

Supplementary information

**Alkali metal doped crystalline g-C₃N₄ with an enriched cyano group
for visible-light photocatalytic degradation of methylamine**

Peiyao Xiong^{a,b}, Qian Li^{a,b,c}, Qijun Tang^{a,b}, Haiqiang Wang^{a,b*}, Zhongbiao Wu^{a,b*}

^a Key Laboratory of Environment Remediation and Ecological Health, Ministry of Education, College of Environmental Resources Science, Zhejiang University, Hangzhou 310058, P.R. China.

^b Zhejiang Tianlan Environmental Protection Technology Co., Ltd., Zhejiang Provincial Engineering Research Center of Industrial Boiler & Furnace Flue Gas Pollution Control, Hangzhou, 311202, P. R. China.

^c Department of Environmental Science and Engineering, School of Petrochemical Engineering & Environment, Zhejiang Ocean University, Zhoushan, 316022, P. R.

* Corresponding author:

E-mail: haiqiangwang@zju.edu.cn, zbwu@zju.edu.cn ; Tel. / Fax: +86-571-87073074.
Full postal address: Key Laboratory of Environment Remediation and Ecological Health, Ministry of Education, College of Environmental & Resources Science, Zhejiang University, Hangzhou, 310058, P.R. China.

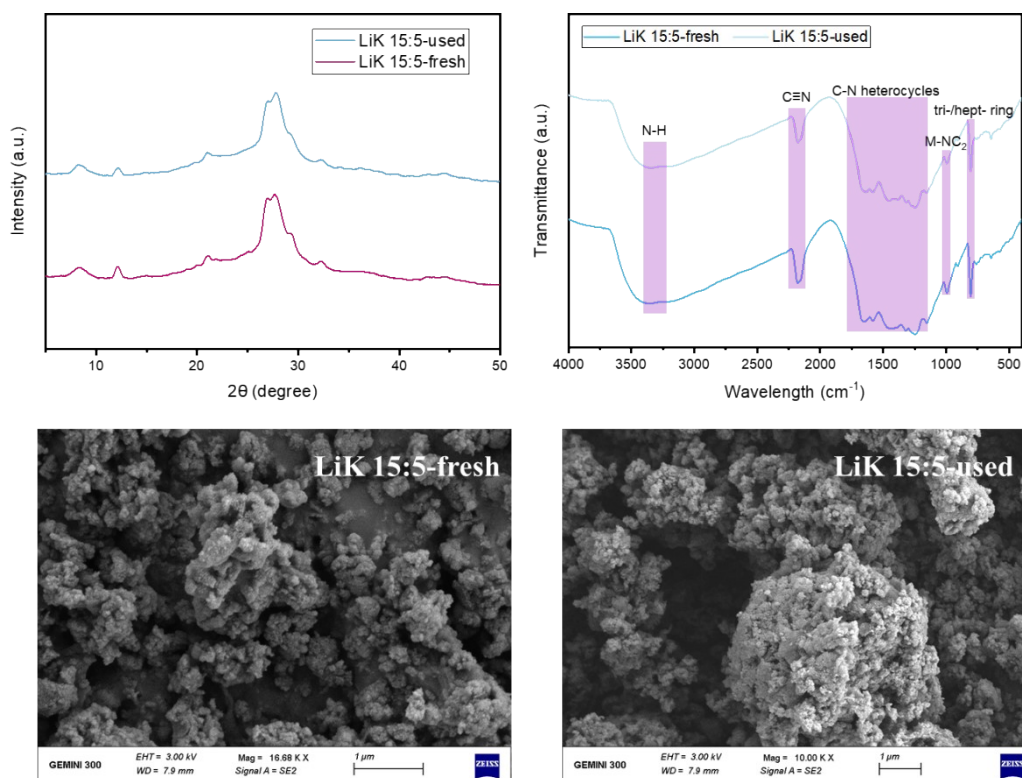


Figure S1. XRD spectra, FTIR spectra, and SEM image for the fresh or used LiK 15:5 sample.

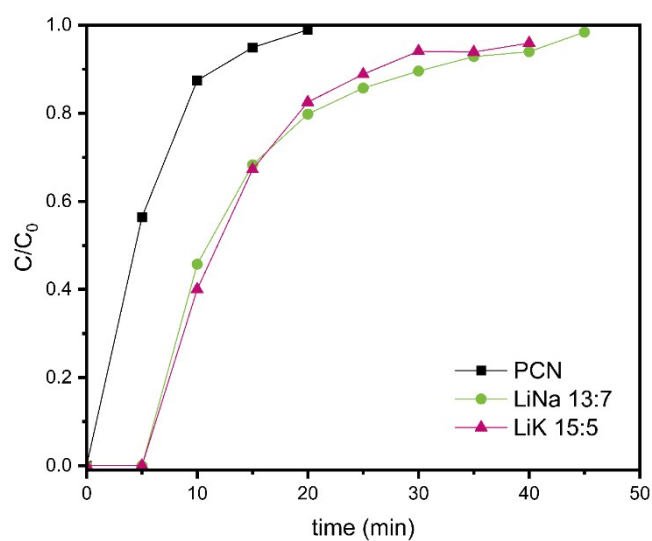


Figure S2. The adsorption breakthrough curve of methylamine on the catalyst surface.

Table S1

Doping amount of alkali metals of LiK 15:5 and LiNa 13:7 measured by ICP-MS.

Catalysts	Li content/ wt%	K content/ wt%	Na content/ wt%
LiK 15:5	1.3315	4.7973	
LiNa 13:7	0.9989		2.2920