

Electronic Supplementary information for

Adsorption of Cr(VI) onto magnetic CoFe₂O₄/MgAl-LDH composite and mechanism study

Lin Deng, Zhou Shi*, Xiaoxu Peng

Key Laboratory of Building Safety and Energy Efficiency, Ministry of Education, Department of Water Engineering and Science, College of Civil Engineering, Hunan University, Changsha 410082, PR China

*Corresponding author: Zhou Shi

Address: College of Civil Engineering, Yuelu Mountain, Hunan University, Changsha Hunan, 410082, China

E-mail address: 369329062@qq.com

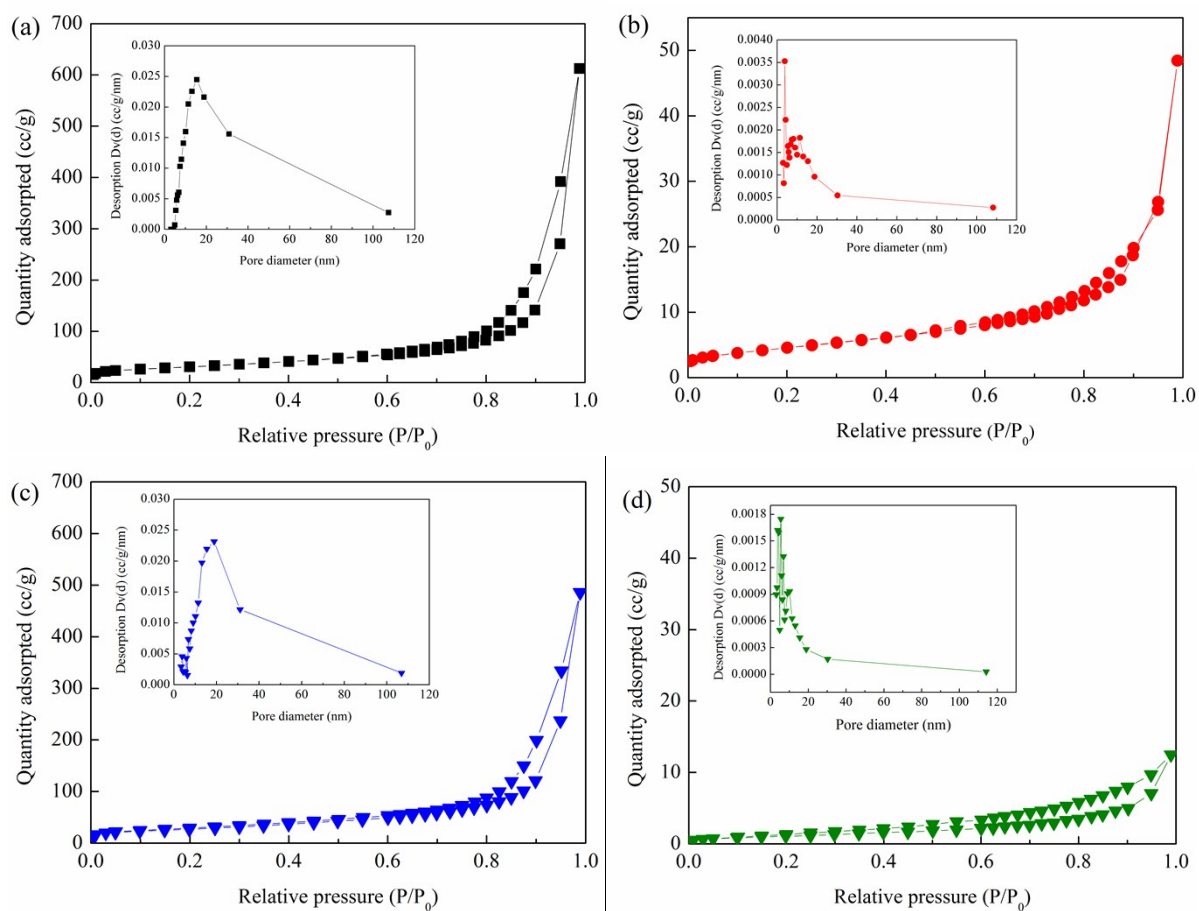


Fig. S1 Nitrogen adsorption-desorption isotherms and pore size distribution of (a) MgAl-LDH, (b) CoFe_2O_4 , (c) $\text{CoFe}_2\text{O}_4/\text{MgAl-LDH}$, and (d) $\text{CoFe}_2\text{O}_4/\text{MgAl-LDH}$ after Cr(VI) adsorption.

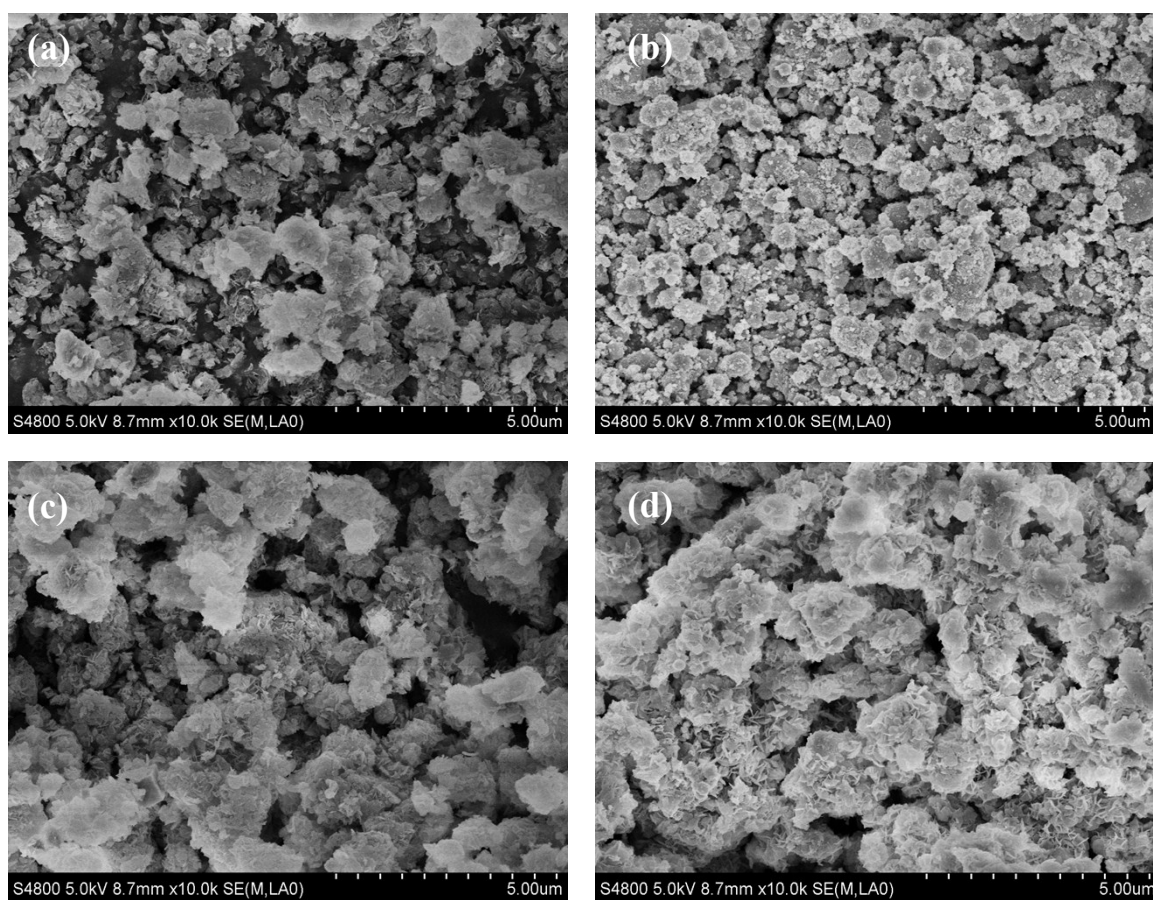


Fig. S2 SEM of (a) MgAl-LDH, (b) CoFe₂O₄, (c) CoFe₂O₄/MgAl-LDH, and (d) CoFe₂O₄/MgAl-LDH after Cr(VI) adsorption.

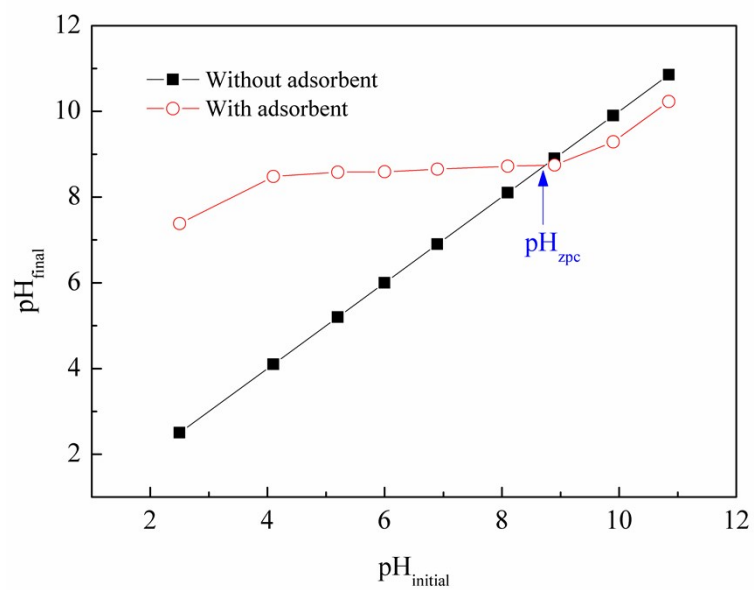


Fig. S3 Illustration of the pH_{zpc} of $\text{CoFe}_2\text{O}_4/\text{MgAl-LDH}$.

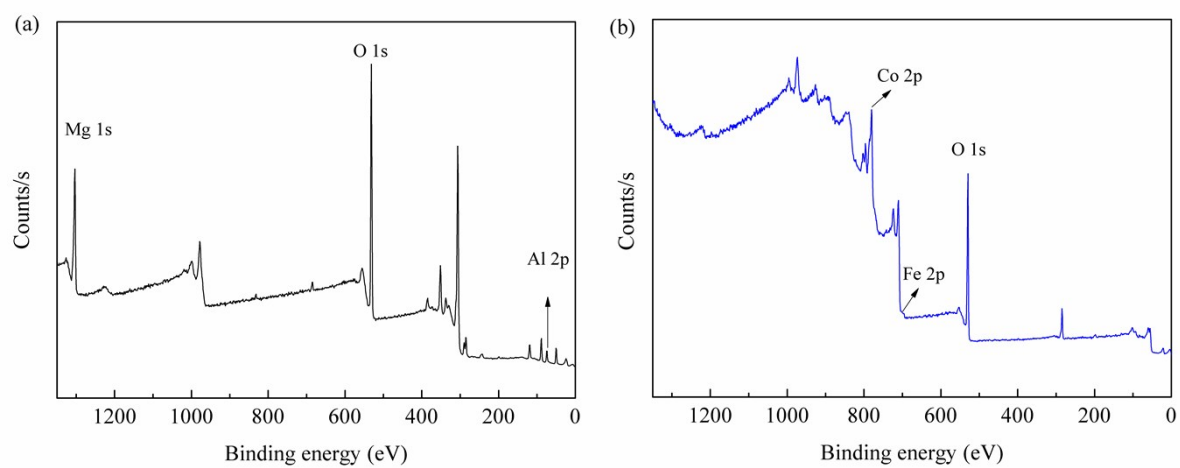


Fig. S4 Wide XPS spectra of (a) MgAl-LDH, (b) CoFe₂O₄.

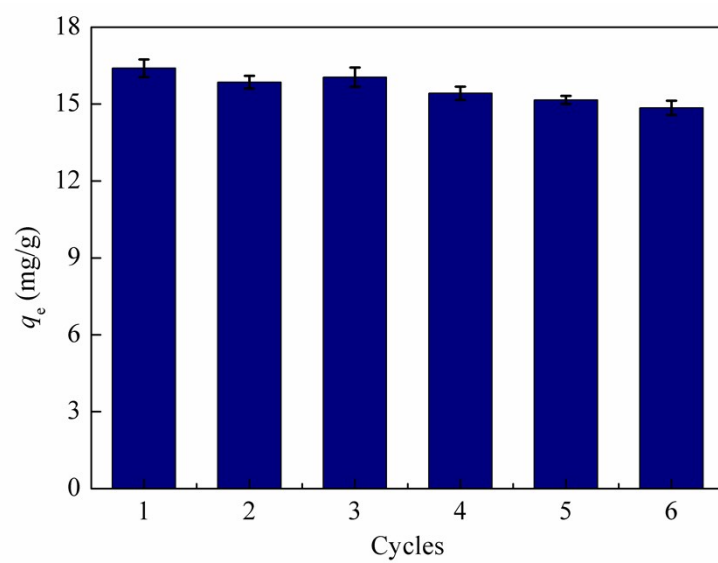


Fig. S5 Sixth consecutive adsorption-desorption cycles of $\text{CoFe}_2\text{O}_4/\text{MgAl-LDH}$.