

Supplementary information

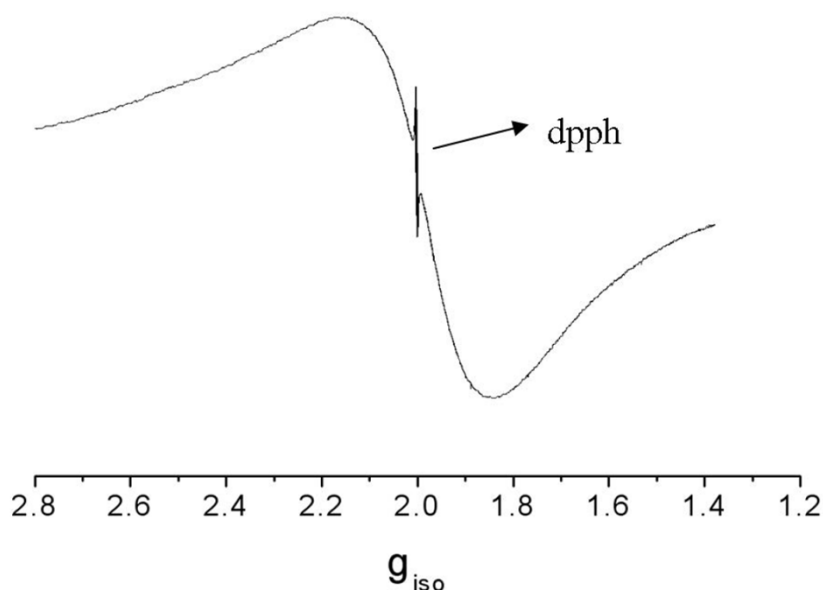


Fig. S1: Experimental X-band CW-EPR spectrum of Cr^{III} species. [Glucar] = 30 mM, $[\text{H}^+] = 0.1 \text{ M}$; $[\text{Cr}^{\text{VI}}] = 0.05 \text{ mM}$; $F = 9.76759 \text{ GHz}$; Mod.Amp. = 2.0 G, Sweep Width = 500.0 G, $T = 14 \text{ }^\circ\text{C}$, $\mu = 1.0 \text{ M}$. The spectrum was collected after 2.0 hs of mixing the reactives.

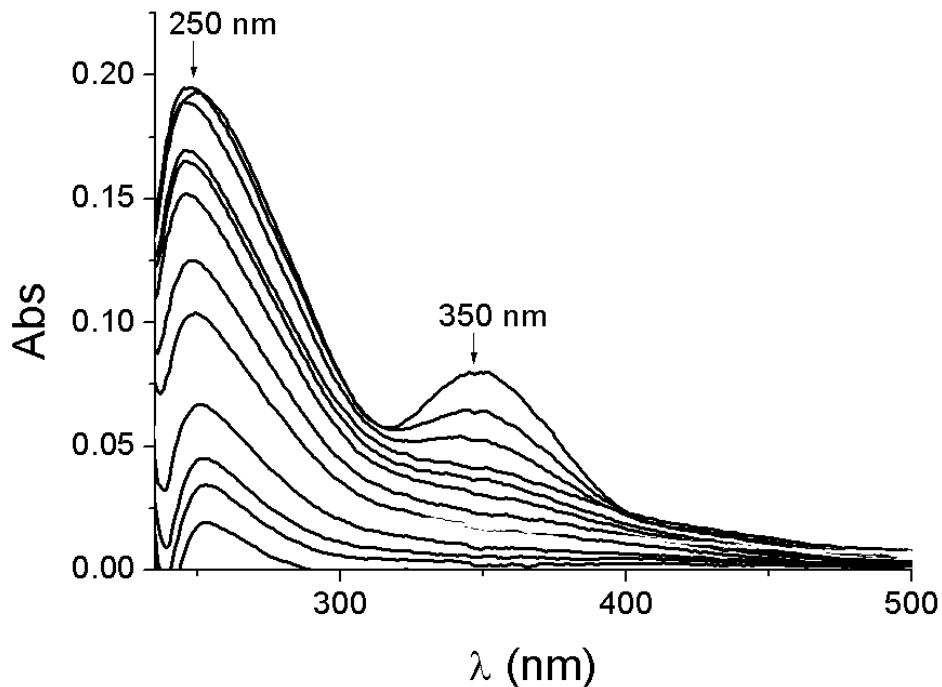


Fig. S2: Sequential spectra Glucar acid and Cr^{VI} reaction mixtures in anaerobic conditions: [Glucar] = 40 mM, $[\text{HClO}_4] = 1.0 \text{ M}$, $[\text{Cr}^{\text{VI}}] = 0.06 \text{ mM}$, $\mu = 1.0 \text{ M}$, $T = 25^\circ\text{C}$, Ar atmosphere. Spectra were recorded every 3.0 min. No band at 290 nm was observed