Supplementary Data
(5 pages)

Heterogeneous Fenton-like CuO-CoO$_x$/SBA-15 Catalyst for Organic Pollutant Degradation: Synthesis, Performance, and Mechanism

Jinwei Li[a], Yifei Wei[b], Qiang Liu[b],Huanhuan Guan[b], Chengchun Jiang[a*],Xiaohui Sun [c*]

(a. School of Material and Environmental Engineering, Shenzhen Polytechnic University,
Shenzhen Guangdong 518055, China；
b. School of Municipal and Environmental Engineering,Shenyang Jianzhu University, Shenyang
Liaoning 110168, China.)
c. College of Civil and Transportation Engineering, Shenzhen University, 3688 Nanhai Avenue,
Shenzhen 518060, China.)

Corresponding Author: Chengchun Jiang
Tel: +86-755-26018380
Fax: +86-755-26018247
Email: jiangcc_szpt@126.com

Co-corresponding Author: Xiaohui Sun
Tel: +86-755-86670391
Fax: +86- 755-86670367
Email: sunxiaohui@szu.edu.cn

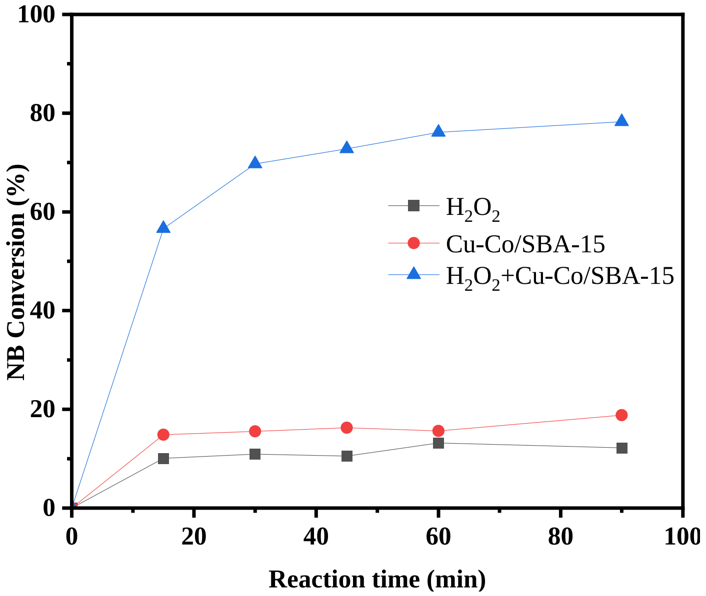


Figure S1. NB removal performance of H_2O_2 alone, CuO-CoO$_x$/SBA-15 catalyst alone, and CuO-CoO$_x$/SBA-15-H_2O_2 systems. Reaction conditions: 0.5 mmol/L NB, 100 mmol/L H_2O_2, and 2 g/L CuO-CoO$_x$/SBA-15.

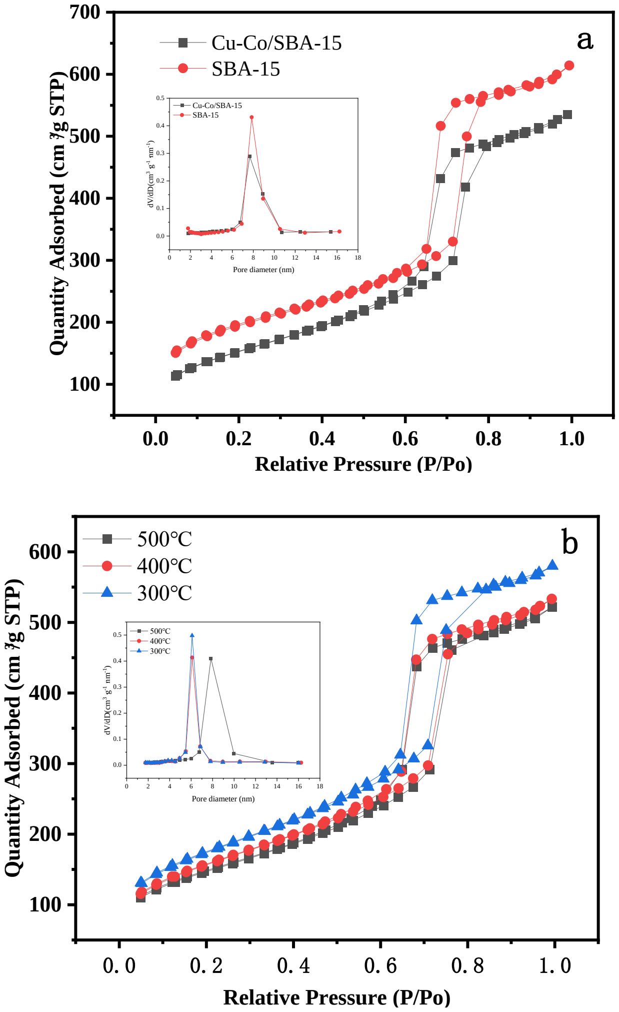


Figure S2. N$_2$ adsorption-desorption isotherms and pore diameter distributions of SBA-15 (a) and CuO-CoO$_x$/SBA-15 catalysts prepared using different calcination temperatures (b).

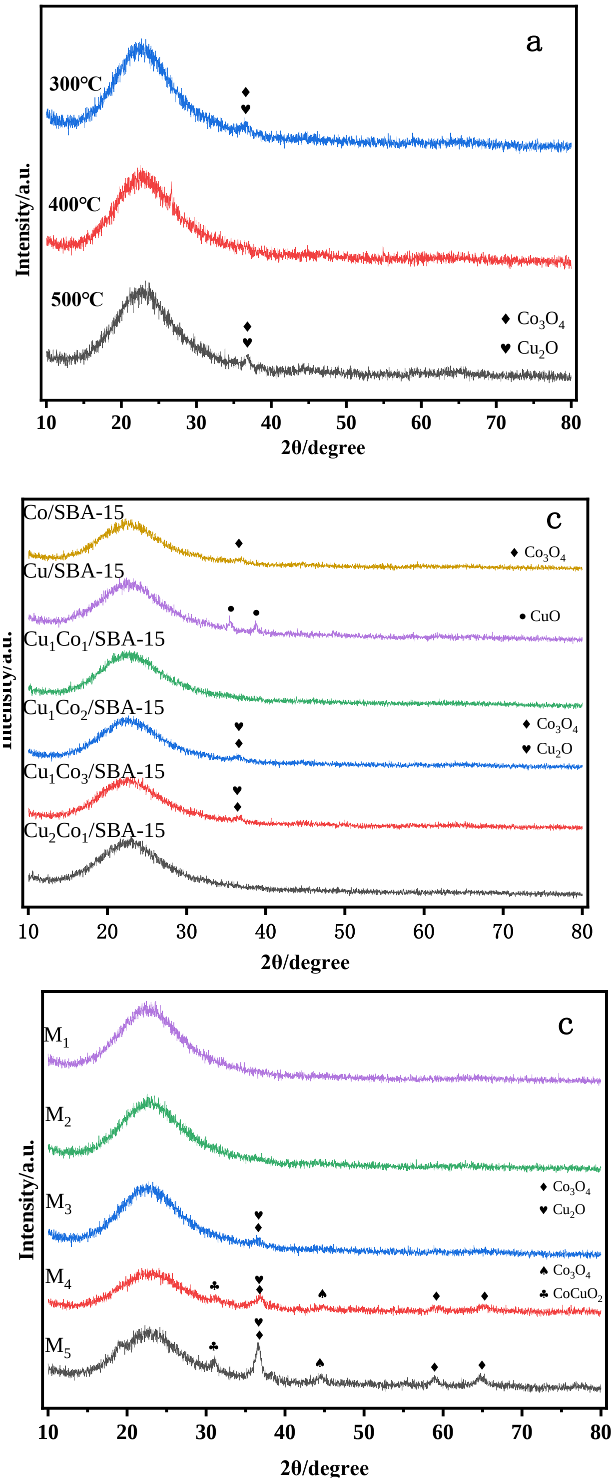


Figure S3. XRD patterns of CuO-CoO$_x$/SBA-15 catalysts prepared using different calcination temperatures (a), Cu/Co molar ratios (b), and metal oxide loading contents (c).

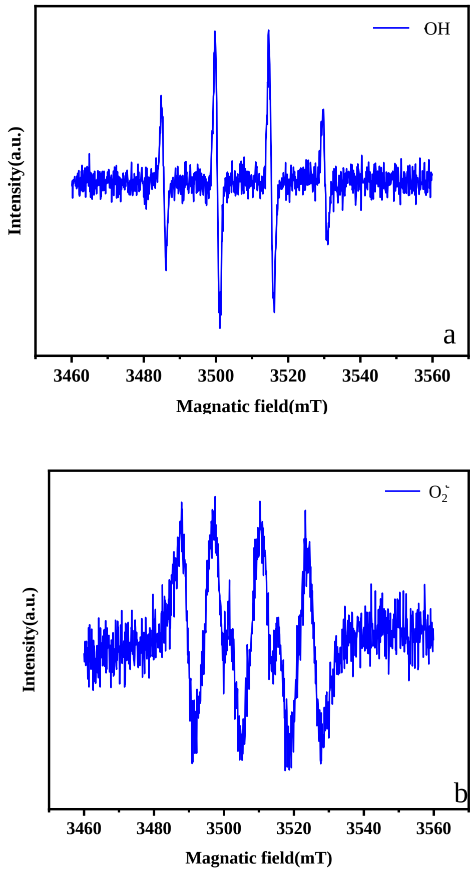
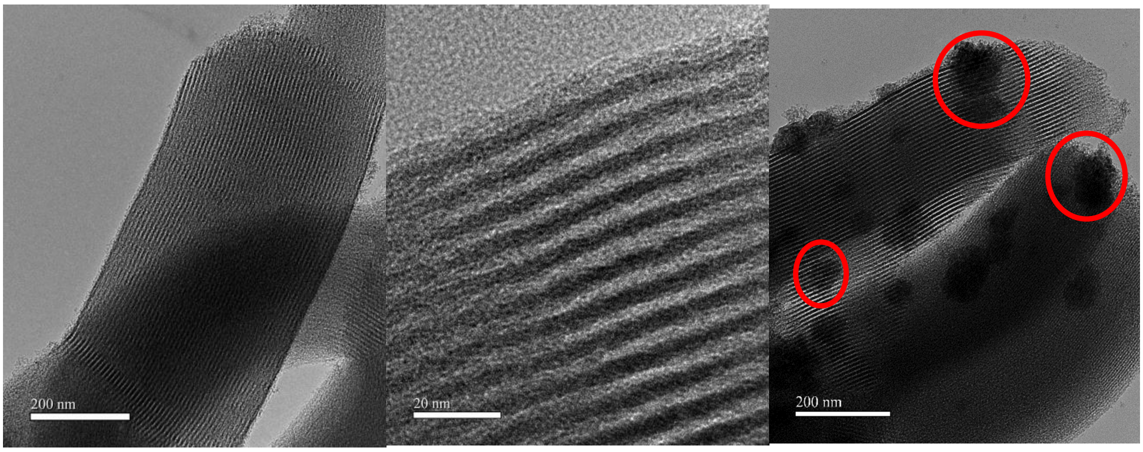
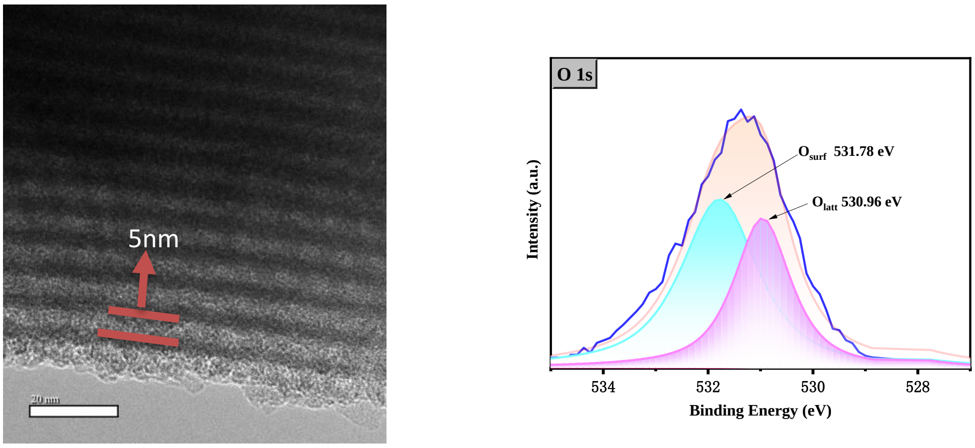


Figure S4. EPR spectra of CuO-CoO$_x$/SBA-15-H$_2$O$_2$ nitrobenzene system.



a TEM image of SBA-15 b TEM image of SBA-15 c TEM image of CuO-CoOx/SBA-15



d TEM image of CuO-CoOx/SBA-15 e O1s XPS spectra of CuO-CoOx/SBA-15

Figure S5. TEM images of SBA-15 (a,b) ,CuO-CoO$_x$/SBA-15 (c,d) and O1s XPS spectra of CuO-CoOx/SBA-15;