

Supporting information

A Proton-Exchange Poly (acrylic acid) Supramolecular Hydrogel for Ultrahigh Uranium Adsorption

Zhongkuan Sun, Yongyi Chen, Yan Liu, Bing Na*, Cheng Meng, Shuang Zhang, Shufen Zou,
Hesheng Liu

State Key Laboratory of Nuclear Resources and Environment, Jiangxi Province Key Laboratory of
Polymer Micro/Nano Manufacturing and Devices, East China University of Technology, Nanchang,
330013, People's Republic of China

Figures: 3

*Correspondence author. E-mail address: bnash@ecit.edu.cn, bingnash@163.com

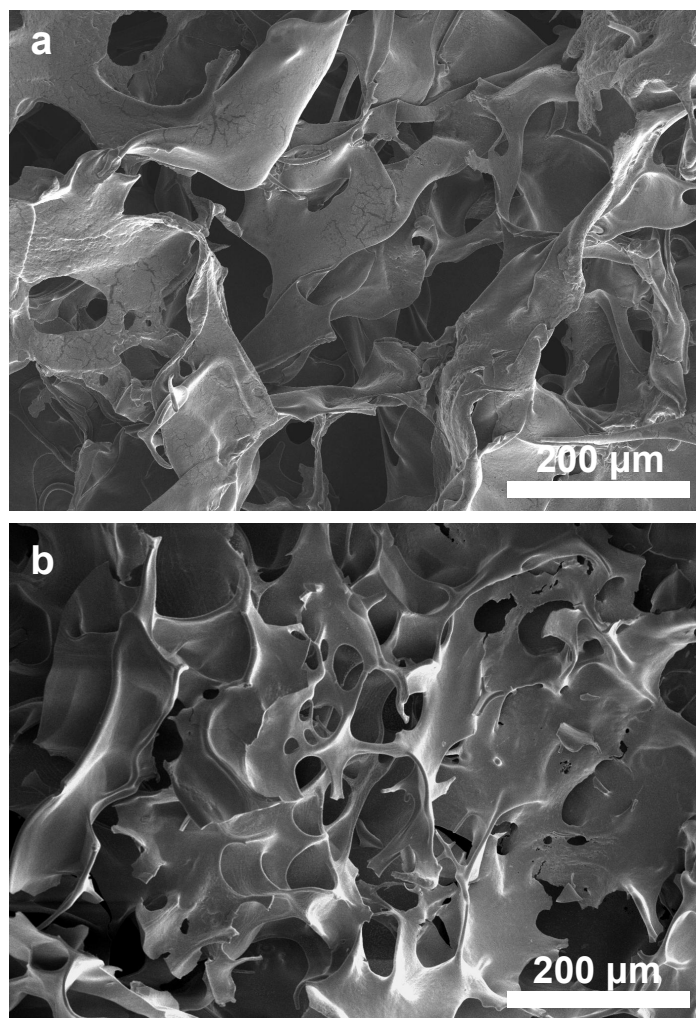


Figure S1 SEM micrographs of PAA (a) aerogel and (b) hydrogel.

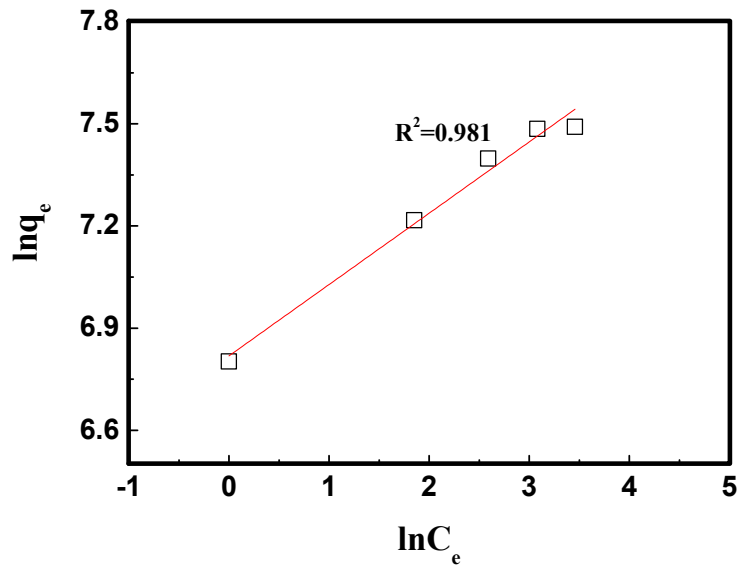


Figure S2 Fitting of adsorption isotherm of PAA hydrogel by Freundlich model

Freundlich model: $\ln q_e = \ln K_f + \frac{1}{n} \ln C_e$

where K_f and n are the Freundlich constants related to the adsorption capacity and adsorption intensity, respectively.

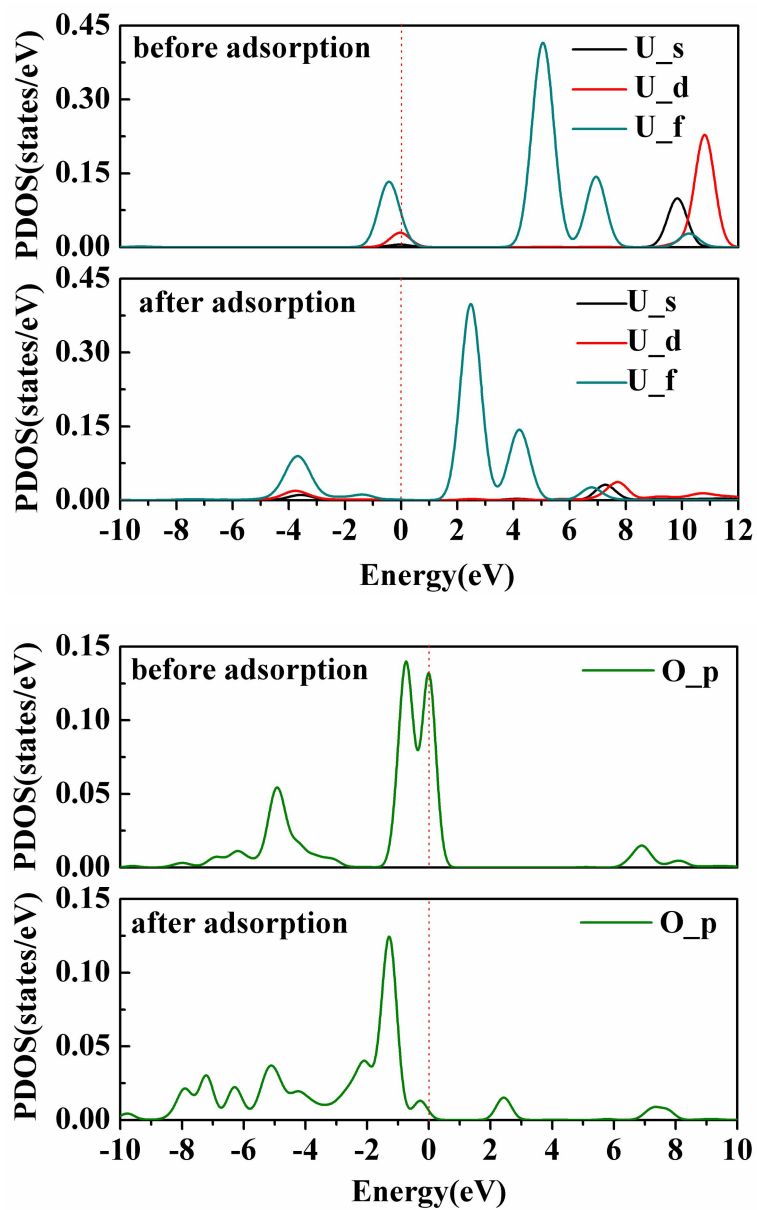


Figure S3 Projected density of states of U and O atoms before and after adsorption.