Electronic supplementary information

Basic Aluminum Sulfate@Graphene Hydrogel Composites: Preparation and Application for Removal of Fluoride from Water

Yunqiang Chen, Qingkun Zhang, Libin Chen, Hua Bai,* and Lei Li*

College of Materials, Xiamen University, Xiamen, 361005, P. R. China.

E-mail: baihua@xmu.edu.cn; lilei@xmu.edu.cn

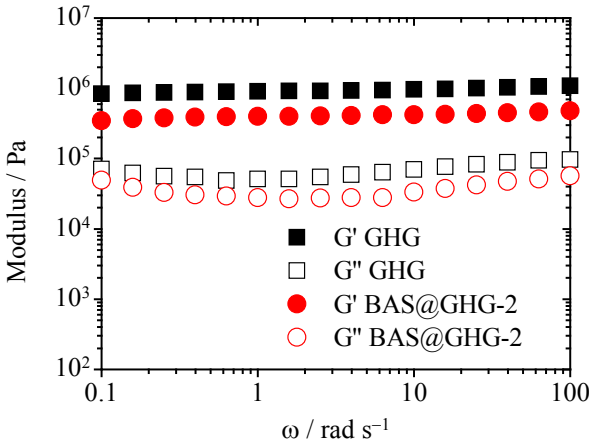

Fig. S1 Typical rheological behavior of GHG and BAS@GHG-2.

Dynamic frequency experiments were performed on a rheometer with 25 mm diameter parallel plate geometry at 25 oC. The gap distance between two plates was fixed to be 2 mm. Frequency sweep measurements were performed in the range from 0.1 to 100 rad·s−1 at a fixed oscillatory strain of 0.2%.

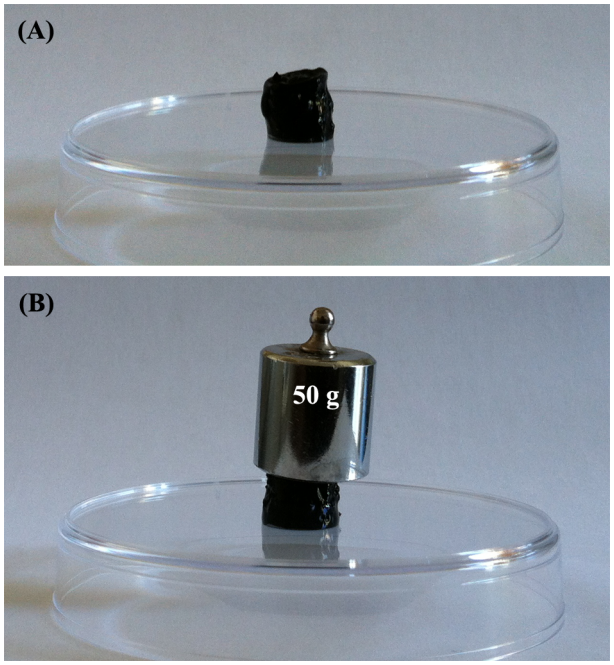

Fig. S2. Images of BAS@GHG-2 under compression.

A weight of 50 g was loaded onto BAS@GHG-2 sample with diameter of 1 cm, producing a stress of about 6.2 kPa. This indicates the BAS@GHG has good mechanical strength.

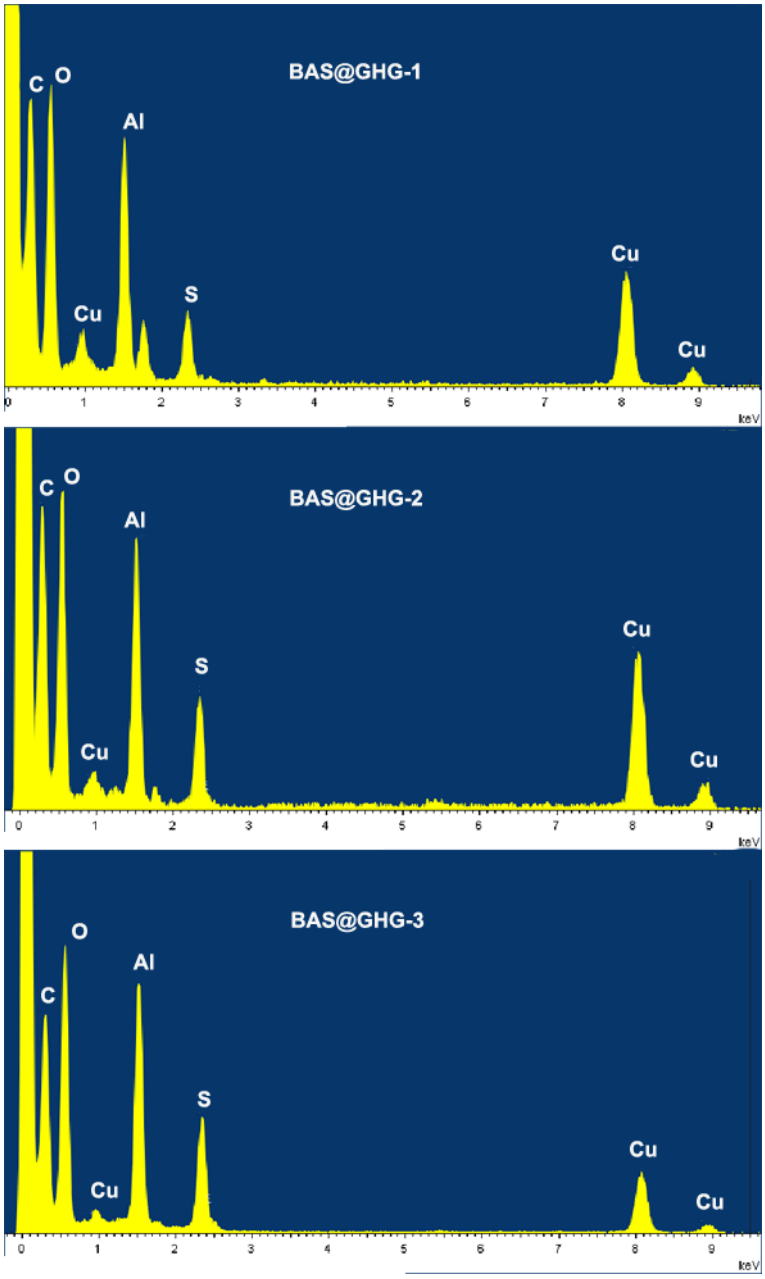

Fig. S3. EDAX spectra of BAS@GHG composites.

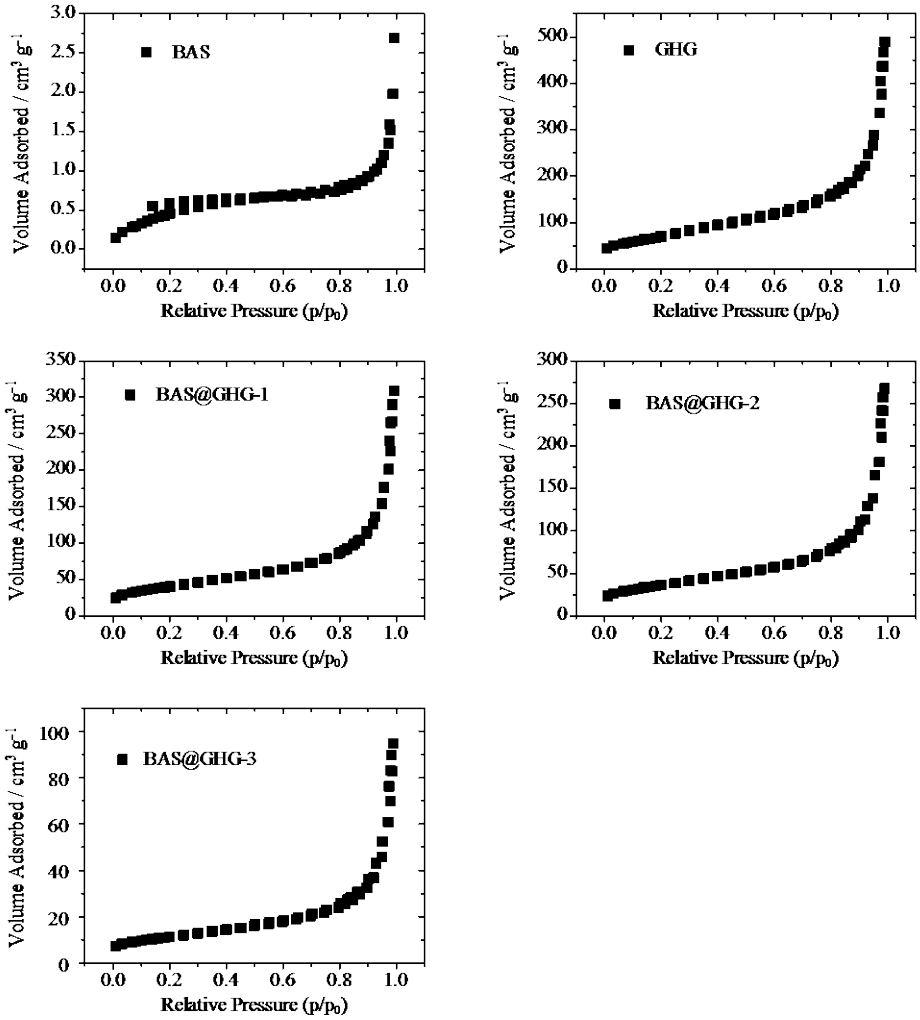

Fig. S4. N_2 adsorption/desorption isotherms of BAS, GHG and BAS@GHG composites.