

Figure S1 Morphology of gel micro-spheres under different concentrations of sodium alginate:

(1) 0.5%, (2) 1%, (3) 1.5%, (4) 2%, and (5) 2.5%.

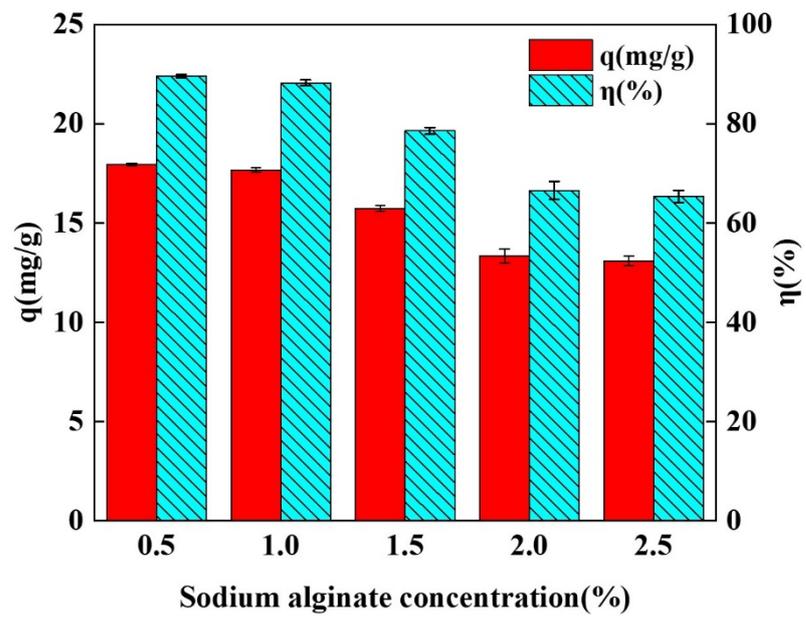


Figure S2 Effects of different sodium alginate concentrations on spherical adsorbent

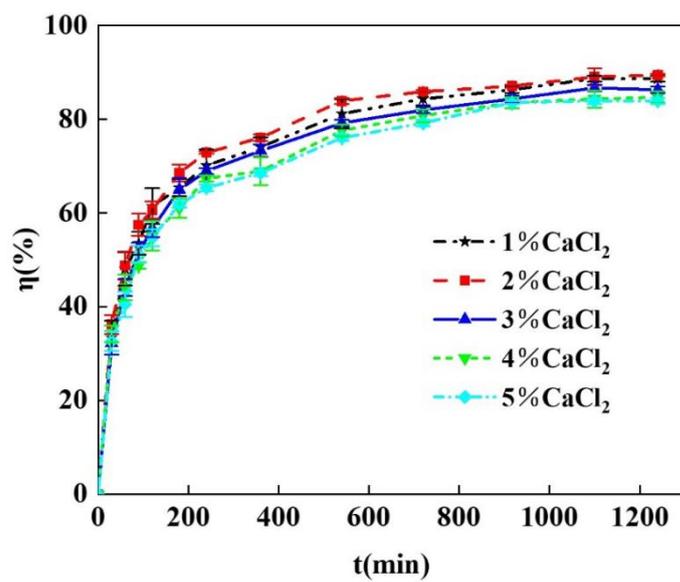
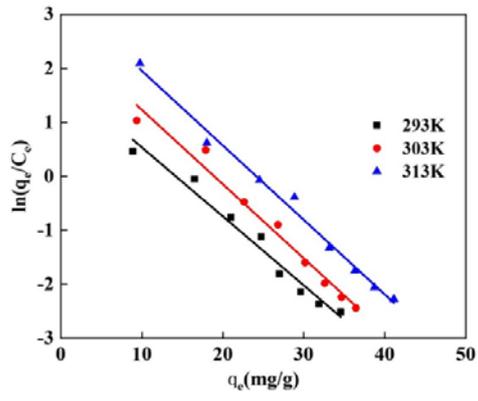
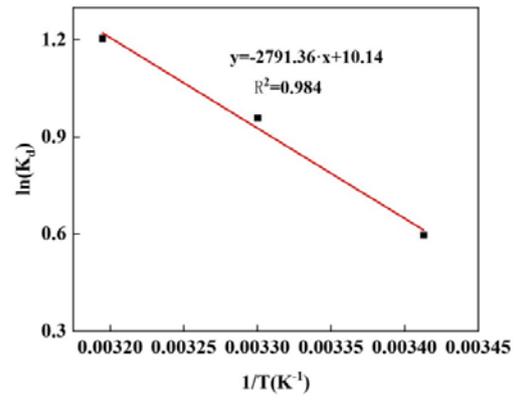


Figure S3 Effects of different  $\text{CaCl}_2$  concentrations on spherical adsorbent



(a)



(b)

Figure S4 (a) Linear diagram for solving thermodynamic parameter  $K_d$ ; (b) Linear diagram for thermodynamic parameter