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Supplementary materials

Magnetic carbon nanocomposites from Fe3O4 reduction and their application as Cr (VI) adsorbents

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Supplementary Figures

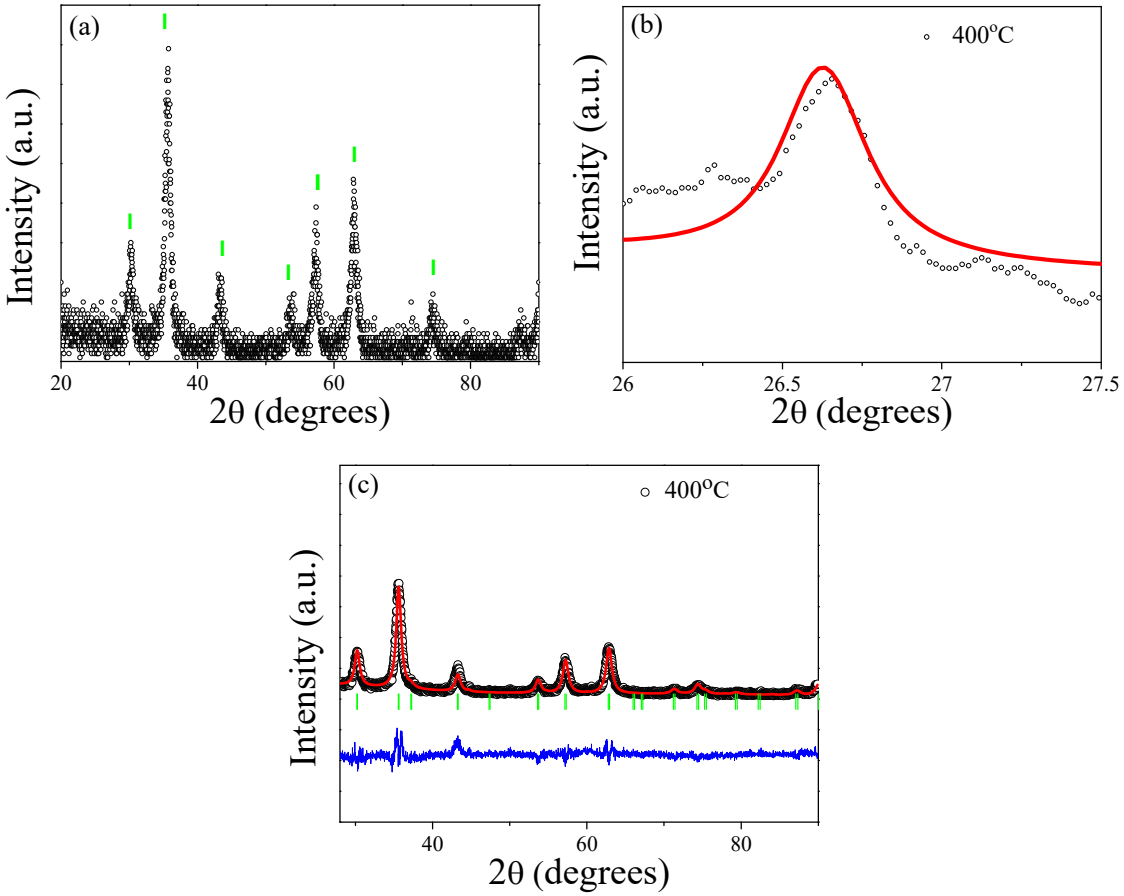

Figure S1. XRD patterns for the (**a**) Fe_3O_4 initial MNPs and (**b,c**) MNPs + fructose sample at T_{ann} = 400°C: (o) Experimental, (—) calculated (Rietveld refinement) intensities and (—) difference between both intensities. The Bragg reflections are shown for (|) Fe_3O_4.

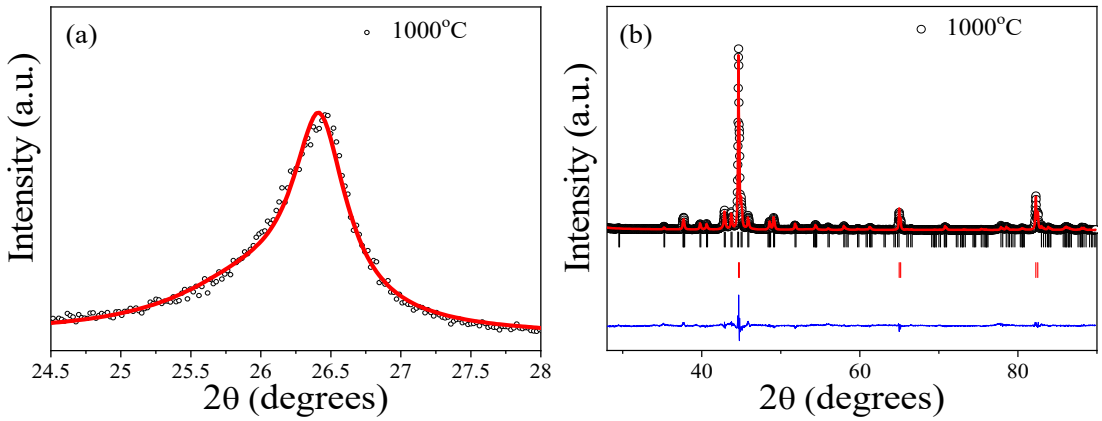

Figure S2. XRD patterns for the MNPs + fructose sample annealed at T_{ann} = 1000ºC. (o) Experimental, (—) calculated (Rietveld refinement) intensities and (—) difference between both intensities. The Bragg reflections are shown for (|) Fe_3C and (|) α-Fe.

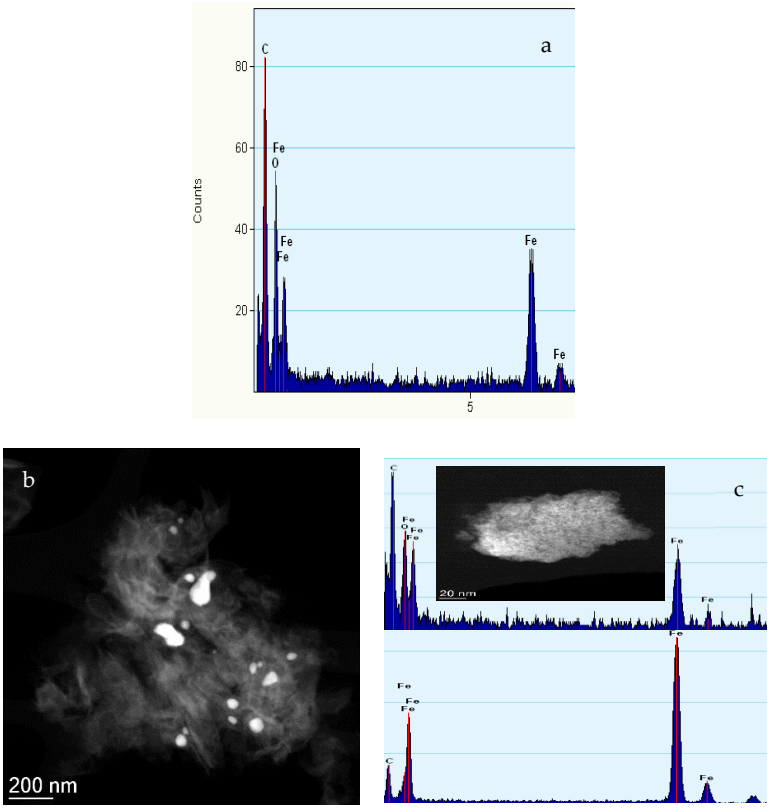

Figure S3. (**a**,**c**) EDX analysis for the MNPs + fructose sample annealed at T_{ann} = 400 and 600°C, respectively. (b) STEM image of the MNPs + fructose sample annealed at T_{ann} = 600°C.

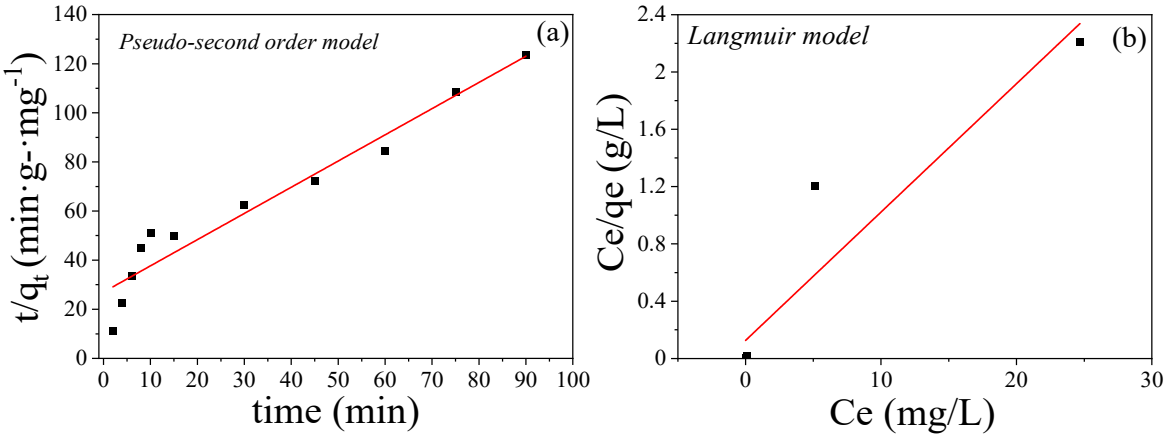

Figure S4. (a) Adsorption kinetics of Cr(VI) and (b) adsorption isotherms in the presence of the initial Fe_3O_4 MNPs.