

Supplementary file data

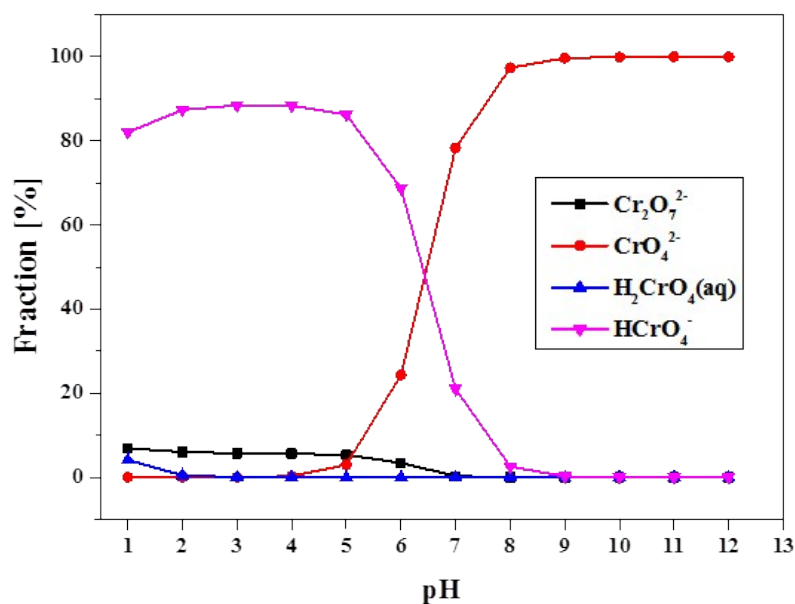
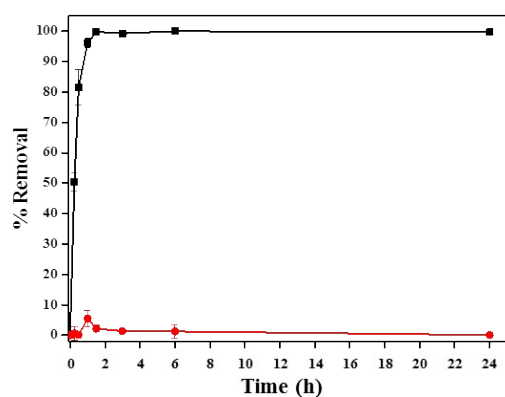
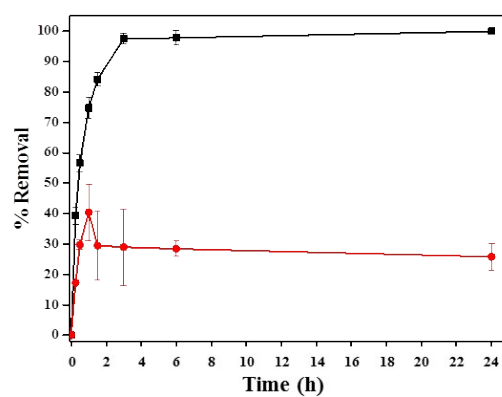


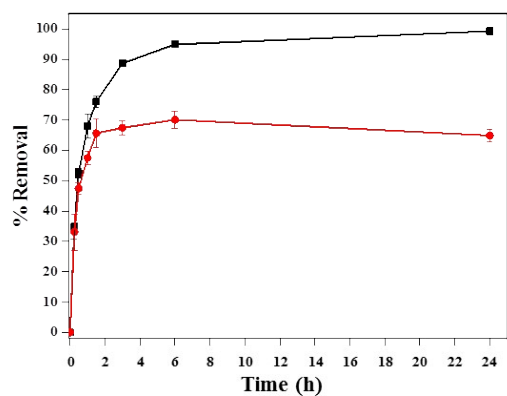
Figure S1: Speciation profiles of Cr(VI) at different pH range from 1 to 12 with 100 ppm concentration obtained by using chemical equilibrium speciation model(VISUAL MINTEQ version 3.1 software).



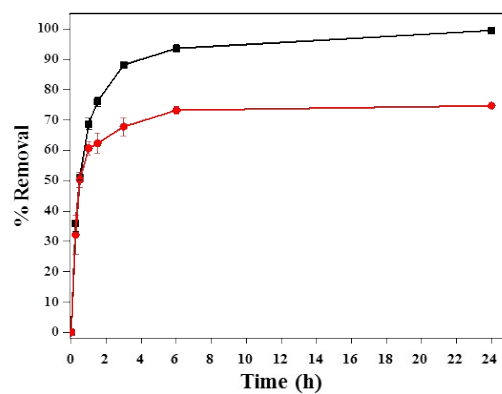
(a)



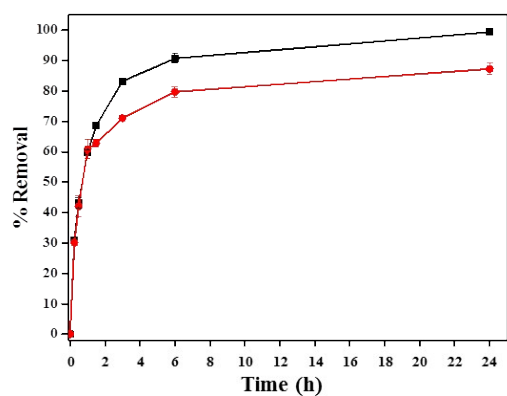
(b)



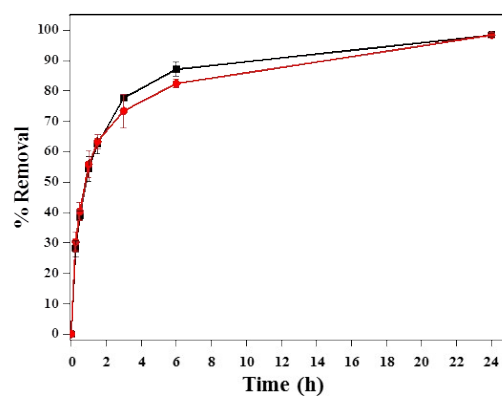
(c)



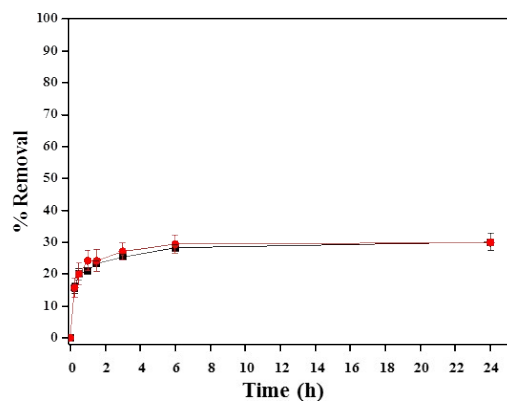
(d)



(e)



(f)



(g)

Figure S2: Graph in black and red denotes % Cr(VI) removal and % total Cr removal respectively with respect to time from 20 mL of 100 ppm Cr(VI) solution at different pH

values (a) pH 1, (b) pH 2, (c) pH 3, (d) pH 5, (e) pH 7, (f) pH 8 and (g) pH 12, difference of both curve gives the Cr(III) desorbed in solution after reduction.