

Electronic Supplementary Information

Regulating the nitrogen types to improve the performance of Co-N/C with confinement effect in peroxymonosulfate activation for effective degradation of organic pollutants

Yanqing Cong^a, Lingjie Ye^a, Qiuang Zheng^a, Yudi Wang^a, Yifan Shao^a, Xuhua Ren^b,
Shi-Wen Lv^{*,a}

a. School of Environmental Science and Engineering, Zhejiang Gongshang University,
Hangzhou 310018, China

b. Zhejiang LanDe Energy Technology Co., LTD, Deqing 313200, China

*Corresponding author.

Mail to: No.18 Xuezheng Road, Hangzhou, 310018, China.

Email: lvshiwen@zjgsu.edu.cn (Shi-Wen Lv)

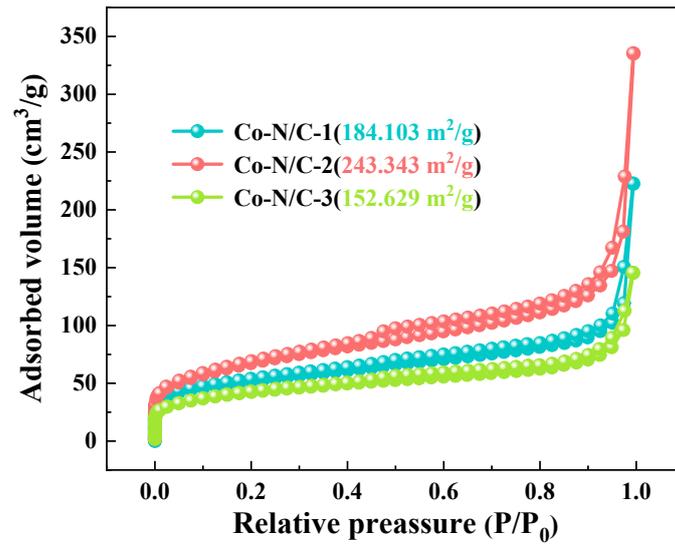


Fig. S1. The N₂ adsorption-desorption isotherms of samples.

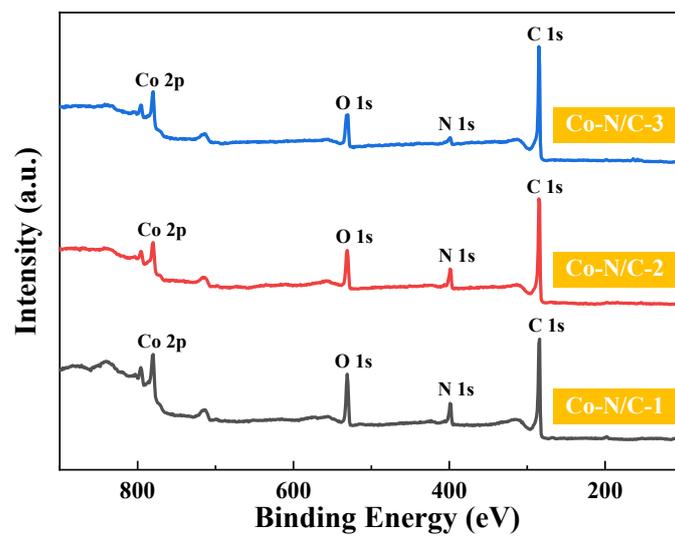


Fig. S2. The XPS survey spectra of catalysts.

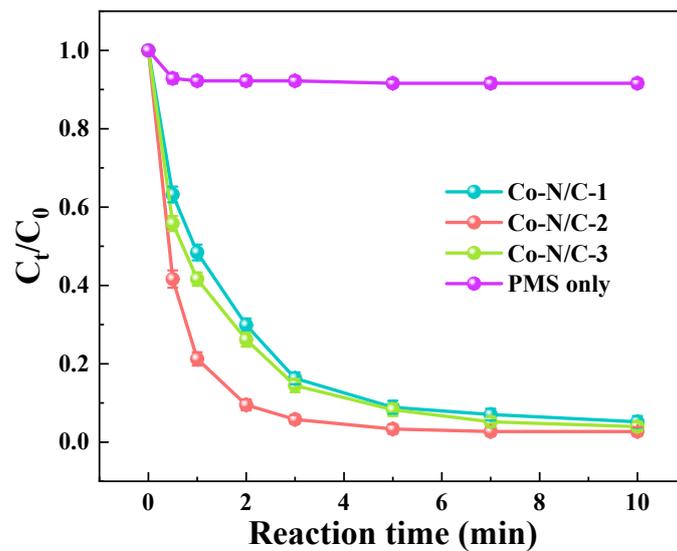


Fig. S3. Degradation curves of TC over different catalysts in the presence of PMS.

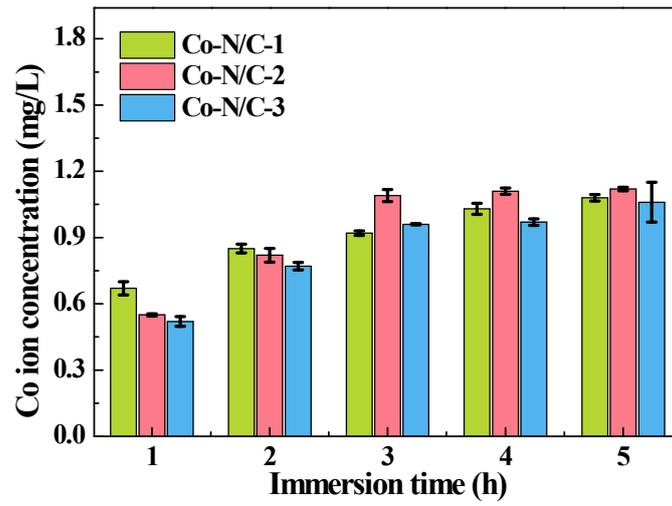


Fig. S4. The leaching tests of Co ions during the immersion period (Conditions: V=50 mL and catalyst dosage=10 mg).

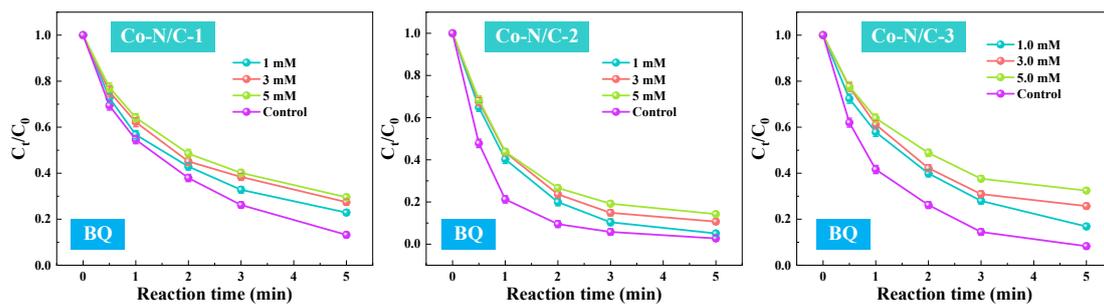


Fig. S5. Effects of BQ on TC degradation over catalysts in the presence of PMS.

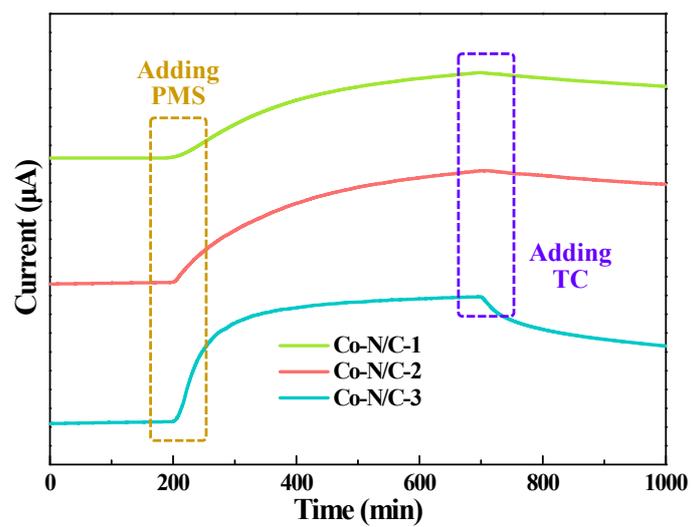


Fig. S6. The open-circuit voltage of Co-N/C-based catalysts.

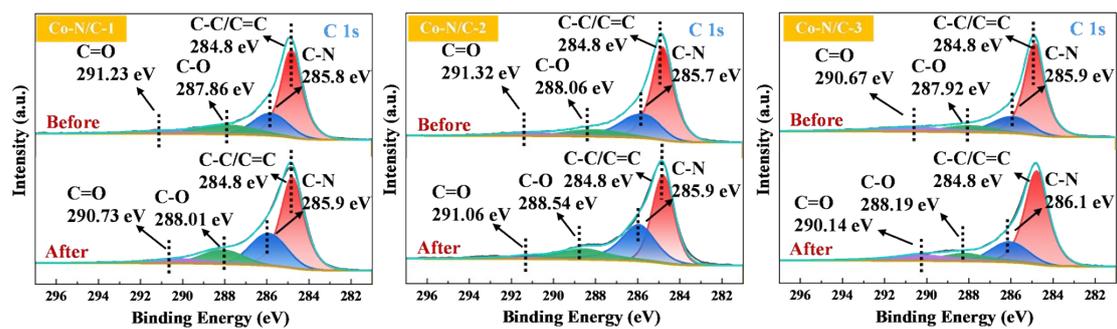


Fig. S7. The high-resolution C 1s XPS of catalysts before and after reaction.

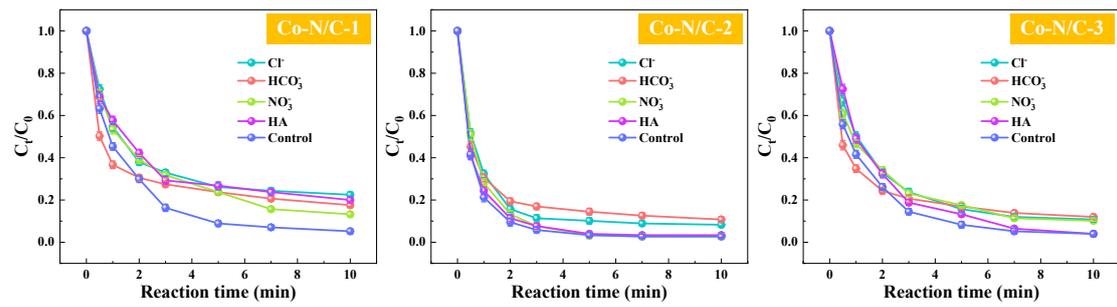


Fig. S8. Effects of inorganic ions and HA on TC degradation over catalysts in the presence of PMS.

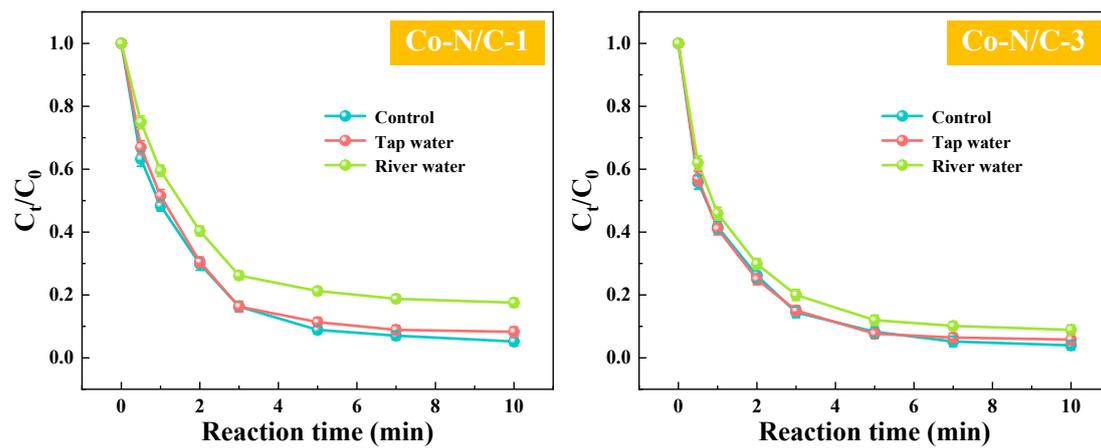


Fig. S9. The degradation tests of TC by Co-N/C-1/PMS and Co-N/C-3/PMS systems in real samples.

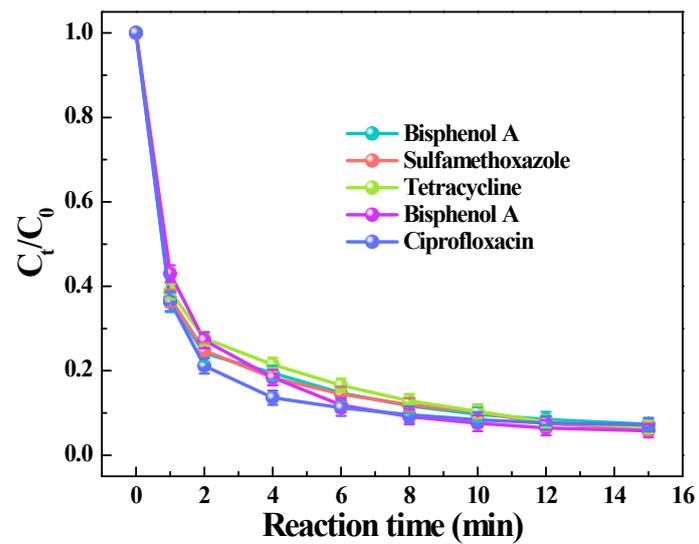


Fig. S10. Degradation curves of simulated wastewater simultaneously containing various pollutants over the reaction device.