

Supplementary Material

Heavy metals removal by EDTA-functionalized chitosan graphene oxide nanocomposites

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Parameters (mg L⁻¹)	Values
pH	7.12-7.37
TCOD	110-120
SCOD	24-30
TOC	28-30
Suspended Solids	16-18
Cl ⁻	79-82
NO ₃ ⁻	2.99-2.95
PO ₄ ³⁻	2.31-2.63
SO ₄ ²⁻	53.6-54.7

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Figure S2. Zeta potential curve obtained for EDTA-MGC/GO in distilled water environment.

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Figure S4. Pseudo first-order kinetics model of Pb^{2+} , Cu^{2+} , and As^{3+} adsorption by EDTA-MGC/GO nanocomposite.

Figure S5. Adsorption capacity of Pb^{2+} , Cu^{2+} , and As^{3+} on the EDTA-MGC/GO composite in four successive adsorption-desorption cycles (*Conditions*: weight of adsorbent = 60 mg, volume of the solution = 200 mL, initial concentrations of Pb^{2+} , Cu^{2+} , and As^{3+} = 100 mg L⁻¹, 100 mg L⁻¹, 10 mg L⁻¹, respectively, shaking speed = 120 rpm, temperature=25).

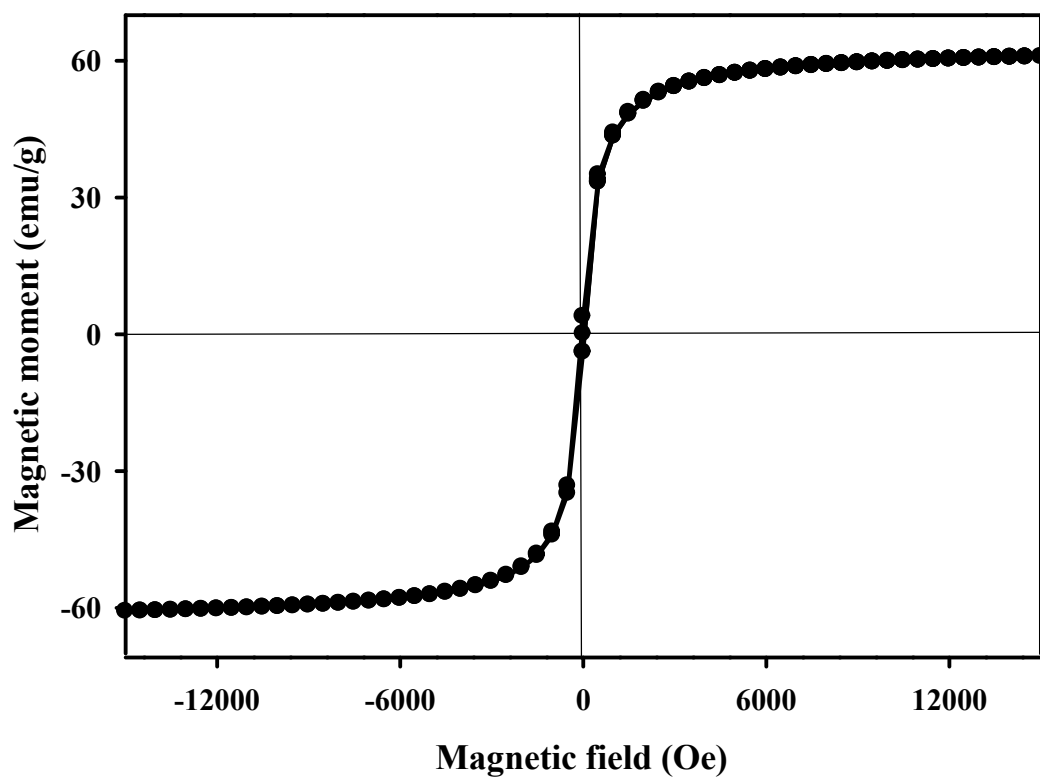


Figure S1.

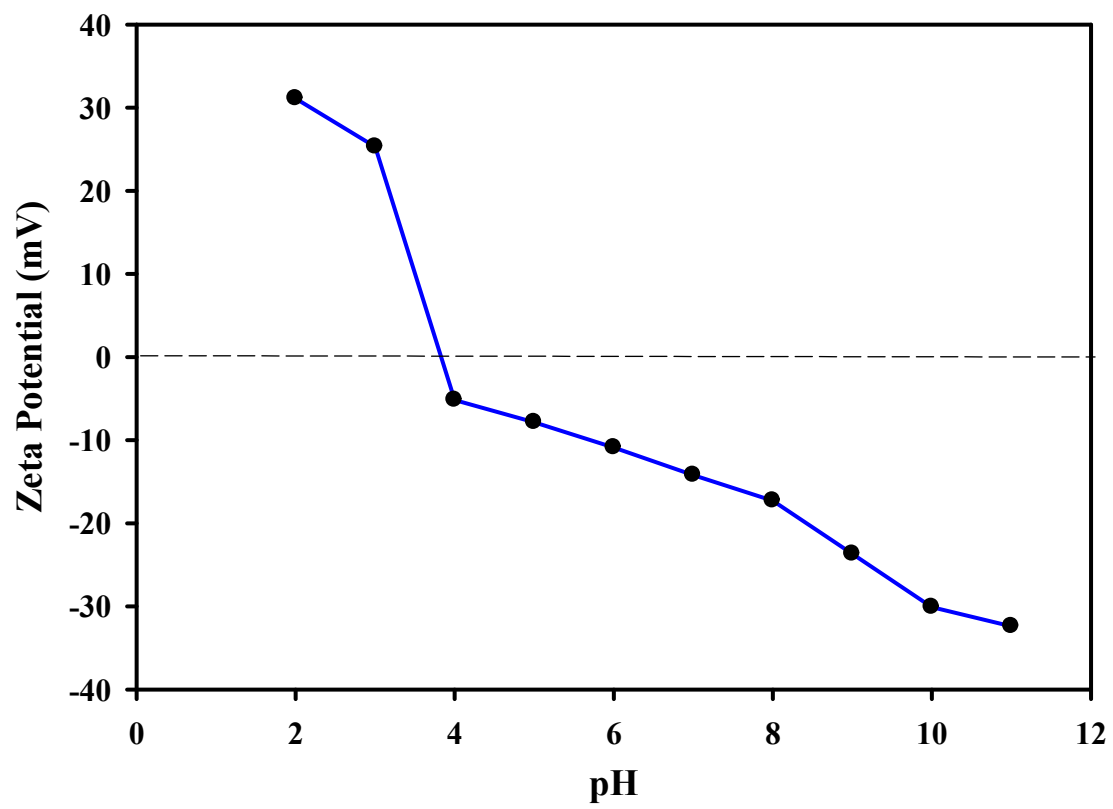


Figure S2

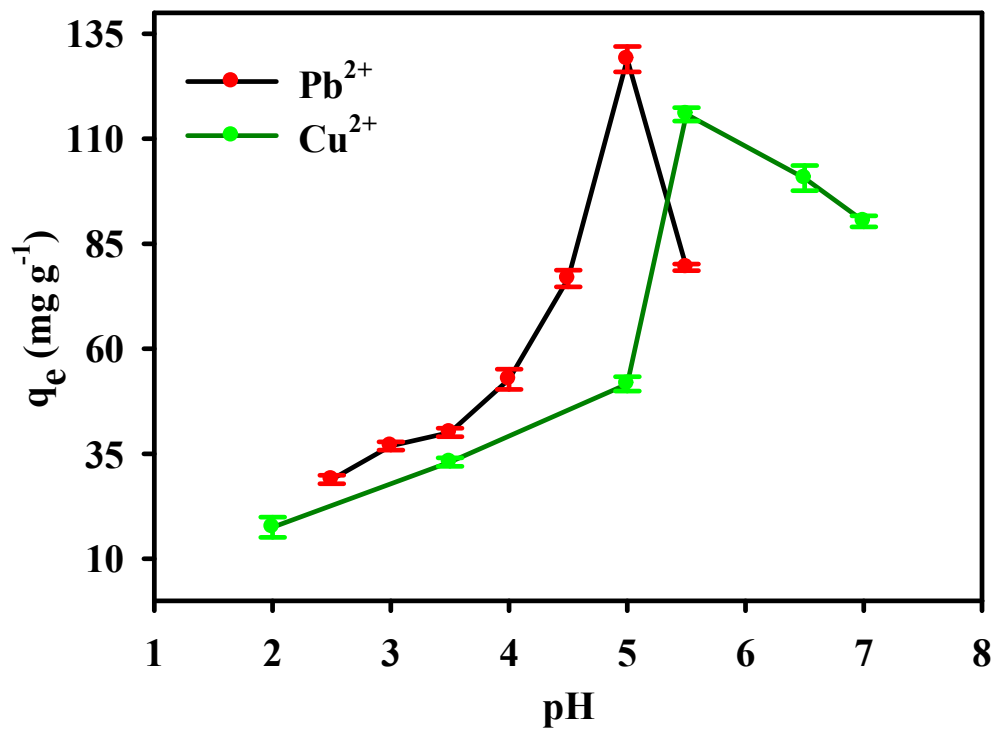


Figure S3

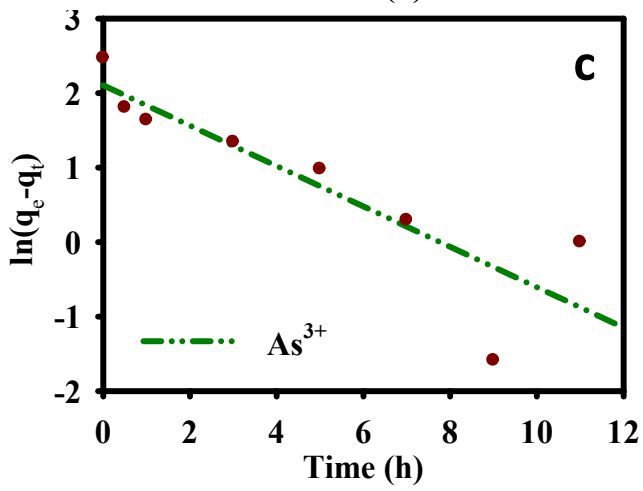
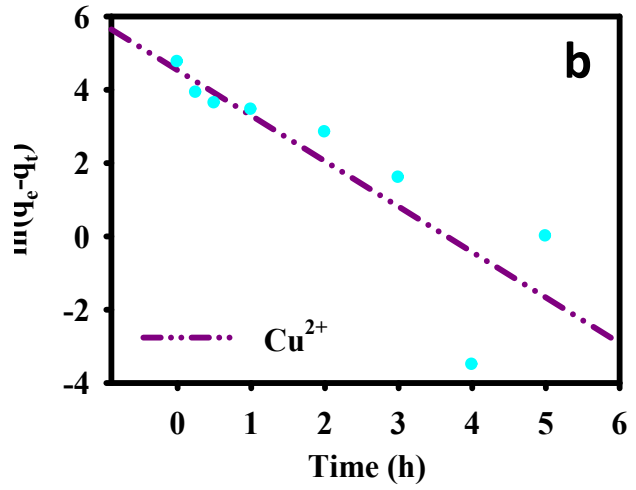
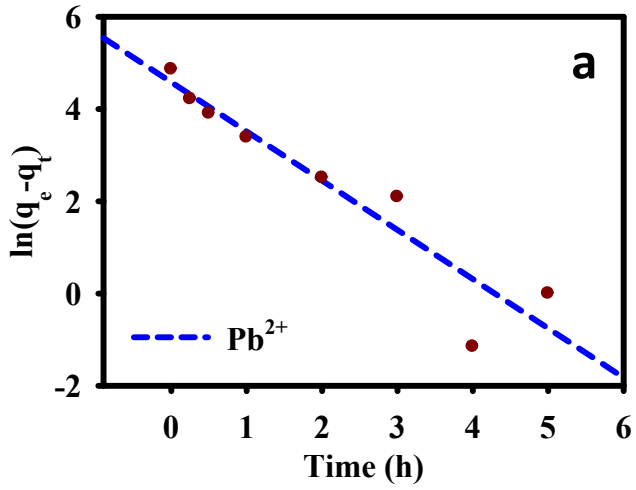


Figure S4

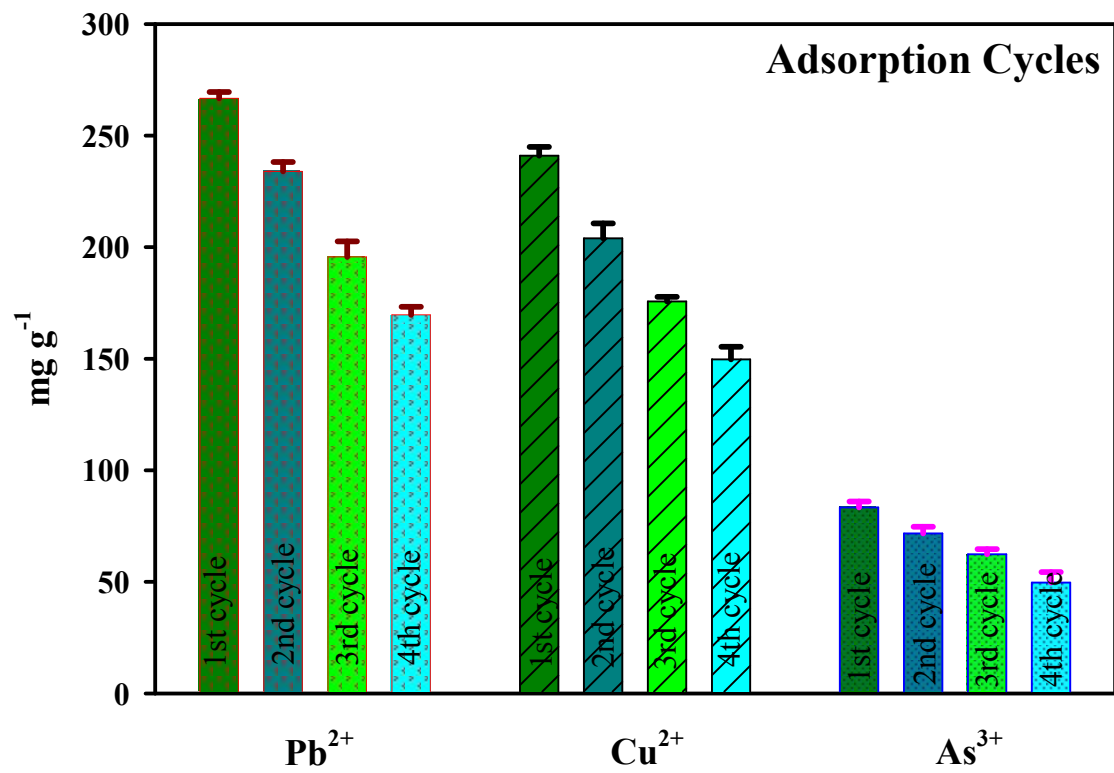


Figure S5.