Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supplementary Information (ESI)

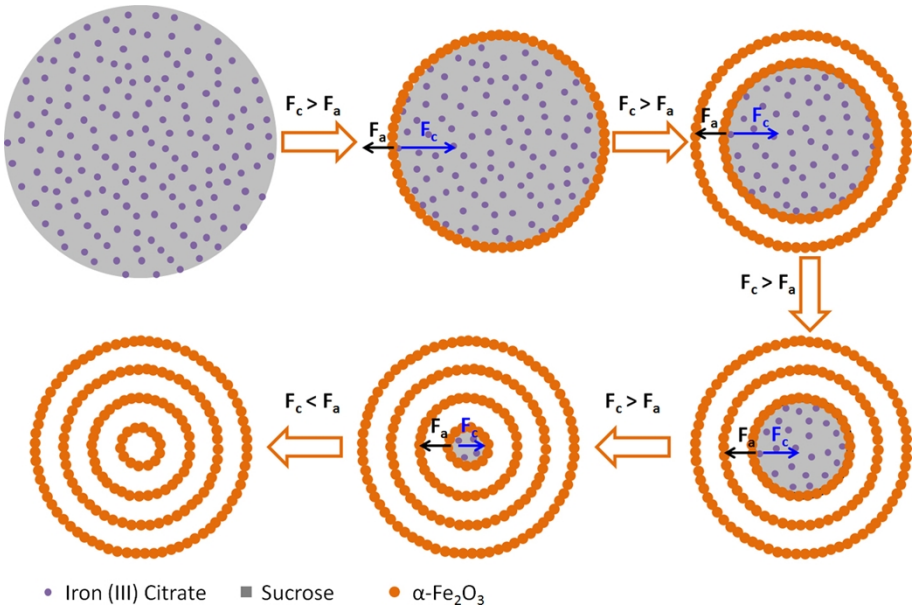

Figure S1. Schematic illustration for the synthesis of α-Fe_2O_3 MSHSs.

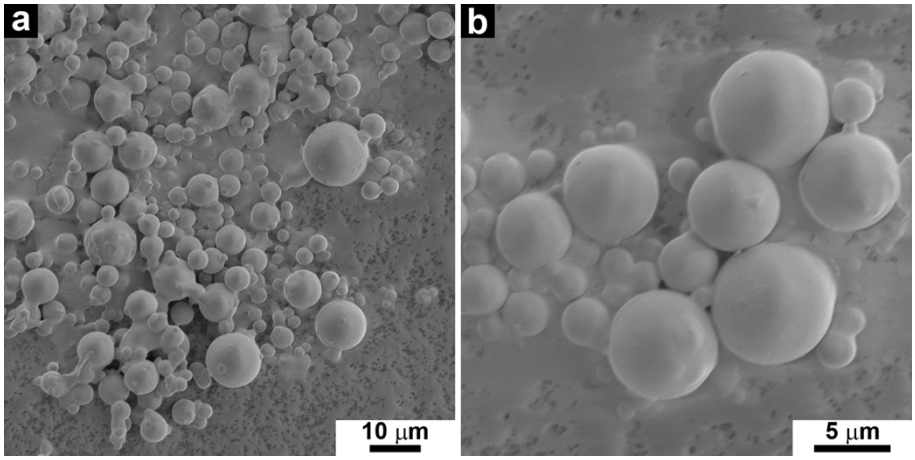

Figure S2. SEM images of the iron (III) citrate-sucrose composite.

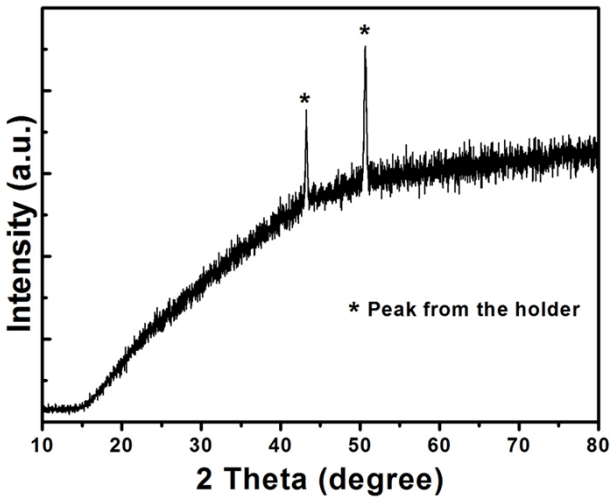

Figure S3. XRD pattern of the iron (III) citrate-sucrose composite. Only the diffraction peaks from the holder can be detected, demonstrating the amorphous nature of the iron (III) citrate-sucrose composite.

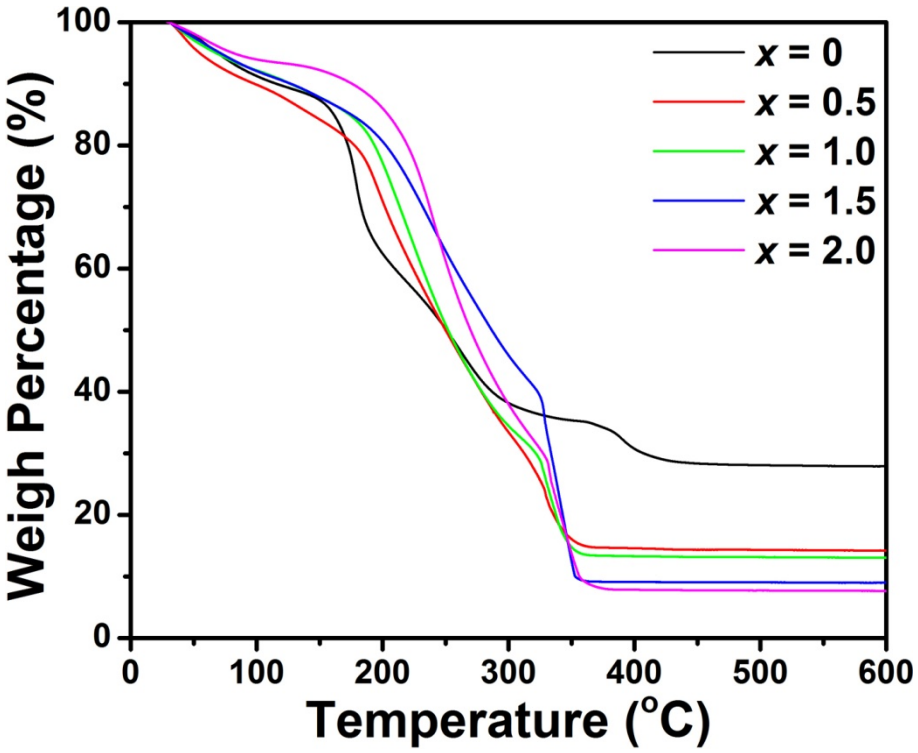

Figure S4. TGA curves for as-synthesised Sample 1 (x = 0.5), 2 (x = 0), 5 (x = 1.0), 6 (x = 1.5) and 7 (x = 2.0).

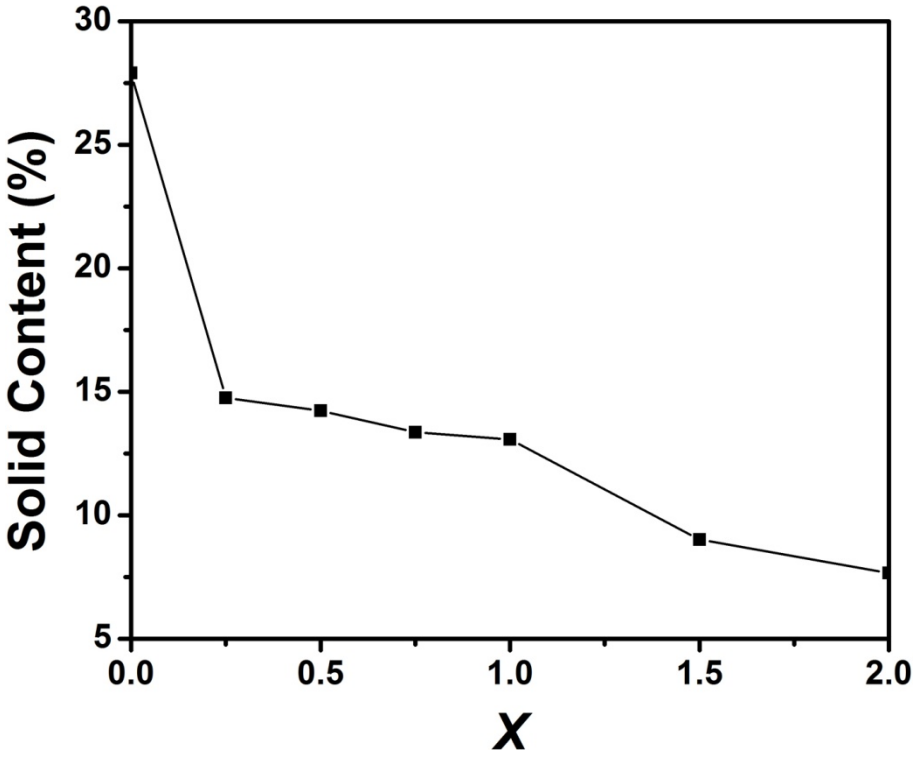

Figure S5. Solid content of as-synthesised samples as a function of *x* (sucrose/iron citrate ratio).

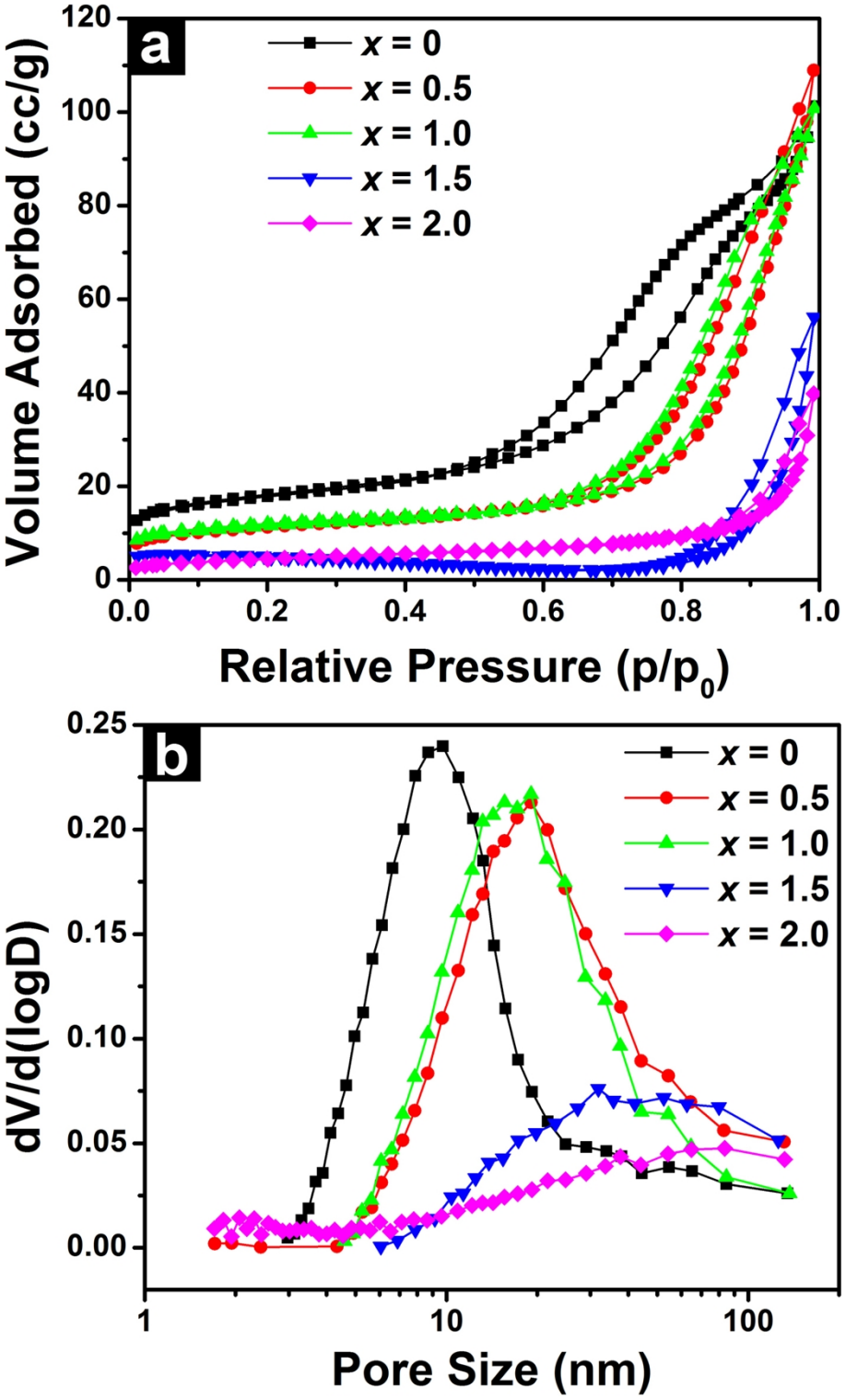

Figure S6. Nitrogen adsorption-desorption isotherms and pore size distributions of selected samples (Sample 1 (x = 0.5), Sample 2 (x = 0), Sample 5 (x = 1.0), Sample 6 (x = 1.5) and Sample 7 (x = 2.0)).

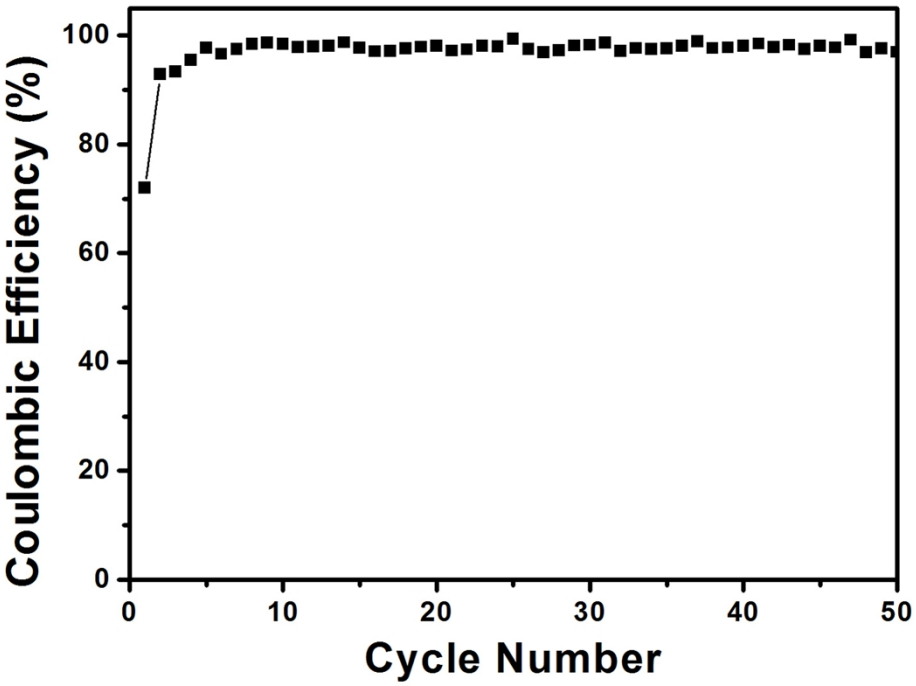

Figure S7. Coulombic Efficiency *vs.* cycle number.

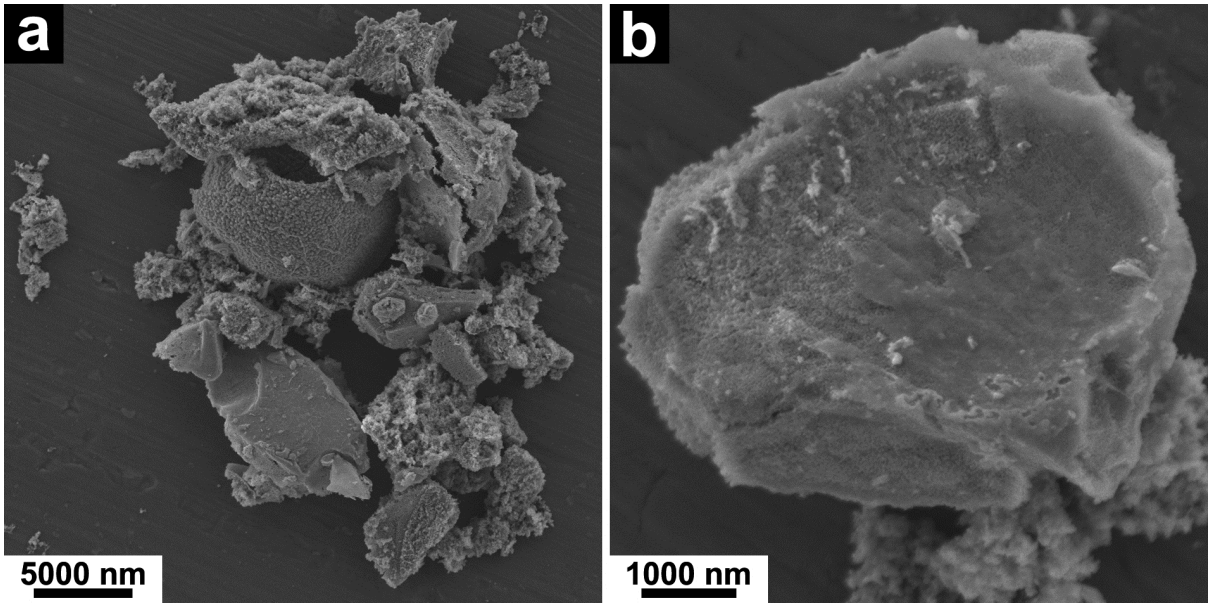

Figure S8. SEM images of Sample 8 (randomly aggregated α-Fe_2O_3 nanoparticles).

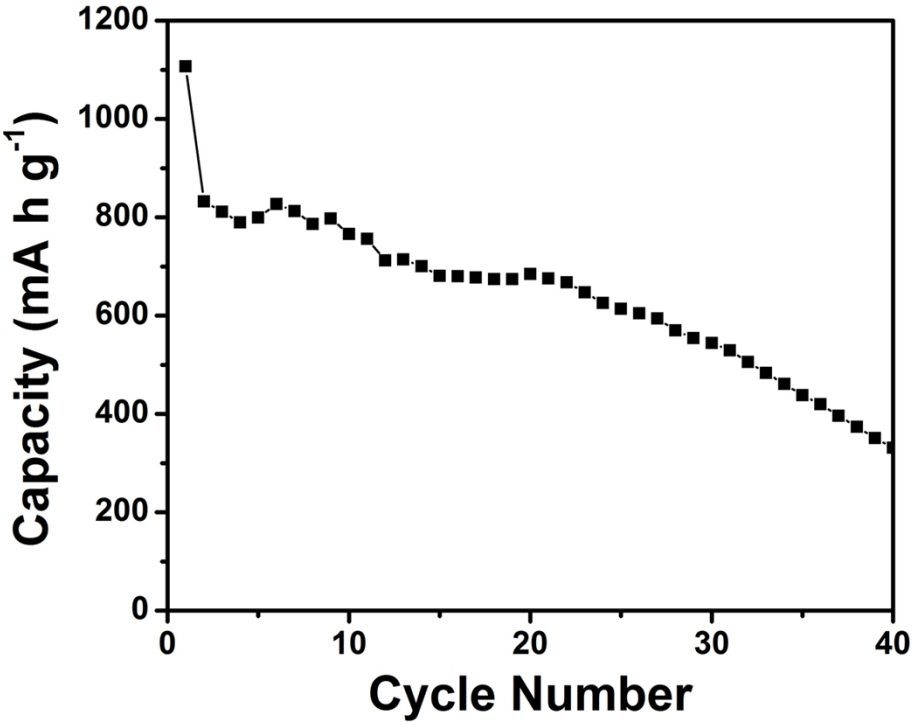

Figure S9. Cycling performance of Sample 8 (randomly aggregated α-Fe_2O_3 nanoparticles) at a current density of 200 mA g^{-1}.