

Supporting Information

Synthesis of Amphipathic Superparamagnetic Fe₃O₄ Janus Nanoparticles via a Moderate Strategy and Their Controllable Self-assembly

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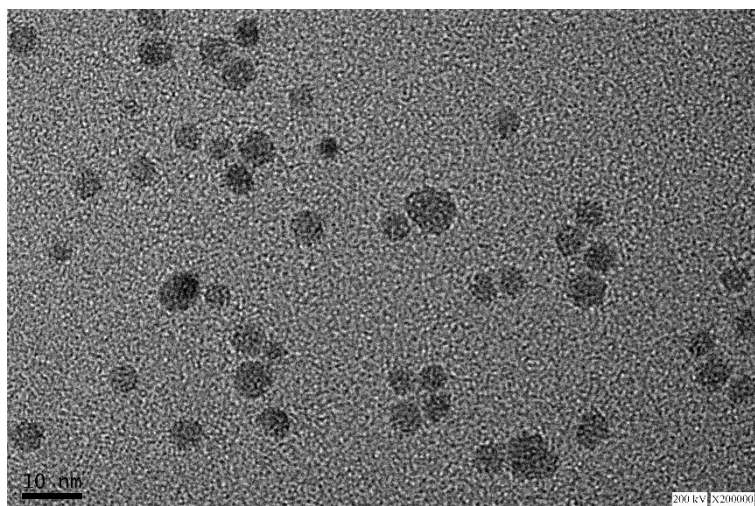


Figure S1. TEM image of hydrophilic Fe₃O₄ nanoparticles.

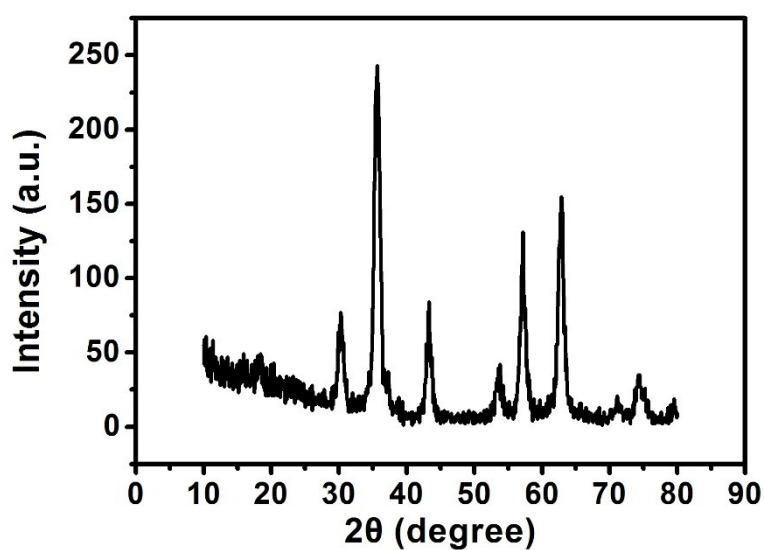


Figure S2. XRD pattern of hydrophilic Fe₃O₄ nanoparticles.

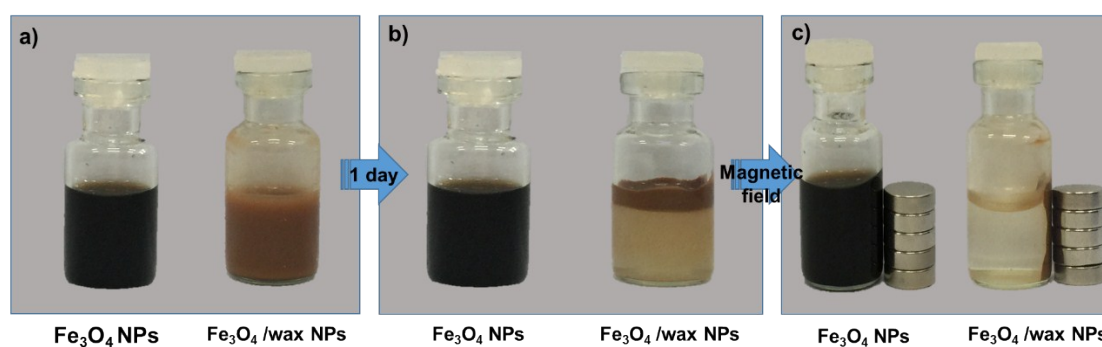


Figure S3. Visual evaluation of the stabilities (a, b) and magnetic responsiveness (c) of the Fe₃O₄ NPs solution, Fe₃O₄/wax composite microsphere solution.

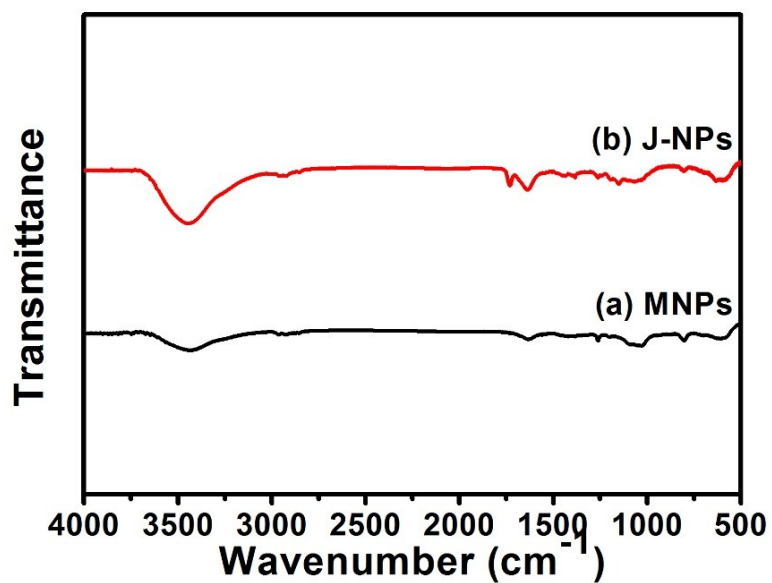


Figure S4. FTIR spectra of Fe₃O₄ nanoparticles (MNPs) (a) and Janus Fe₃O₄ nanoparticles (J-NPs) (b).

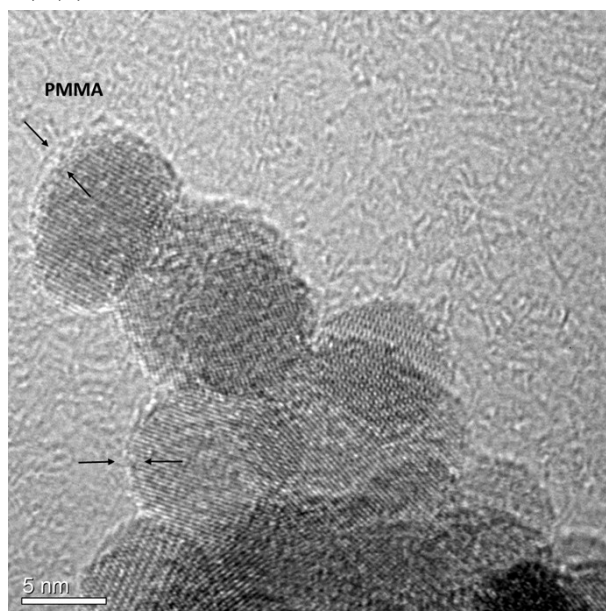


Figure S5. High-resolution TEM image of Janus Fe₃O₄ nanoparticles in THF.

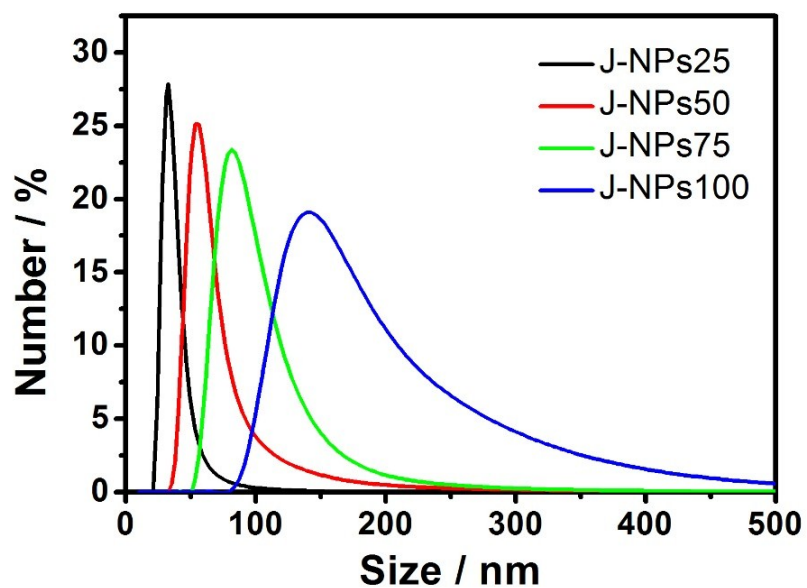


Figure S6. DLS of J-NPs25, J-NPs50, J-NPs75, and J-NPs100 self-assembly in water.

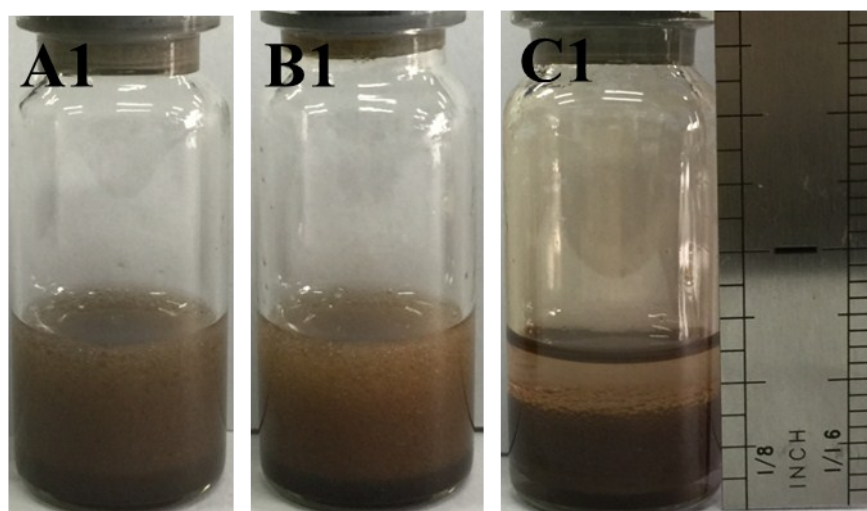


Figure S7. Influence of Janus Fe_3O_4 nanoparticles with different polymerization degree of PMMA on 1:1 toluene-water emulsion containing 3.75 mg/mL: (A1) J-NPs25; (B1) J-NPs50; (C1): J-NPs75; 50 min of shaking at 800 rpm; 2 days standing time.