Supporting Information

Graphene oxide/Fe₃O₄/SO₃H nanohybrid: A new adsorbent for adsorption and reduction of Cr(VI) from aqueous solutions

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Figure S1. UV-vis absorption spectrum of GO.

Figure S2. X-ray photoelectron spectroscopy (XPS) spectra: (A) wide scan, (B) Fe 2p, (C) O 1s, (D) S 2p spectra of SMGO.
Figure S3. Raman spectra ($\lambda = 532$ nm) of (A) GO, (B) SMGO.

![Raman spectra](image)

Figure S4. Nitrogen adsorption-desorption isotherms of SMGO.

![Nitrogen adsorption-desorption isotherms](image)
Figure S5. Pore size distribution of SMGO.
Figure S6. TGA analysis of (A) GO and (B) SMGO.

Figure S7. EDS spectra of (A) GO (B) SMGO.
Figure S8. Dispersity of GO and GO-SO$_3$H in water.