

Supporting Information for

Cotton derived carbonaceous aerogels for efficient organic pollutants and heavy metal ions removal

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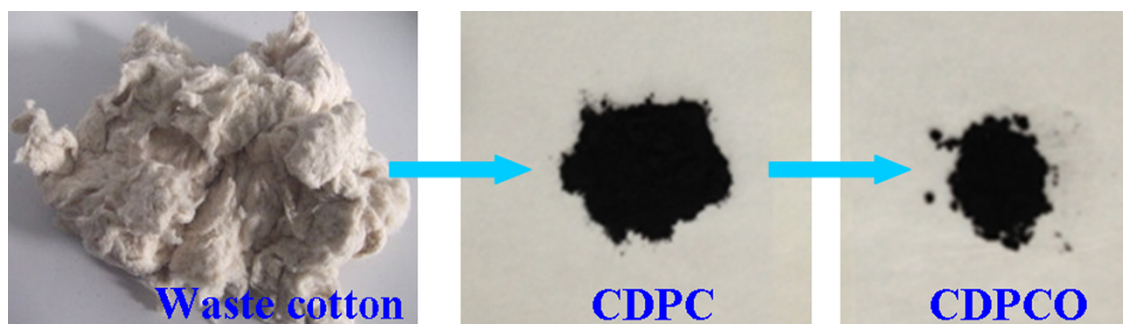


Fig. S1 images of cotton, CDPC and CDPCO.

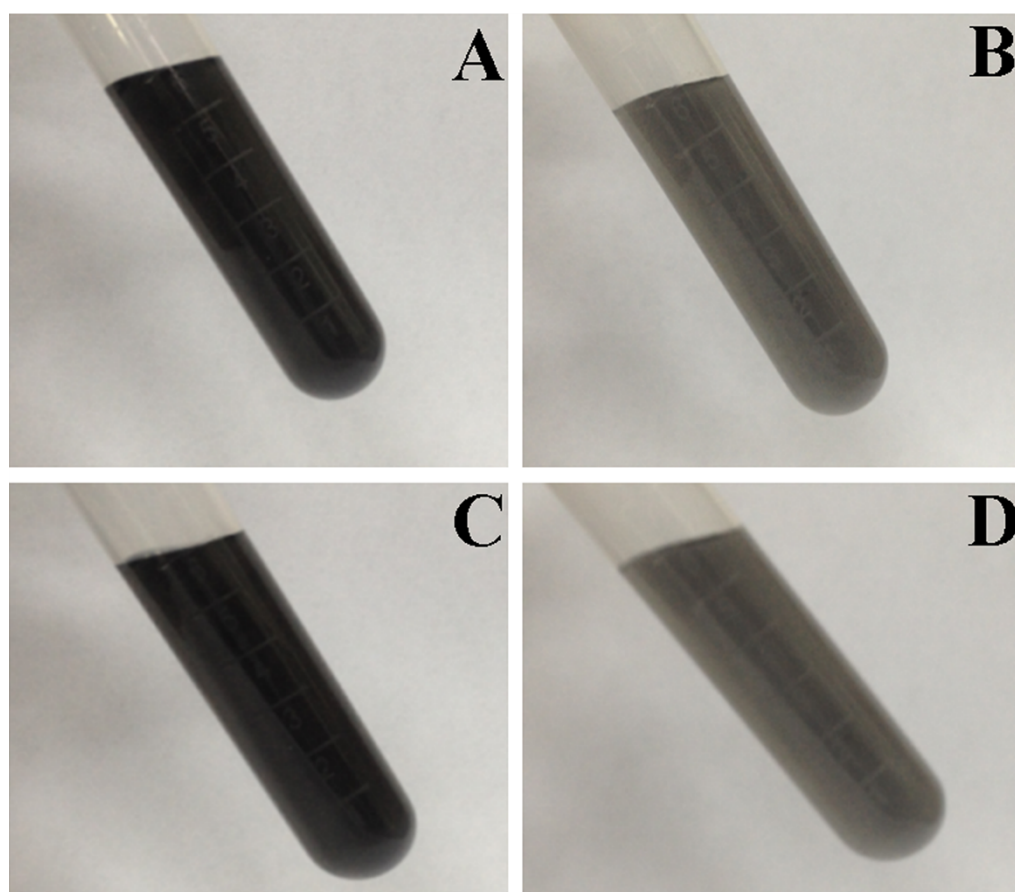


Fig. S2 (A) Stock suspension of CDPC 0.6 g/L, (B) initial adsorption concentration of CDPC 0.1 g/L, (C) stock suspension of CDPCO 0.6 g/L, (D) initial adsorption concentration of CDPCO 0.1 g/L

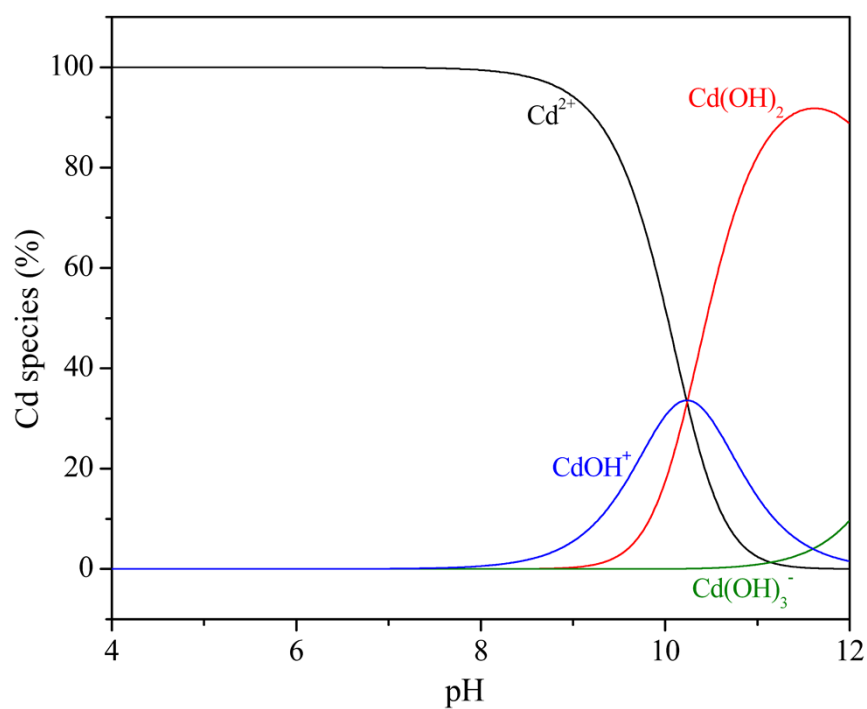


Fig. S3. Species distribution of Cd, ($\log\beta_1 = 3.9$, $\log\beta_2 = 7.7$, and $\log\beta_3 = 8.7$), $T = 298$ K.

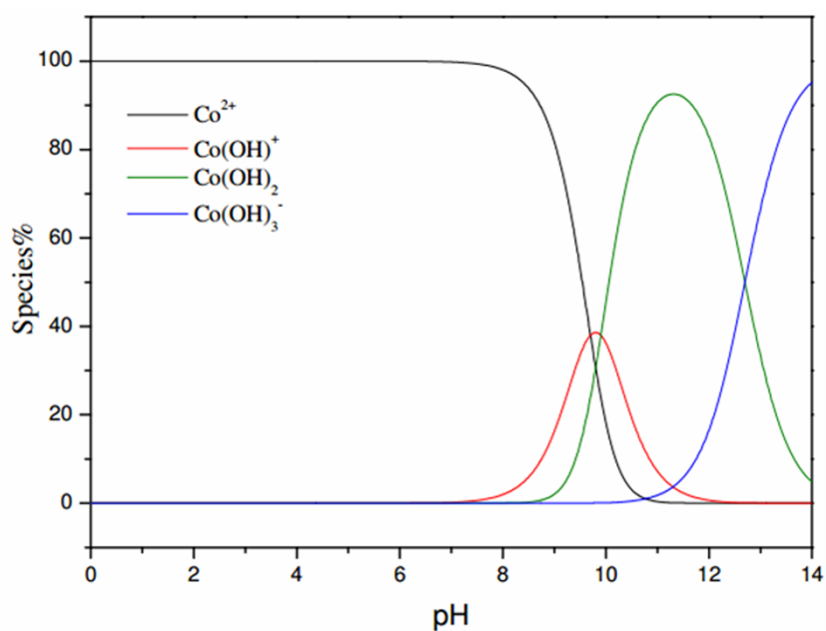


Fig. S4. Species distribution of Co, ($\log\beta_1 = 4.3$, $\log\beta_2 = 7.4$ and $\log\beta_3 = 8.4$), $T = 298$ K.

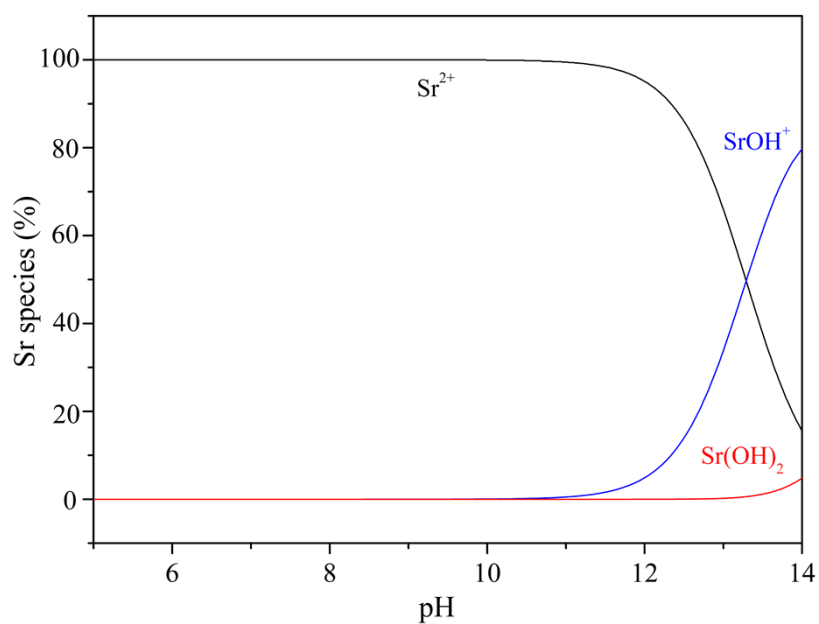


Fig. S5. Species distribution of Sr, ($\log\beta_1 = -13.3$ and $\log\beta_2 = -28.5$), $T = 298$ K.

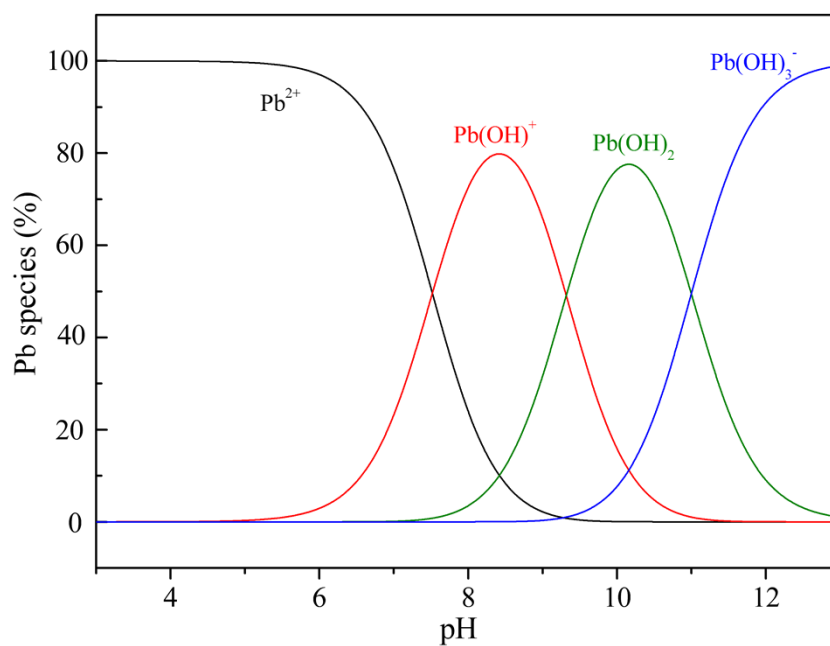


Fig. S6. Species distribution of Pb, ($\log\beta_1 = 6.5$, $\log\beta_2 = 11.2$ and $\log\beta_3 = 14.2$), $T = 298$ K.

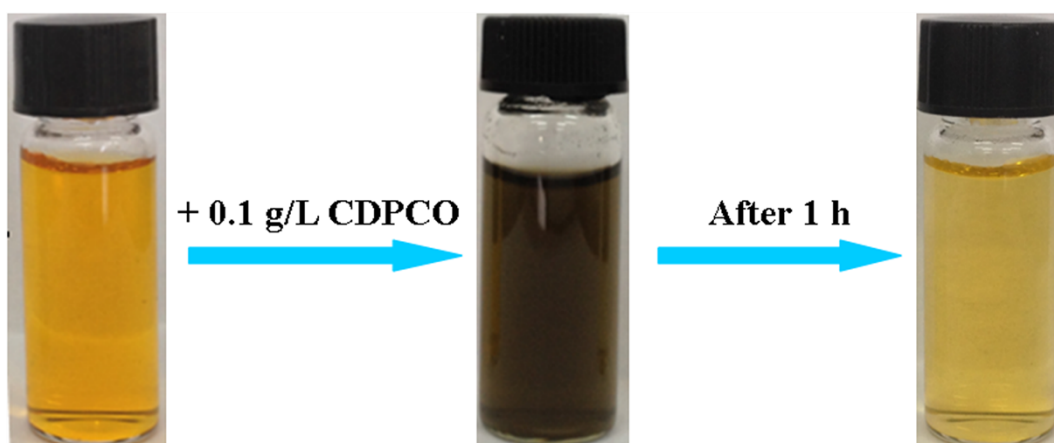


Fig. S7 Image of MO before and after CDPCO treatment

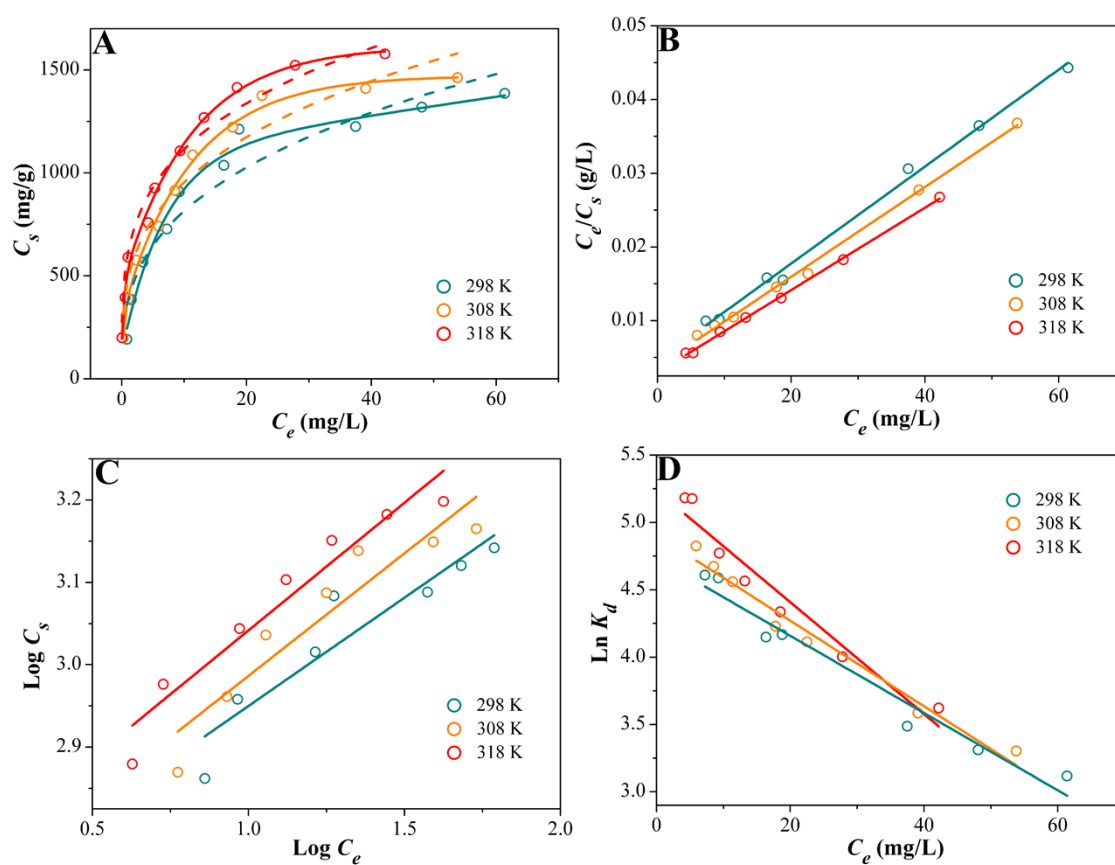


Fig. S8 Adsorption isotherms of MB on CDPCO at different temperatures (A), the solid line is for Langmuir model and the dash line is for Freundlich model; linear plots of Langmuir model of MB adsorption on CDPCO (B); linear plots of Freundlich model of MB adsorption on CDPCO (C); linear plots of $\ln K_d$ versus C_e (D): $m/V = 0.1$ g/L, $C_{[MB]initial} = 20$ mg/L $\sim$ 200 mg/L.