

Supplementary information

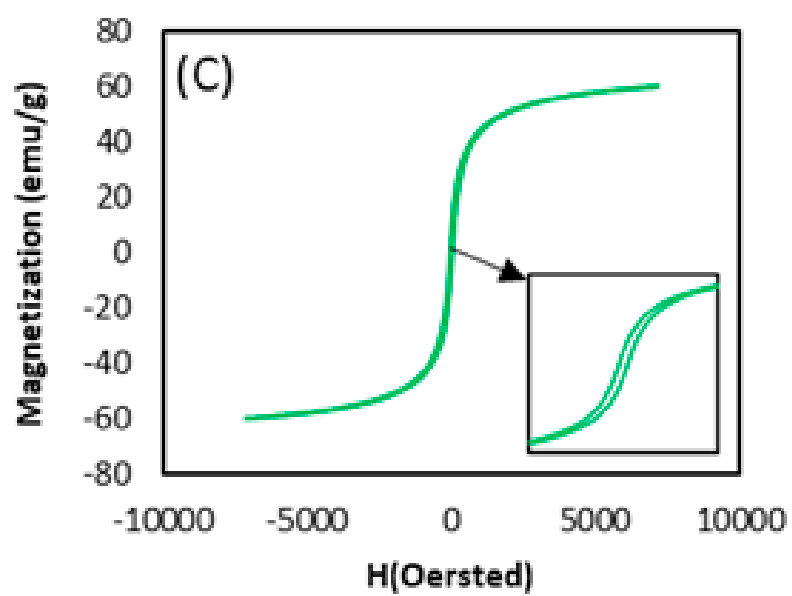


Figure S1. Hysteresis loop of Fe₃O₄ NP and inset at 0 Oe obtained by VSD.

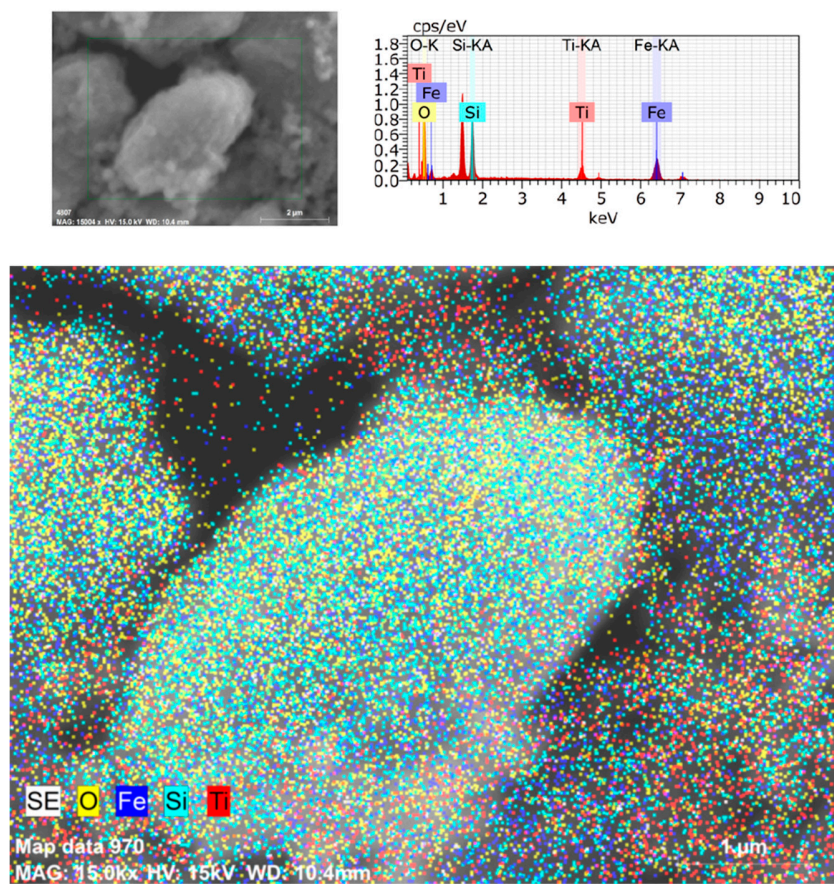


Figure S2. Energy-dispersive X-ray spectroscopy of $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{TiO}_2$

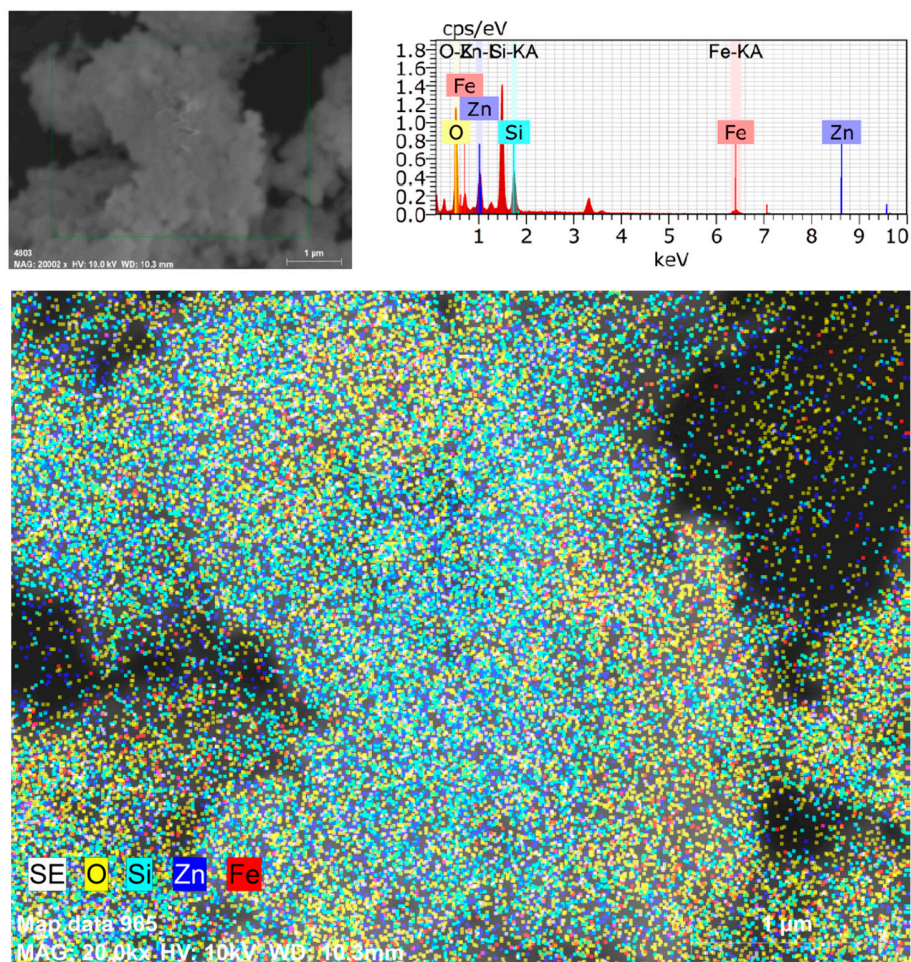


Figure S3. Energy-dispersive X-ray spectroscopy of $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{ZnO}$

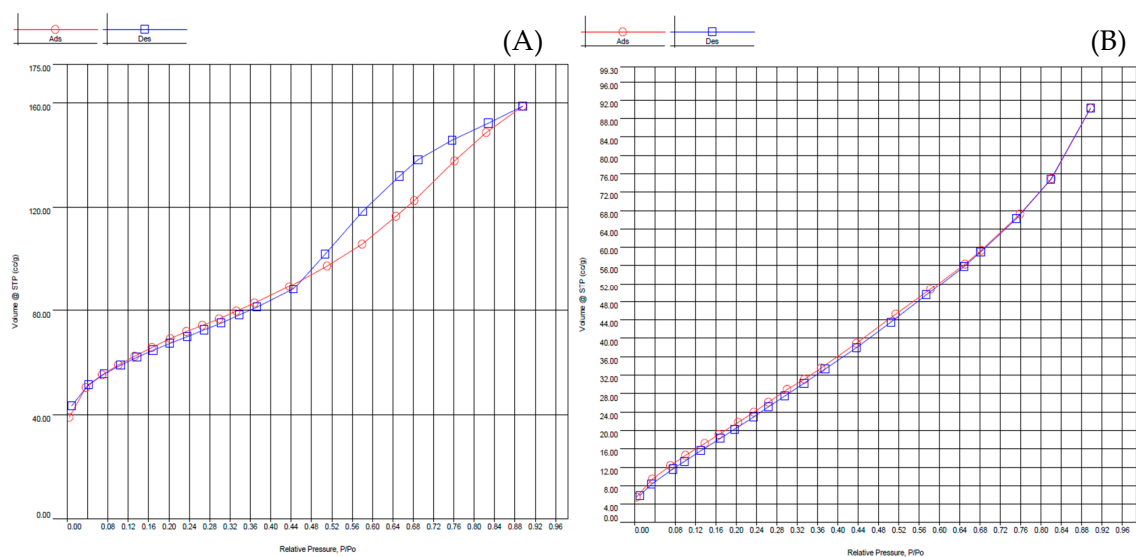


Figure S4. N₂ adsorption-desorption isotherms of synthesized nanocomposites. (A) SPION@SiO₂@TiO₂, (B) SPION@SiO₂@ZnO