Supplementary material

Controllable and green synthesis of robust graphene aerogels with tunable surface properties for oil and dyes adsorption

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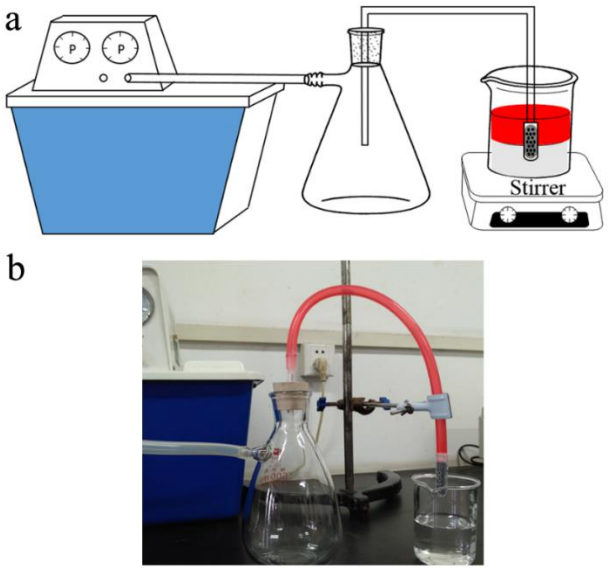

Fig. S1. (a) The diagram of vacuum system equipment for continuous oil removal from water; (b)The device for continuous oil removal from water.

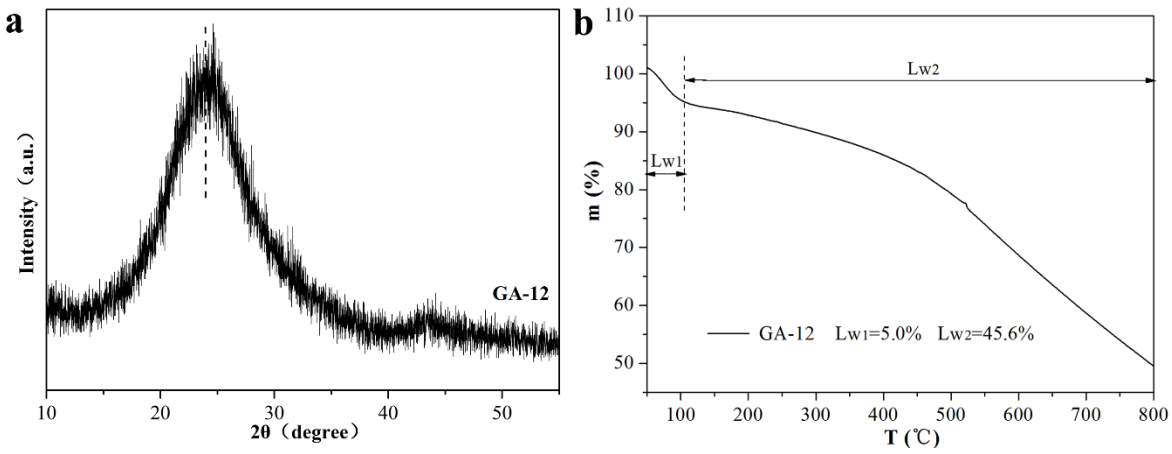

Fig. S2. (a) XRD patterns and (b) TG of GA-12.

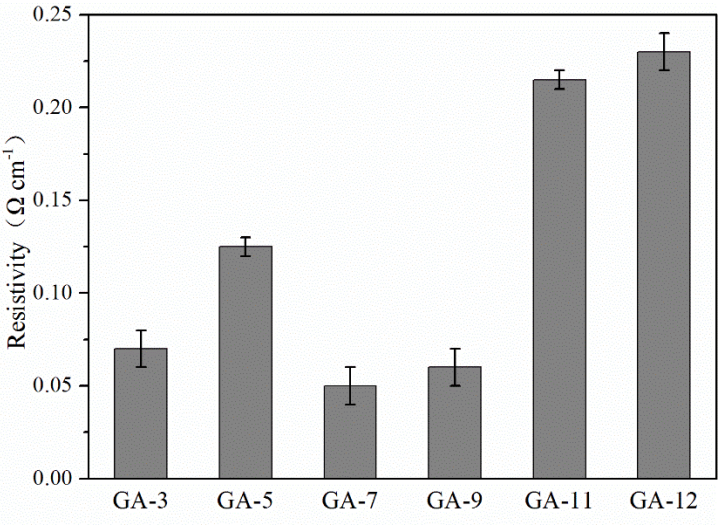

Fig. S3. The electrical resistivity of GA-3, GA-5, GA-7, GA-9, GA-11 and GA-12.

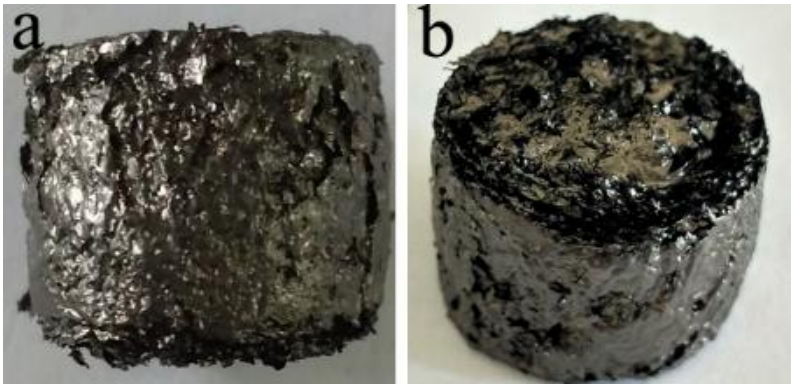

Fig. S4. The photograph of GA-12.

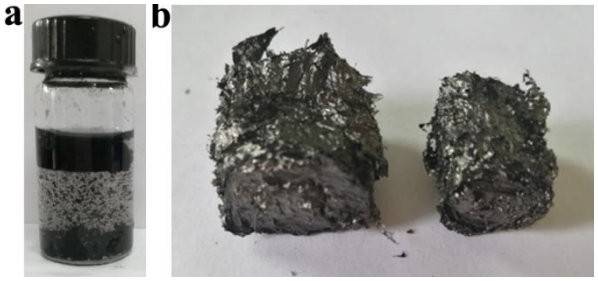

Fig. S5. The photographs of (a) the hydrogel and (b) the aerogels of GA-5 prepared in the absence of VC.

Fig. S6 Photographs of GA-5 (0.024g, 9 mg/cm^3, 1.5 cm in diameter, 1.5 cm in height) supporting a bunch of coins (the mass of each coin is ~6 g).

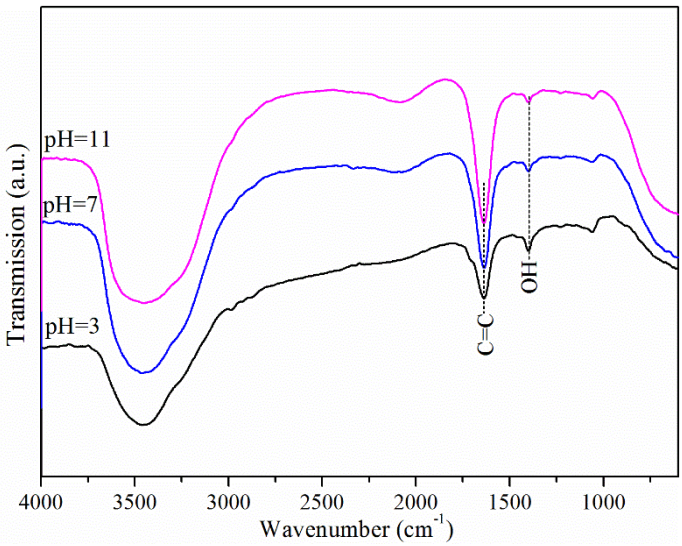

Fig. S7. FT-IR spectra of VC solution at different pH values.

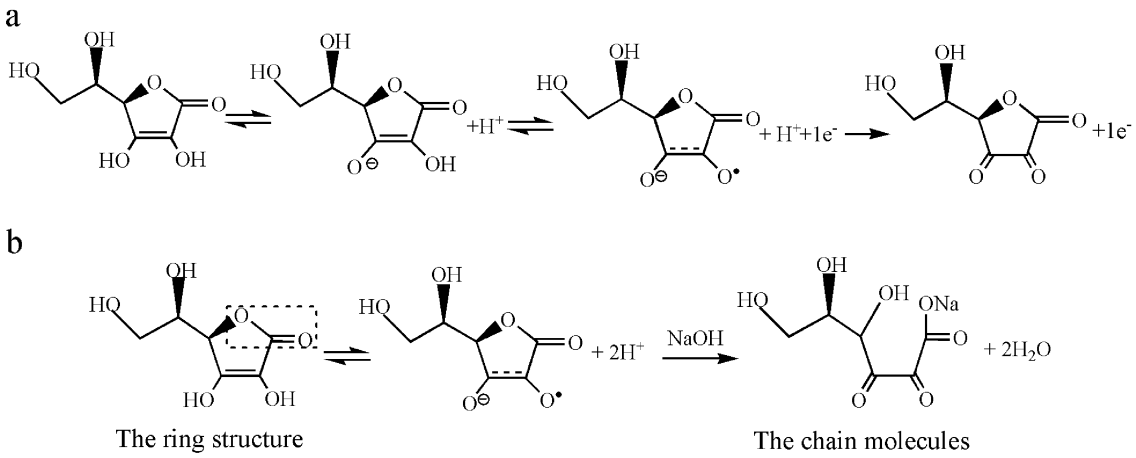

Fig. S8. (a) The chemical reaction process of VC under acidic conditions; (b) The reaction pathway of VC under alkaline conditions.

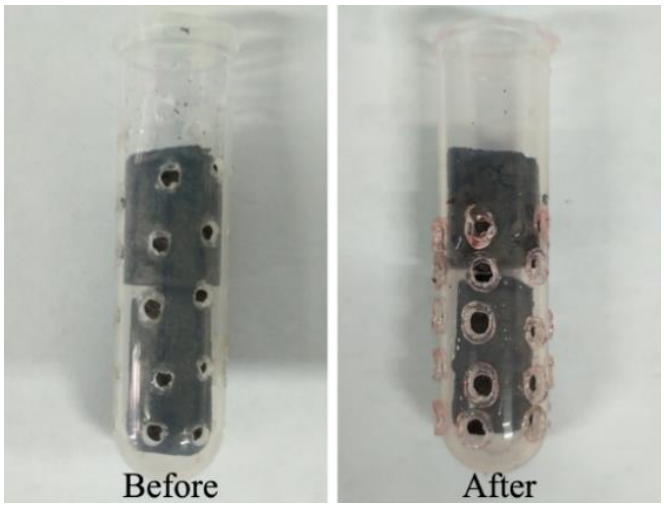

Fig. S9. The photographs of GA-5 before and after continuous separation experiment.

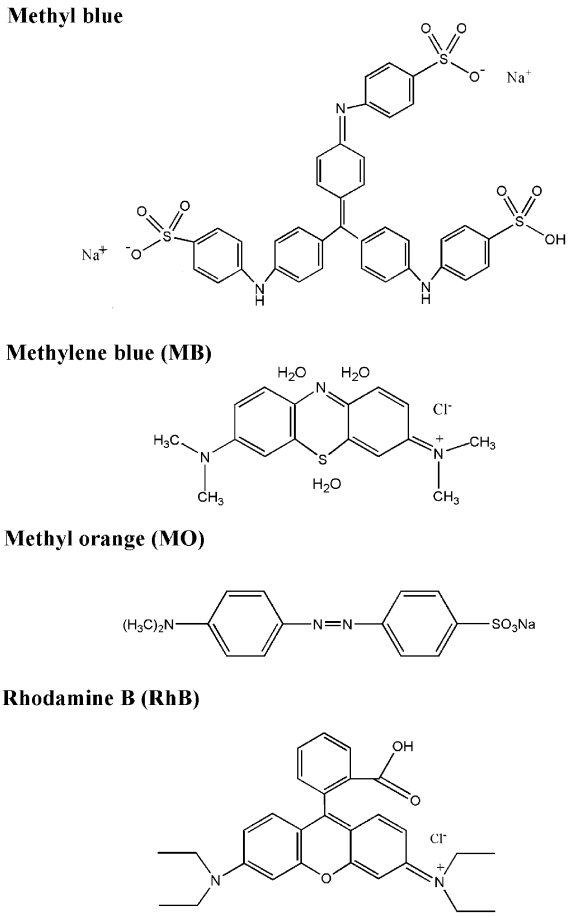

Fig. S10. The structure of methyl blue, methylene blue (MB), methyl orange (MO) and rhodamine B (RhB).