

Halloysite Nanotubes as an Effective and Recyclable Adsorbent for Removal of Low-Concentration Antibiotics Ciprofloxacin

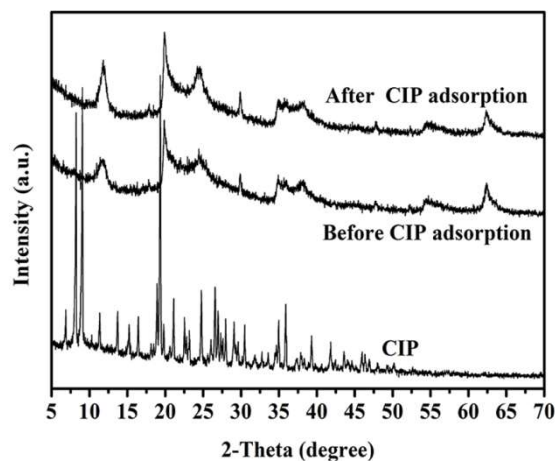


Figure S1. XRD patterns of HNTs before and after CIP adsorption.

Table S1. The q_{\max} values of HNTs and other clays toward CIP.

Absorbents	q_{\max} (mg/g)	Refs
Modified coal fly ash	1.547	[1]
kaolinite	6.99	[2]
Aluminum hydrous oxide	14.72	[3]
halloysite	25.09	this work
Iron hydrous oxide	25.76	[4]
Illite	33	[5]
Montmorillonite	71.6	[6]
Birnessite	80.96	[7]
Palygorskite-montmorillonite	107	[8]
Carbon xerogel	112	
Carbon nanotubes	135	[9]
Activated carbon	231	
Bentonite	147	[10]
Graphene oxide	379	[11]

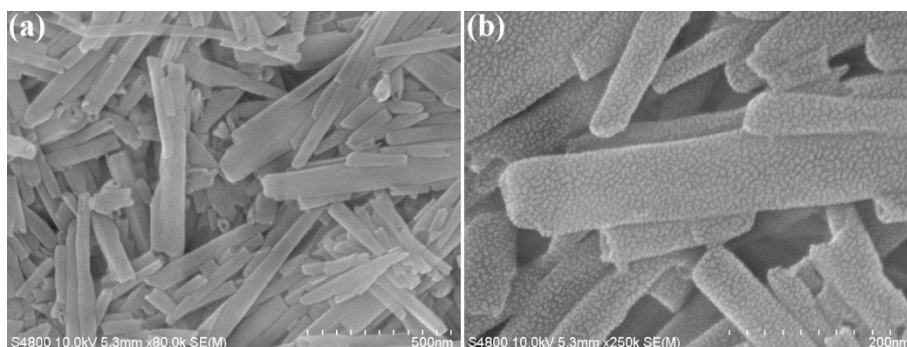


Figure S2. SEM images of HNTs immersed in deionized water without CIP molecules for 90 min.

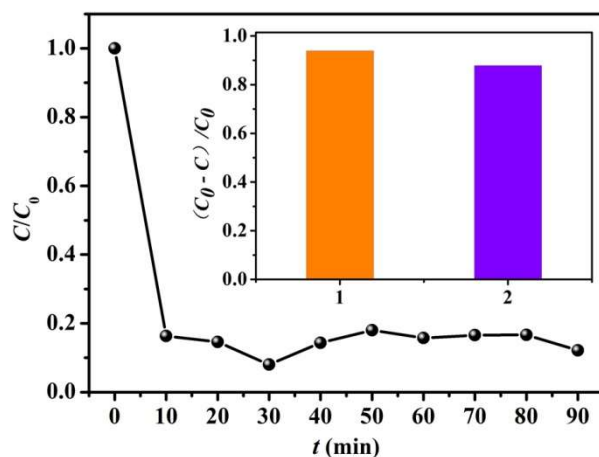


Figure S3. The adsorption efficiency of HNTs toward CIP after HNTs immersed in deionized water for 90 min. The insert graph is the comparison of adsorption efficiencies of HNTs (1-without immersion in deionized water; 2-with immersion in deionized water).

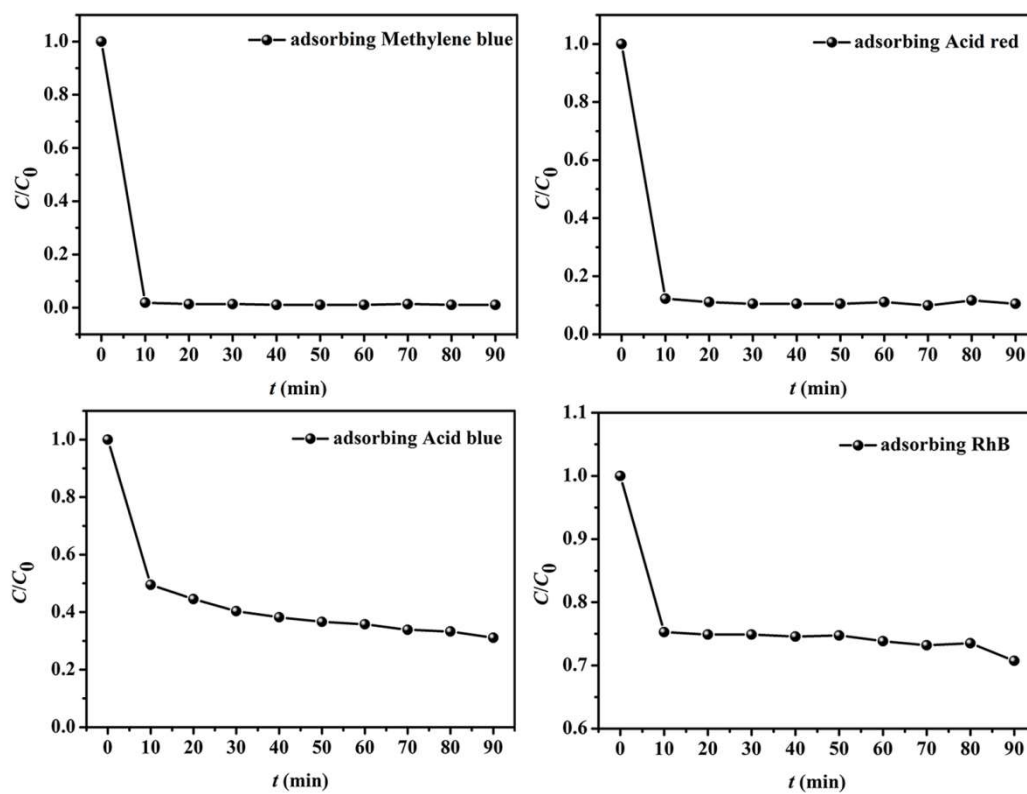


Figure S4. The adsorption efficiency of HNTs toward various cationic organic dyes.

References

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