Electronic Supplementary Information for:

Synthesis of MnFe₂O₄@Mn-Co oxide core-shell nanoparticles and their excellent performance for heavy metal removal

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Figure S1. HRTEM image of MnFe₂O₄@Mn-Co oxide.



Figure S2. FTIR spectra of (a) MnFe₂O₄ and (b) MnFe₂O₄@Mn-Co oxide.



Figure S3. Nitrogen adsorption–desorption isotherms of $MnFe_2O_4$ and $MnFe_2O_4$ @Mn-Co oxide.



Figure S4. Room-temperature magnetization loops of of $MnFe_2O_4$ and $MnFe_2O_4$ (@Mn-Co oxide.



Figure S5. Adsorption kinetics curves of heavy metals on MnFe₂O₄@Mn-Co oxide



Figure S6. Effects of adsorbent concentrations on heavy metals removal.



Figure S7. The removal efficiencies of mixed metal ions by $MnFe_2O_4@Mn-Co$ oxide. The concentration of each metal ion was 5 mg L⁻¹.