

Supporting Information

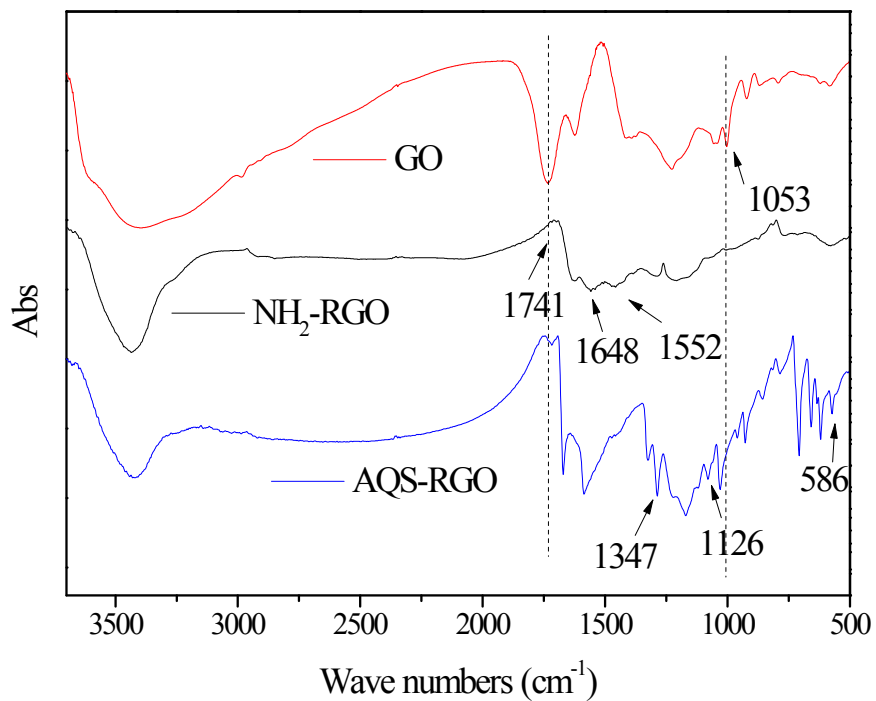


Fig. S1. The FTIR spectra of GO, NH₂-RGO and AQS-RGO.

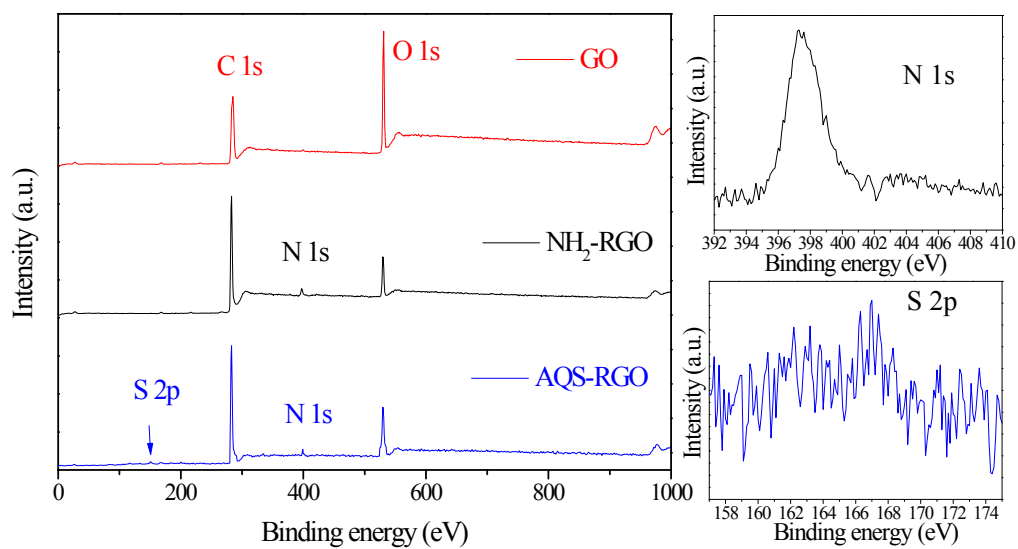


Fig. S2. The whole XPS spectra of GO, NH₂-RGO and AQS-RGO. (a) N 1s of NH₂-RGO; (b) S 2p of AQS-RGO.

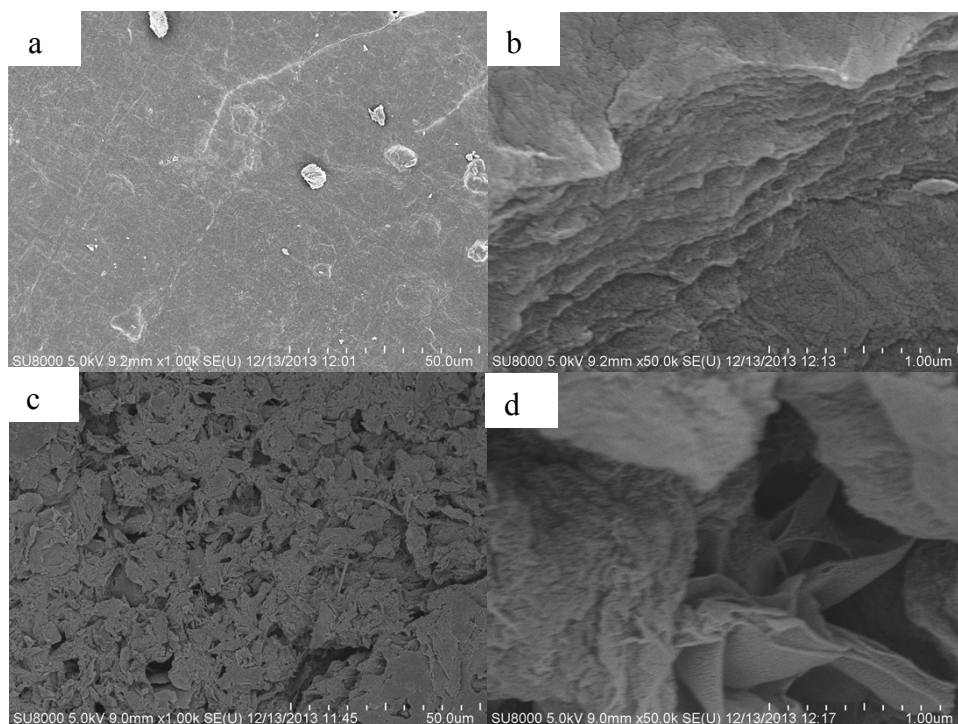


Fig. S3. SEM micrographs of the surfaces and edges of GO (a,b) and AQS-RGO (c,d).

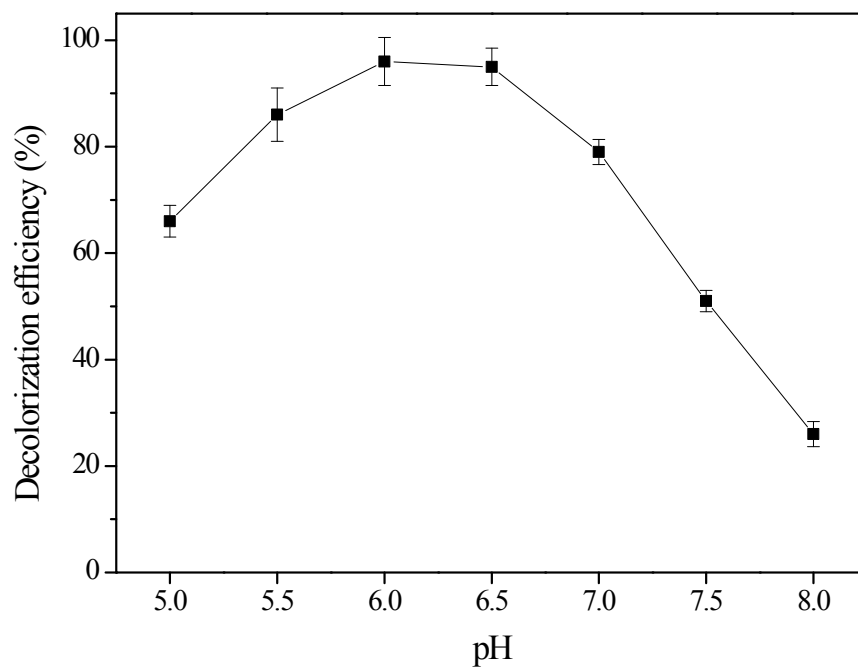


Fig. S4. Effect of pH on AQS-RGO-mediated decolorization of AY 36 in Na_2S -containing aqueous solution. The decolorization efficiency (%) is defined as the ratio of the AY 36 concentration after 3 h reaction to the initial AY 36 concentration. Reaction conditions: 30 °C, 0.2 mM AY 36, 4 mM Na_2S and 25 mg L^{-1} AQS-RGO.

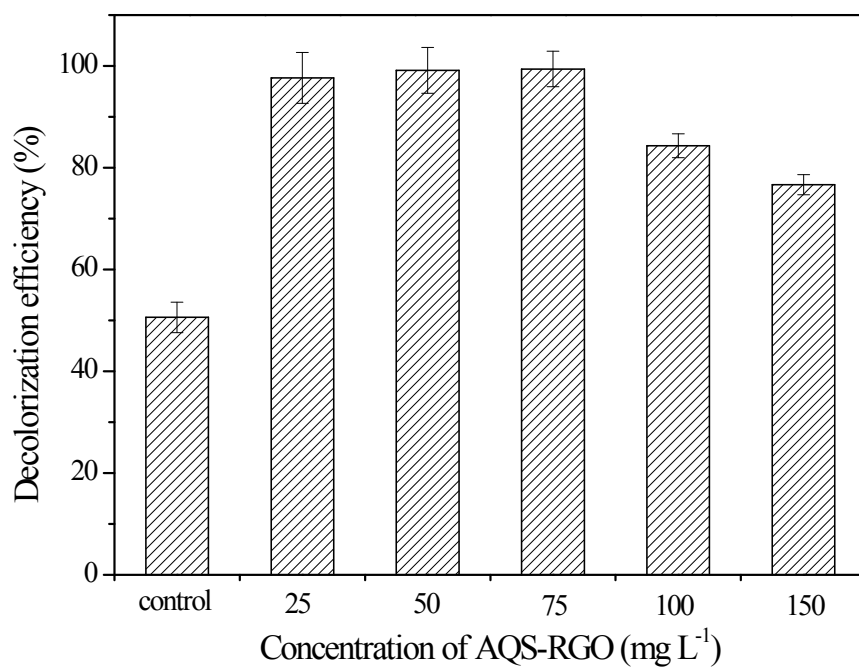


Fig. S5. AY 36 decolorization by anaerobic sludge in the presence of different concentrations of AQS-RGO. The decolorization efficiency (%) is defined as the ratio of the AY 36 concentration after 5 h reaction to the initial AY 36 concentration.

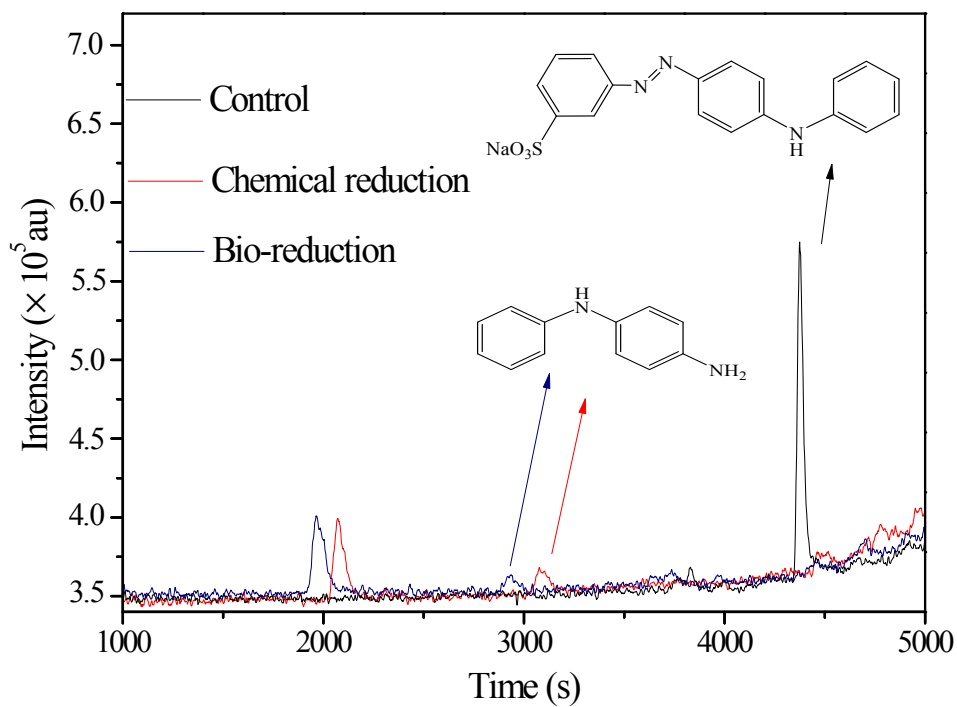


Fig. S6. Total ion chromatogram (TIC) of the products from both chemical and biological reduction of AY 36. Electron donors for chemical and biological reduction of AY 36 were Na_2S and glucose, respectively.