

Gallic Acid-functionalized Graphene Hydrogel as Adsorbent for Removal of Chromium (III) and Organic Dye Pollutants from Tannery Wastewater

*Gongyan Liu,^{ab} Ruiquan Yu,^{ab} Tianxiang Lan,^b Zheng Liu,^c Peng Zhang^d and Ruifeng
Liang,^{*d}*

^a National Engineering Laboratory for Clean Technology of Leather Manufacture,
Sichuan University, Chengdu 610065, China.

^b The Key Laboratory of Leather Chemistry and Engineering of Ministry of
Education, Sichuan University, Chengdu 610065, China

^c Jiangsu Province Special Equipment Safety Supervision and Inspection Institute,
Wuxi 214717, China

^d The State Key Laboratory of Hydraulic and Mountain River Engineering, Sichuan
University, Chengdu 610065, China

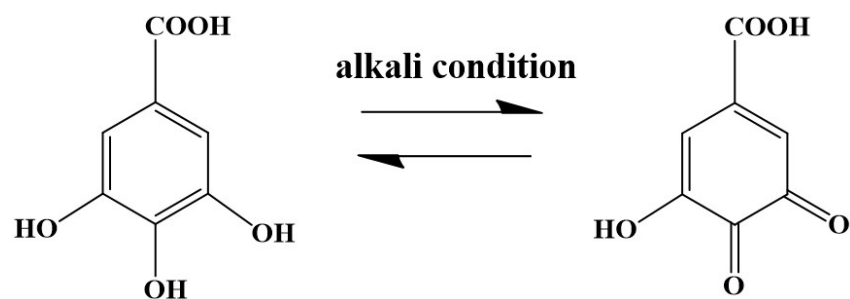
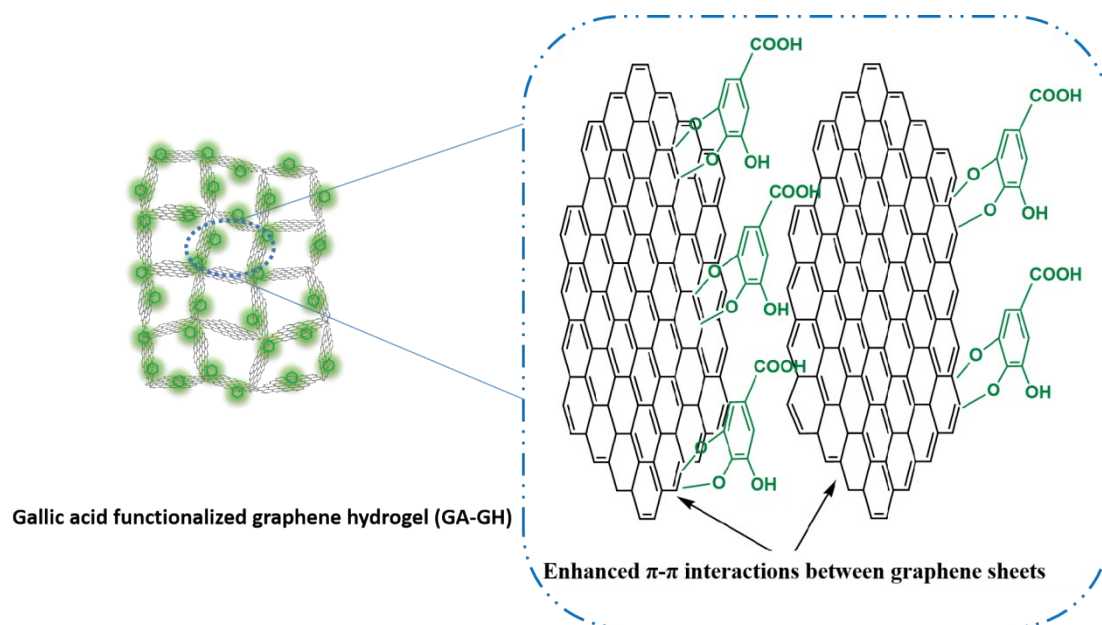


Fig. S1 Transformation of GA under alkali condition.



Scheme S1. Schematic illustration of the formation process of gallic acid functionalized graphene hydrogel (GA-GH).

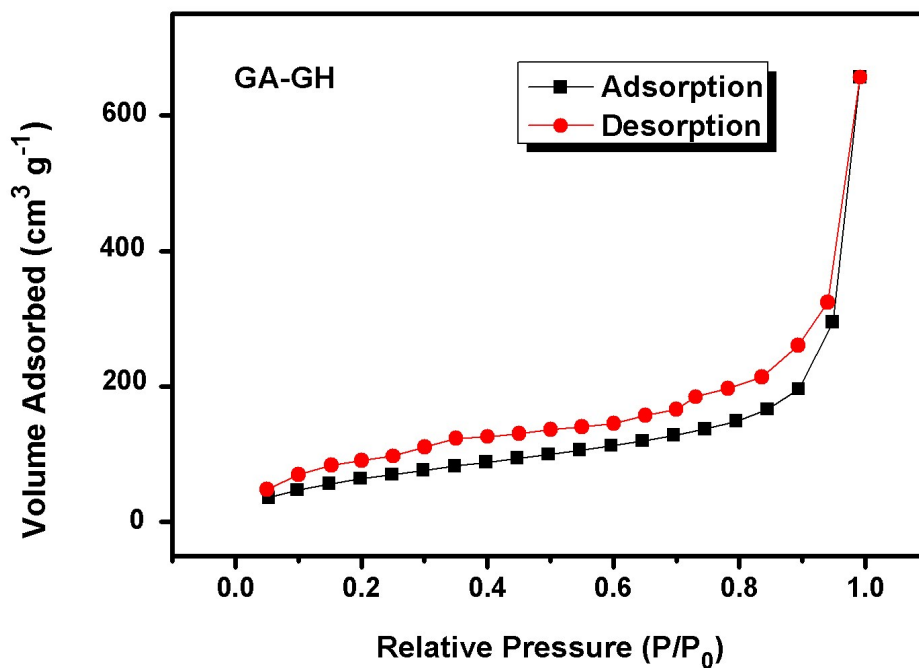


Fig. S2 Nitrogen gas adsorption and desorption isotherms of GA-GH.

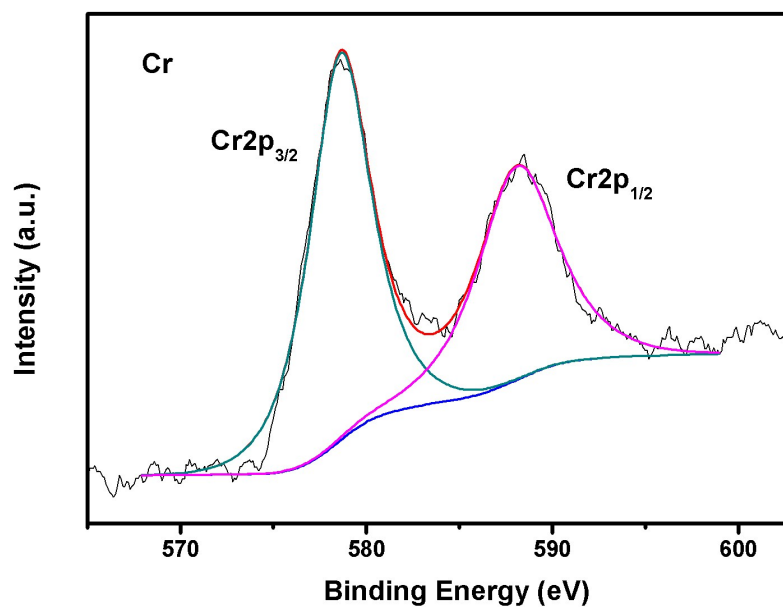


Fig. S3 High-resolution XPS of Cr peaks of GA-GH after adsorption for Cr(III).

