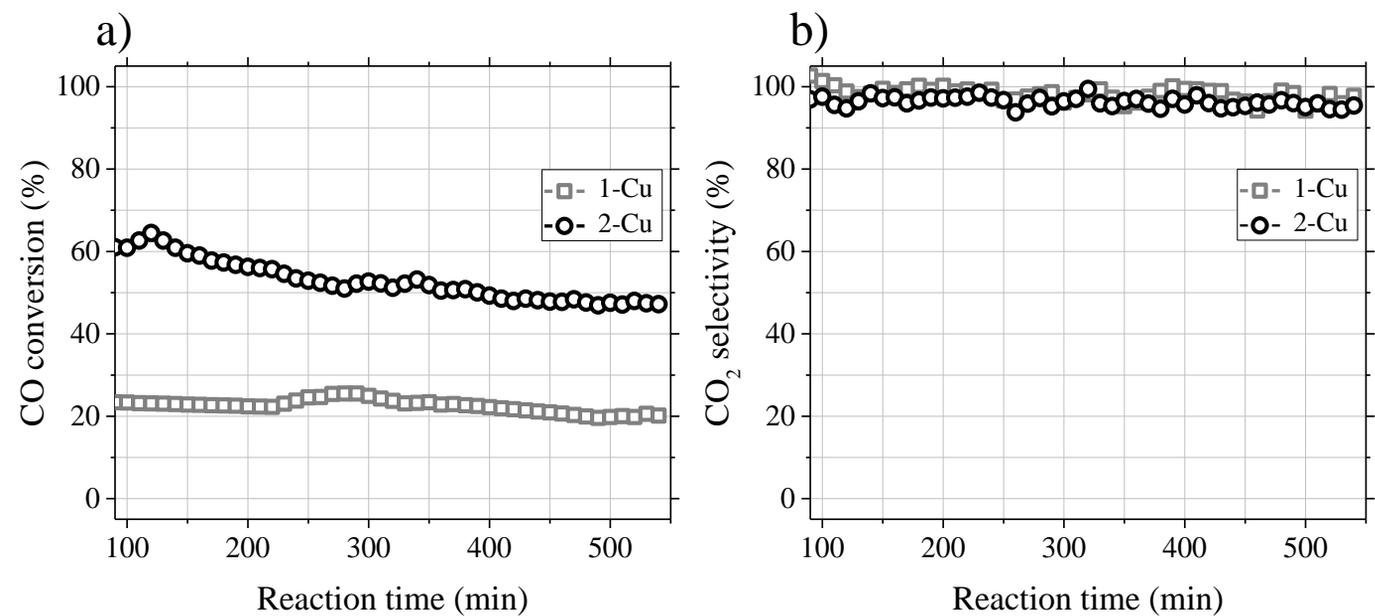


Figure S2. a) CO conversion (%) and b) CO₂ selectivity (%) during the isothermal CO oxidation experiments at 100 °C performed with the 1-Cu and 2-Cu samples.

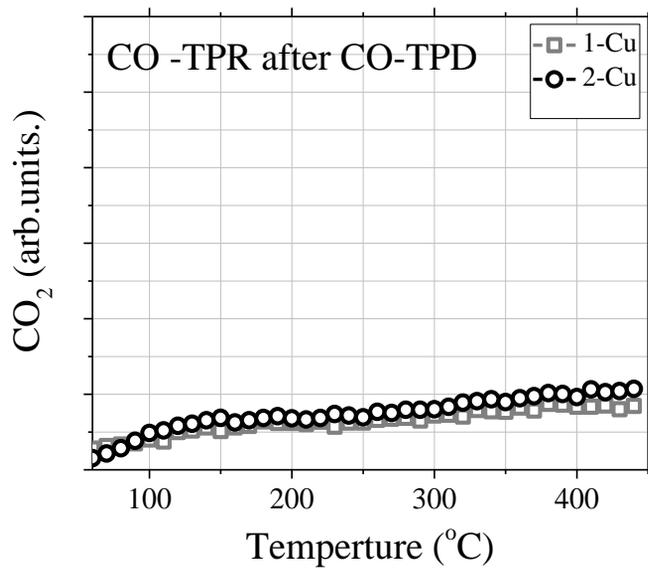


Figure S3. The results of sequential CO-TPD-TPR. The CO-TPR was performed after CO-TPD without air exposure for each sample.