

One-pot electrochemical synthesis of polydopamine coated magnetite nanoparticles

Supporting information

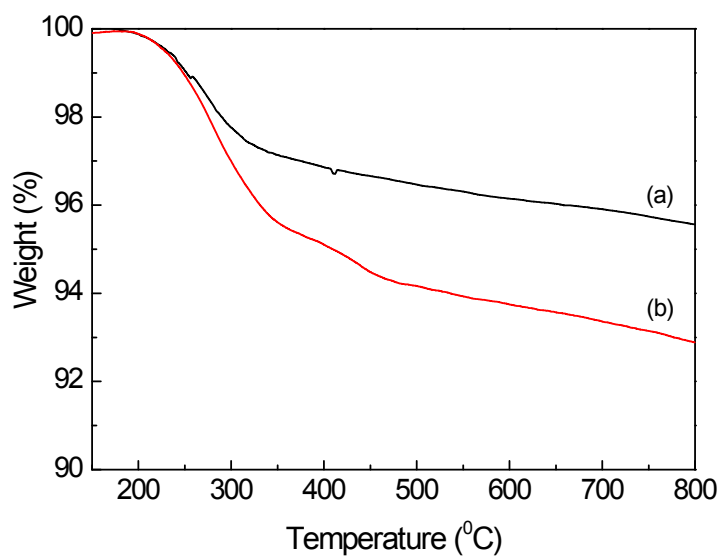


Figure S1. TGA thermograms of a) naked magnetite nanoparticles synthesized electrochemically and of b) Fe₃O₄@PDA-1 synthesized following approach 1.

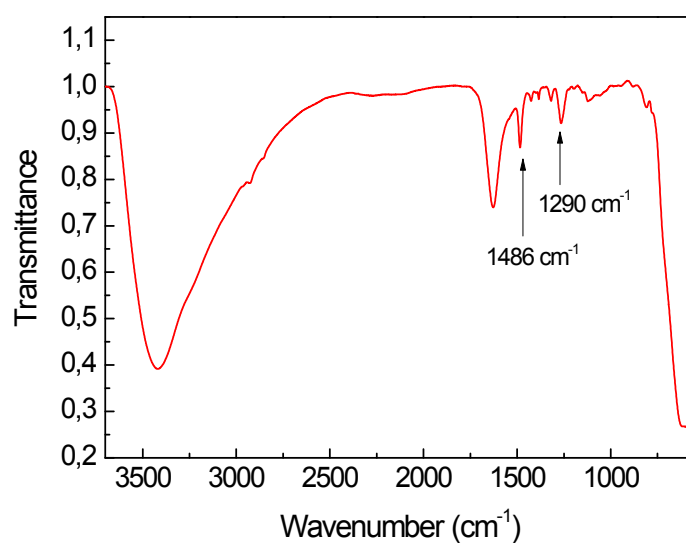


Figure S2. FTIR of polydopamine coated magnetic nanoparticles $\text{Fe}_3\text{O}_4\text{@PDA-2-5mg}$ synthesized following approach 2.

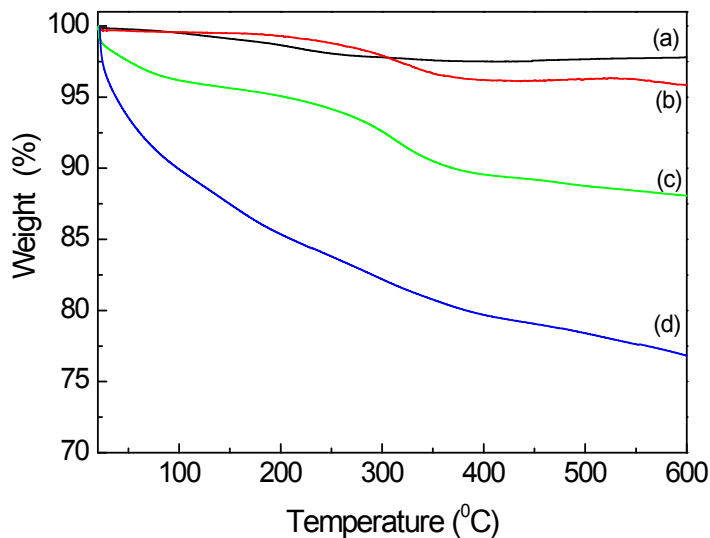


Figure S3. TGA thermograms of magnetite nanoparticles synthesized electrochemically by approach 2 a) naked NPs, b) $\text{Fe}_3\text{O}_4\text{@PDA-2-2mg}$, c) $\text{Fe}_3\text{O}_4\text{@PDA-2-5mg}$ and d) $\text{Fe}_3\text{O}_4\text{@PDA-2-10mg}$.

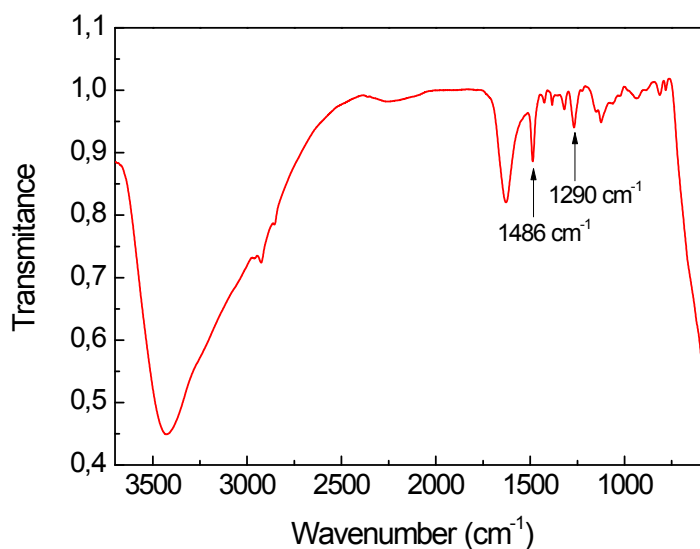


Figure S4. FTIR of polydopamine coated magnetic nanoparticles $\text{Fe}_3\text{O}_4\text{@PDA-3-40mg}$ synthesized following approach 3.

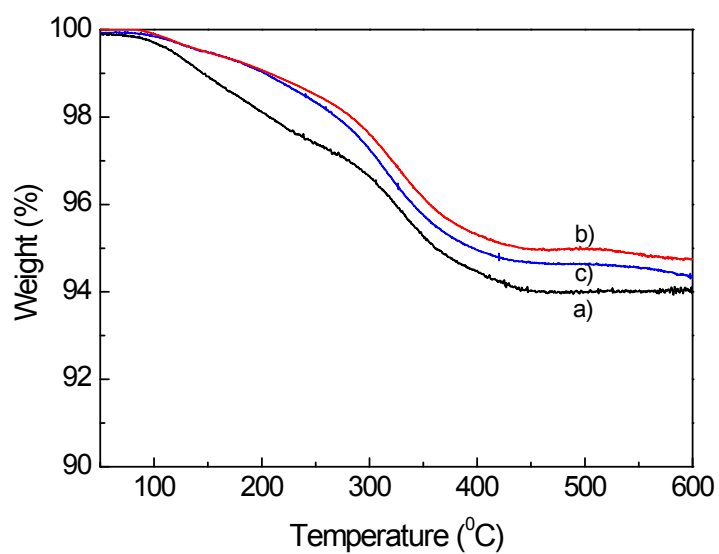


Figure S5. TGA thermograms of magnetite nanoparticles synthesized electrochemically by approach **3**: a) Fe₃O₄@PDA-**3**-20mg, b) Fe₃O₄@PDA-**3**-40mg and c) Fe₃O₄@PDA-**3**-60mg.