Electronic Supplementary Information

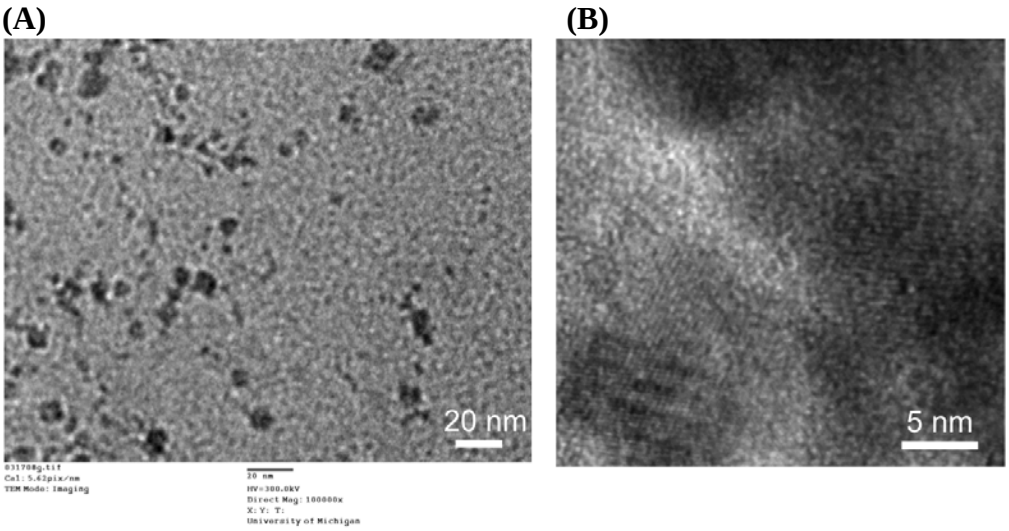

Figure S1. TEM image of the magnetite shows an average size of 10 nm in diameter (A) and a magnified view showing the crystalline magnetite (B).

Figure S2. A typical image of two jetting solutions in vials where the dark one has p(AAm-co-AA) (5 wt/v %), PAA-stabilized magnetite (2.2 wt/v %), and rhodamine B isothiocyanate-dextran (0.5 wt/v %) in ethylene glycol, while the white solution has p(AAm-co-AA) (5 wt/v %), PAA-stabilized TiO_2(2.2 wt/v %), and FITC-dextran (0.5 wt/v %) in ethylene glycol.

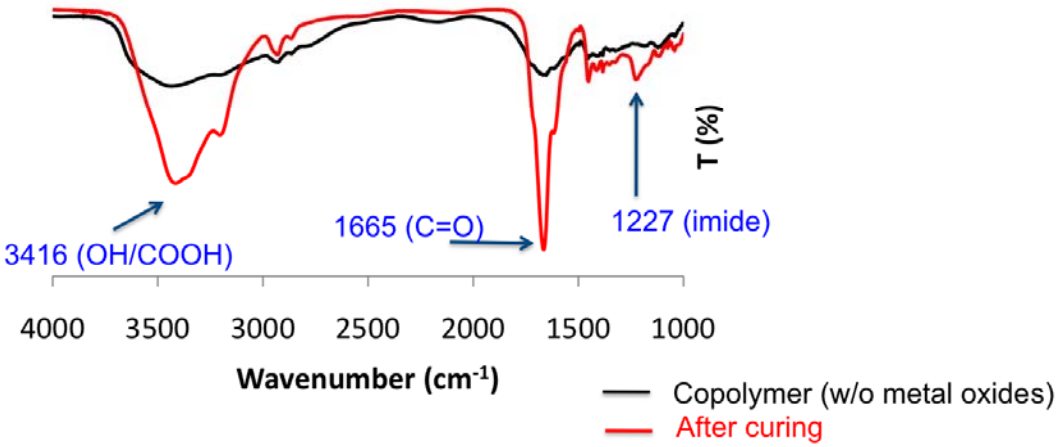

Figure S3. The IR spectrum of hybrid particles prepared by the EHD co-jetting after thermal crosslinking (red spectrum) compared to the IR spectrum of the neat polymer.

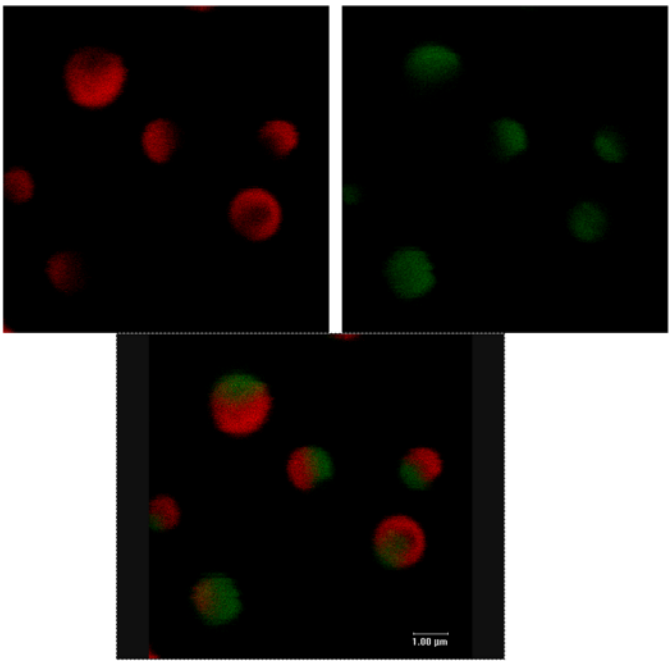

Figure S4. The CLSM images of the particles after storage in DI water for one week at room temperature.

(A) (B)

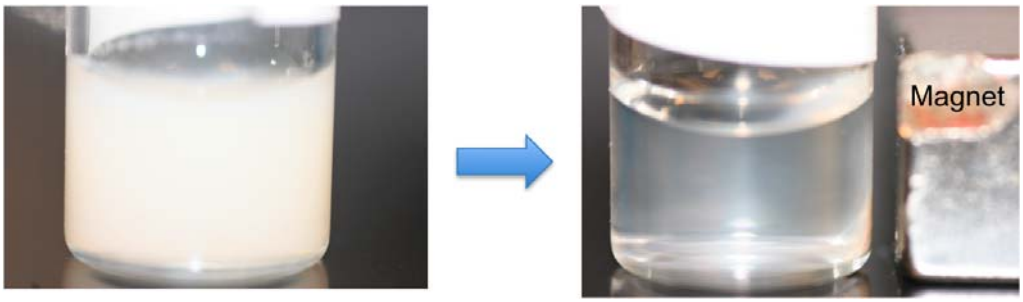

Figure S5. (A) The bicompartmental particles are suspended in DI water. (B) The suspension solution becomes clear after an external magnet has introduced.