

Carbonised sieve-like corn straw cellulose-graphene oxide composite for
organophosphorus pesticides removal

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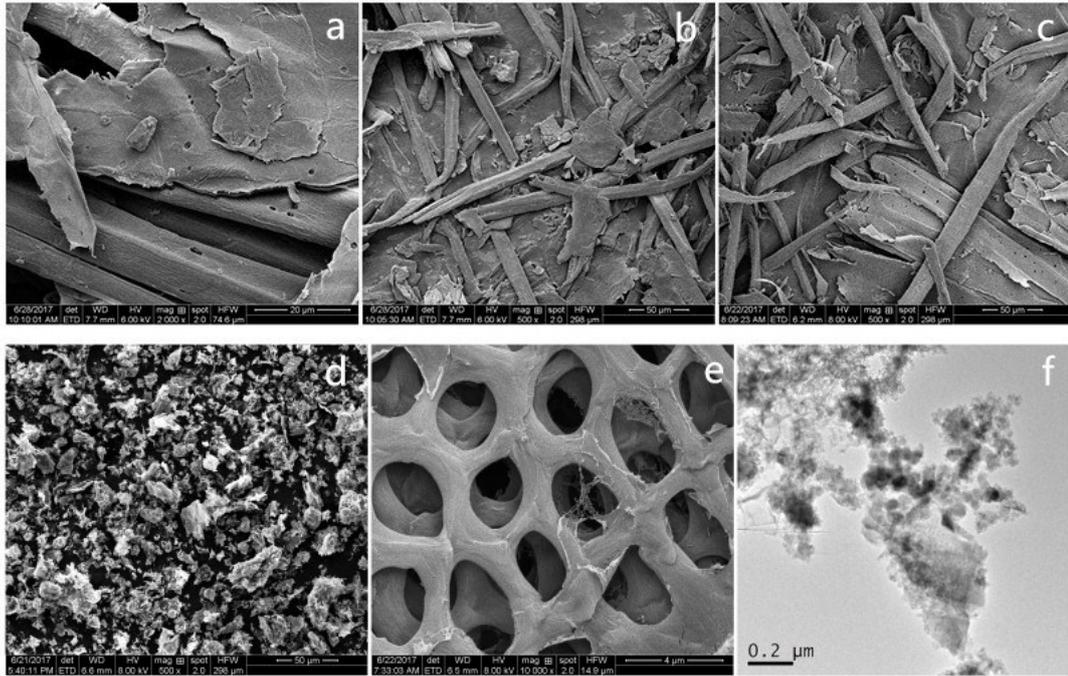


Fig. S1 the SEM images of cellulose (a)(b); the SEM image of CCE/G (c); the SEM image of GO (d); the SEM image of CCE (e); the TEM image of ACCE/G (f)

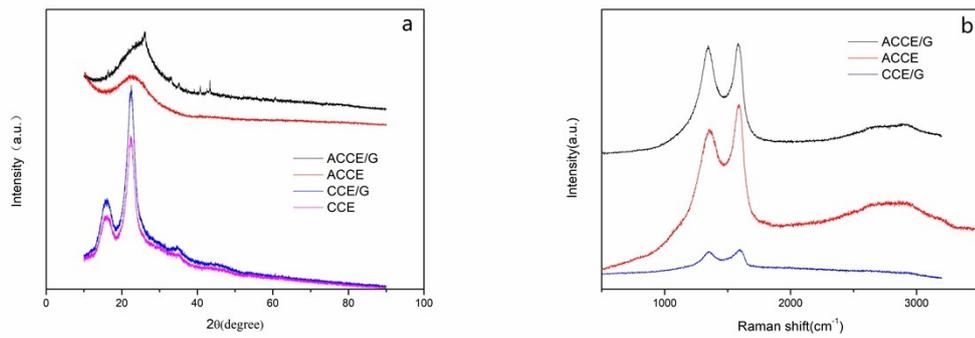


Fig. S2 X-ray diffraction patterns for CCE, CCE/G , ACCE and ACCE/G(a); Raman spectras of CCE/G, ACCE and ACCE/G (b)

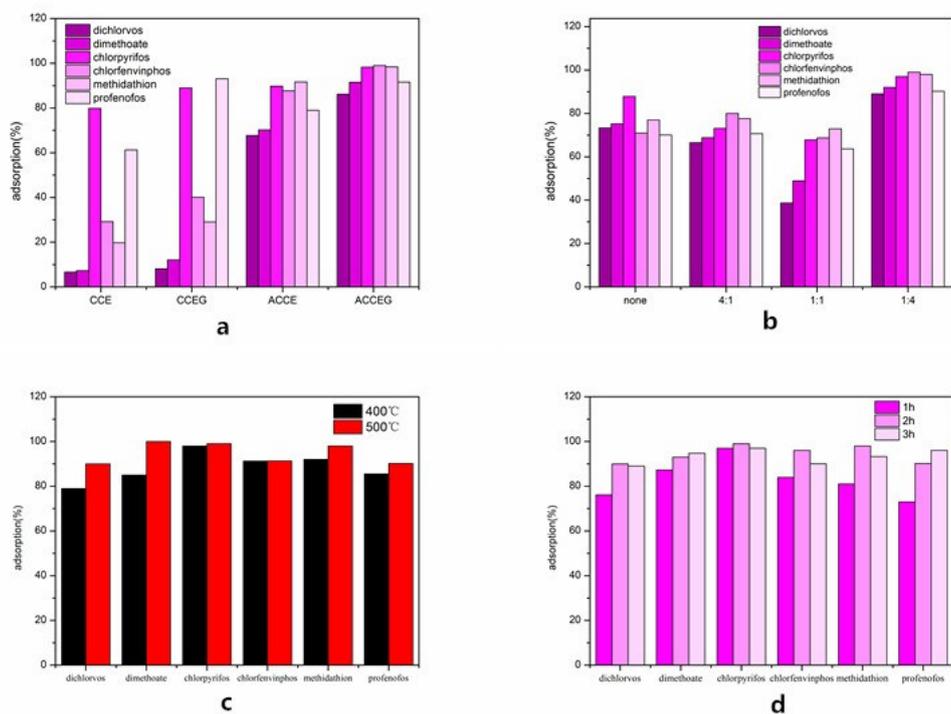


Fig.S3 Effects of different condition of synthesis on the adsorption efficiency: Heat-activated and have GO or not (a); The component of KOH(b); Heat-activated temperature(c); Heat-activated time(d).

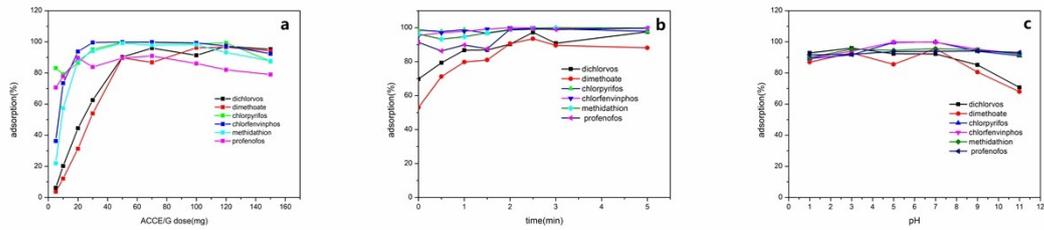


Fig.S4 Effect of the ACCE/G dose on the adsorption (a); Effect of the vortex time on the adsorption (b); Effect of pH on the adsorption (c)

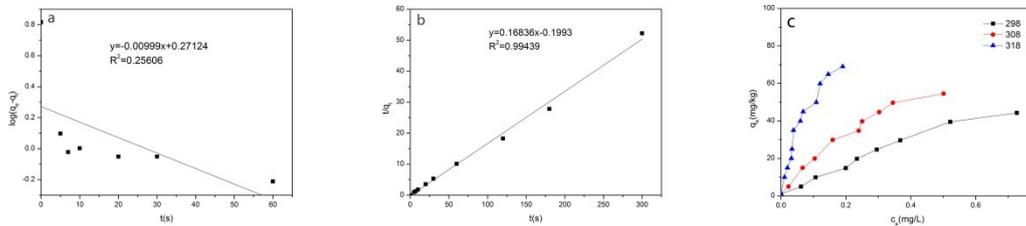


Fig.S5 Kinetic studies of chlopyrifos on to ACCE/G: Pseudo-first-order kinetics model (a); Pseudo-second-order kinetic model (b); Adsorption isotherms of chlopyrifos on ACCE/G (c)