

Supplementary materials

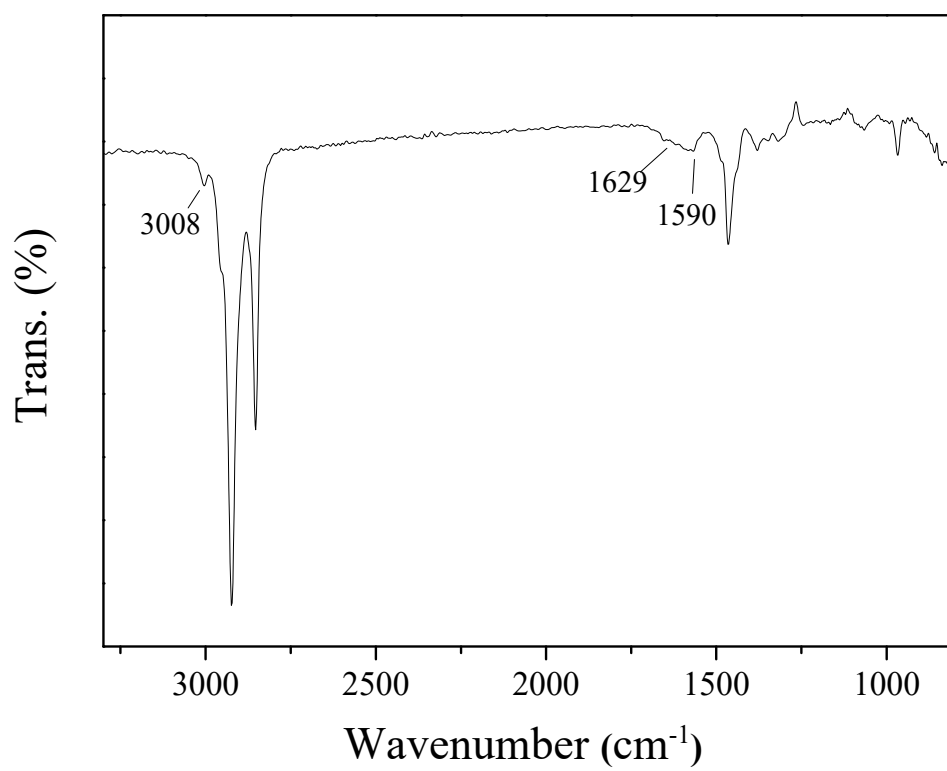


Figure S1. FTIR spectroscopy spectrum of surface-modified Fe₃O₄ nanoparticles.

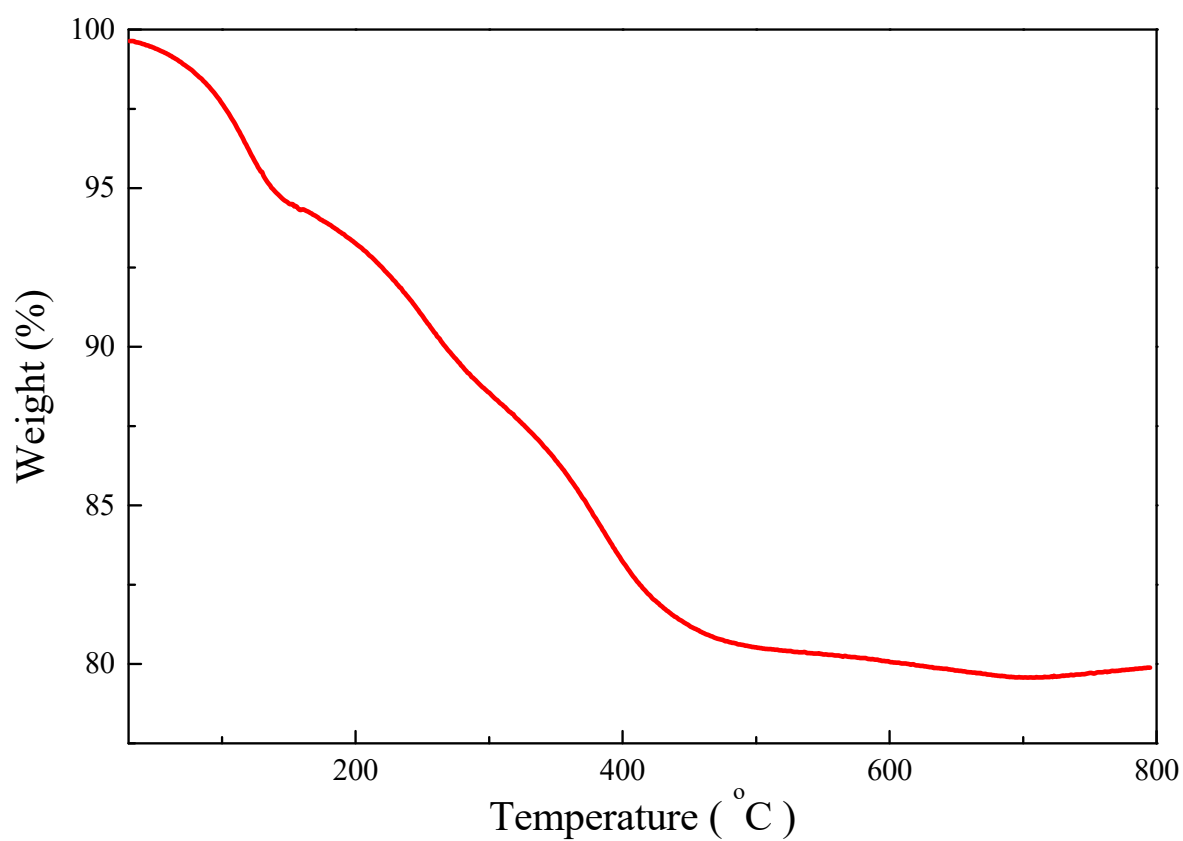


Figure S2. Thermogravimetric analysis (TGA) of surface-modified Fe₃O₄ nanoparticles..

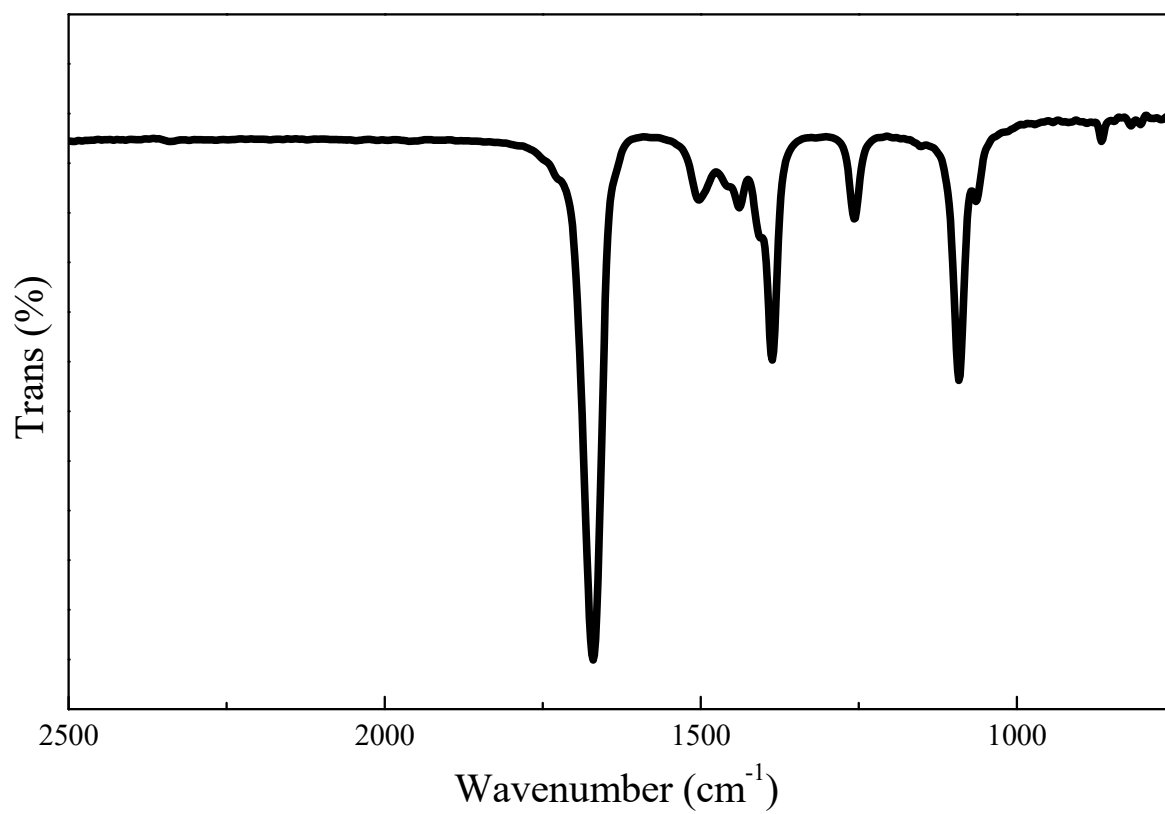


Figure S3. FTIR of synthesized TA.

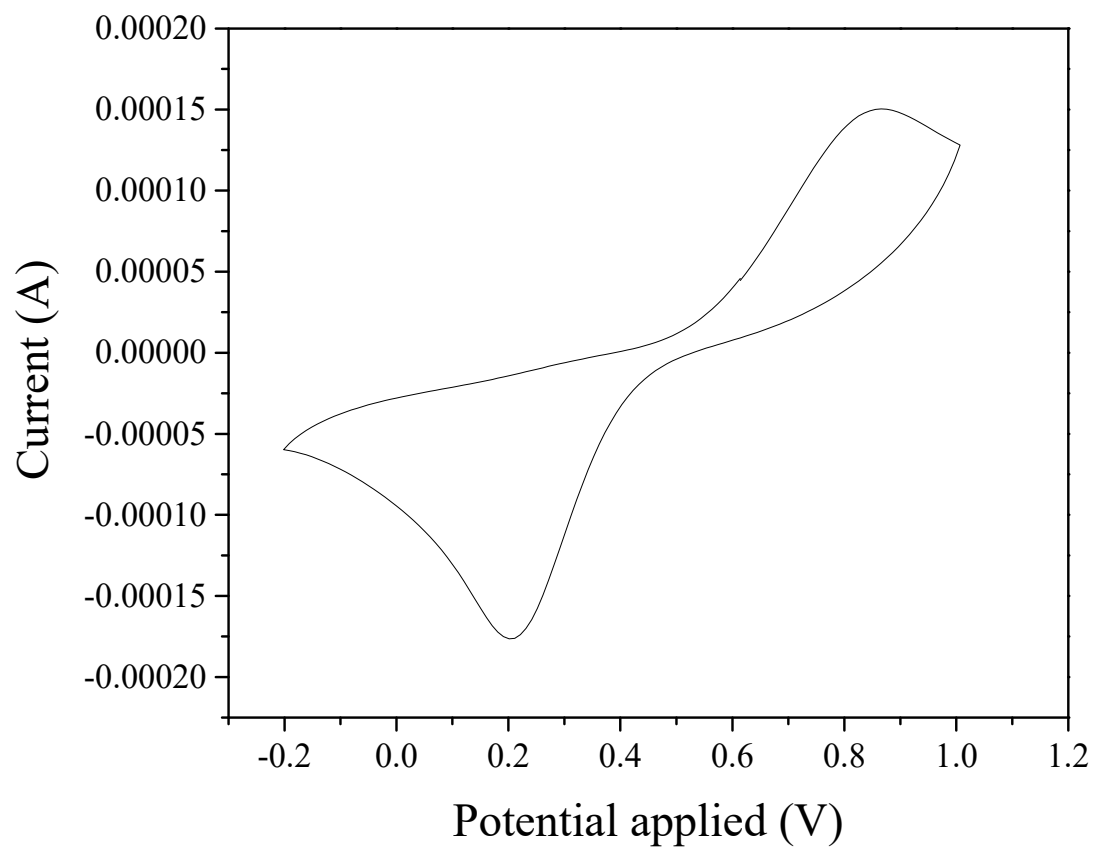


Figure S4. Cyclic voltammetry measurement for S-SEBS polymer with 20 wt% Fe_3O_4 nanoparticles.