Supporting Information

Highly cross-linked and biocompatible polyphosphazene coated superparamagnetic Fe_3O_4 nanoparticles for magnetic resonance imaging

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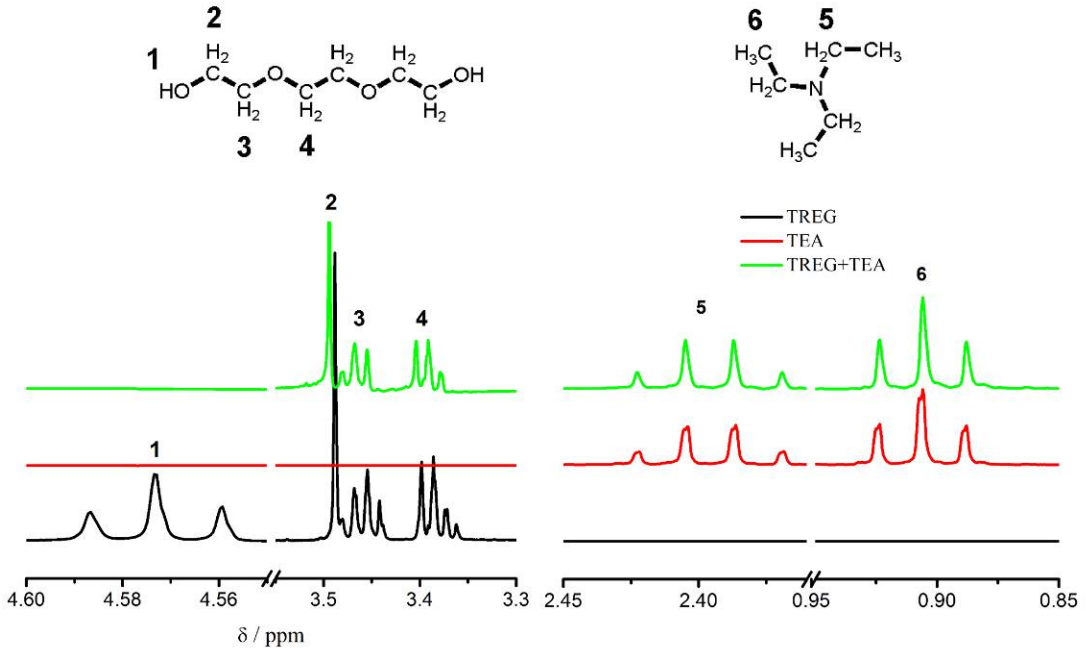

Figure S1. ^{1}H NMR spectra of TREG on Fe_3O_4 nanoparticles, TEA and TREG+TEA

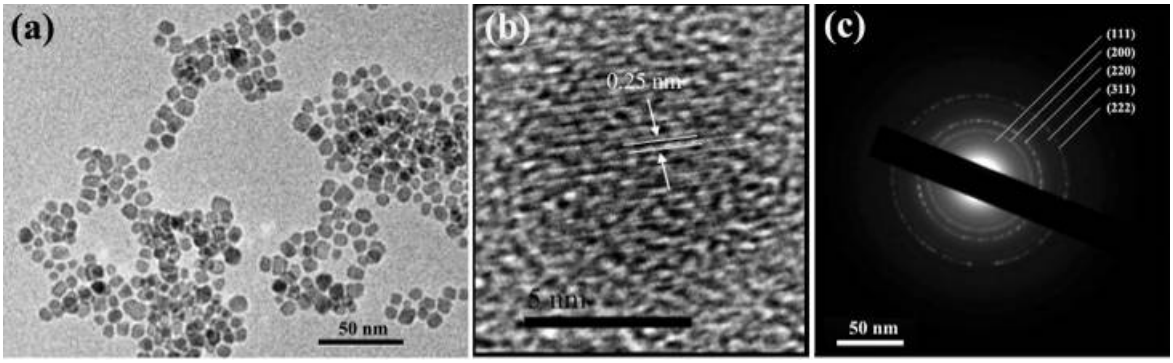

Figure S2. (a,b)TEM images and (c) SAED pattern of Fe_3O_4.

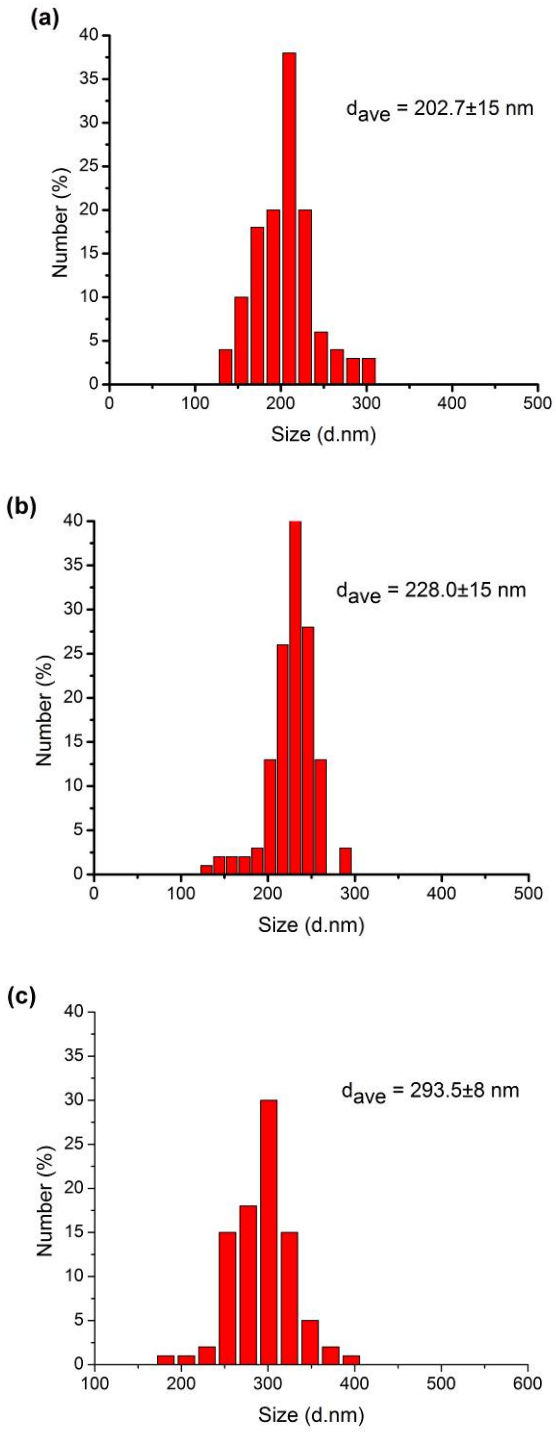

Figure S3. The size distribution of (a) Fe_3O_4@PZS-1, (b) Fe_3O_4@PZS-2 and (c) Fe_3O_4@PZS-3, analyzed from the SEM images in Figure 1.

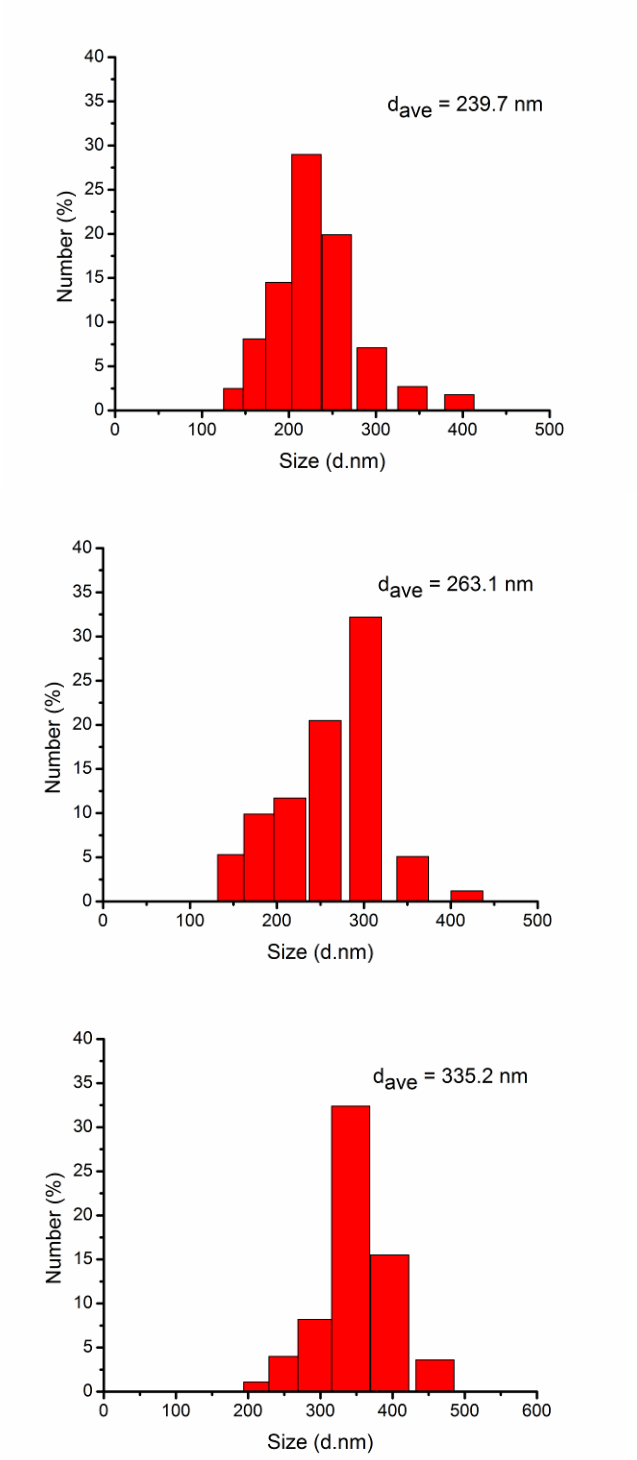

Figure S4. The size distribution of Fe_3O_4@PZS-1,2,3 by DLS.

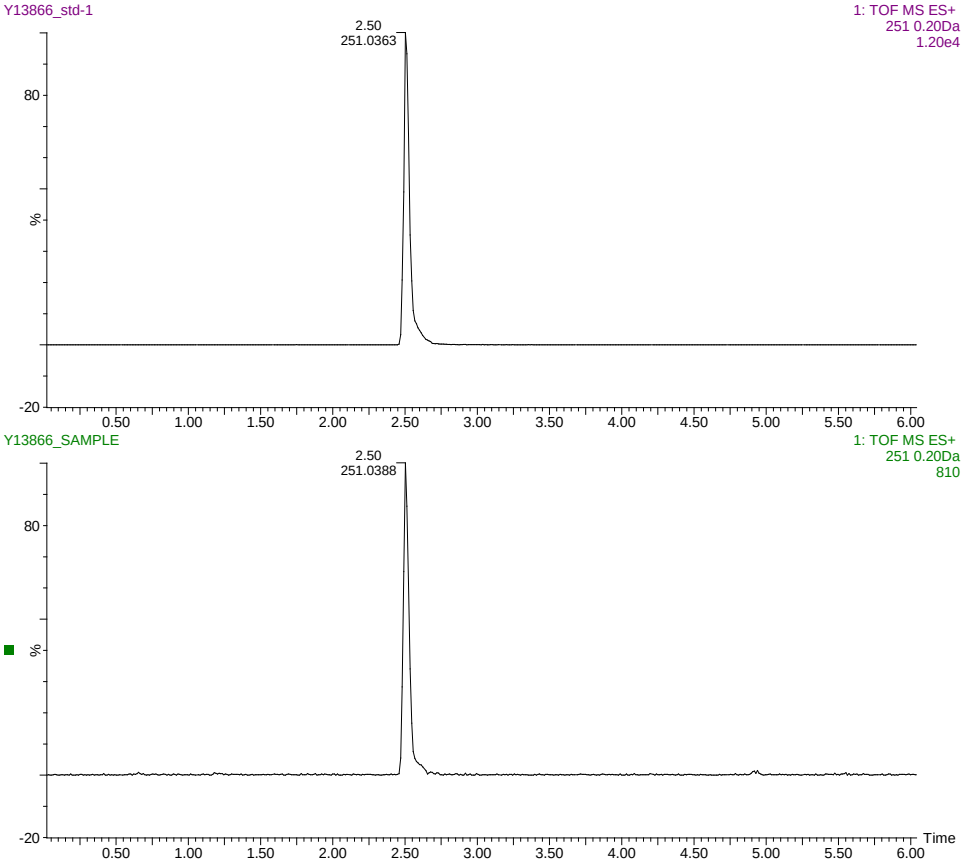

Figure S5. The liquid chromatography-mass spectroscopy of BPS and the degradation product of Fe_3O_4@PZS-2.

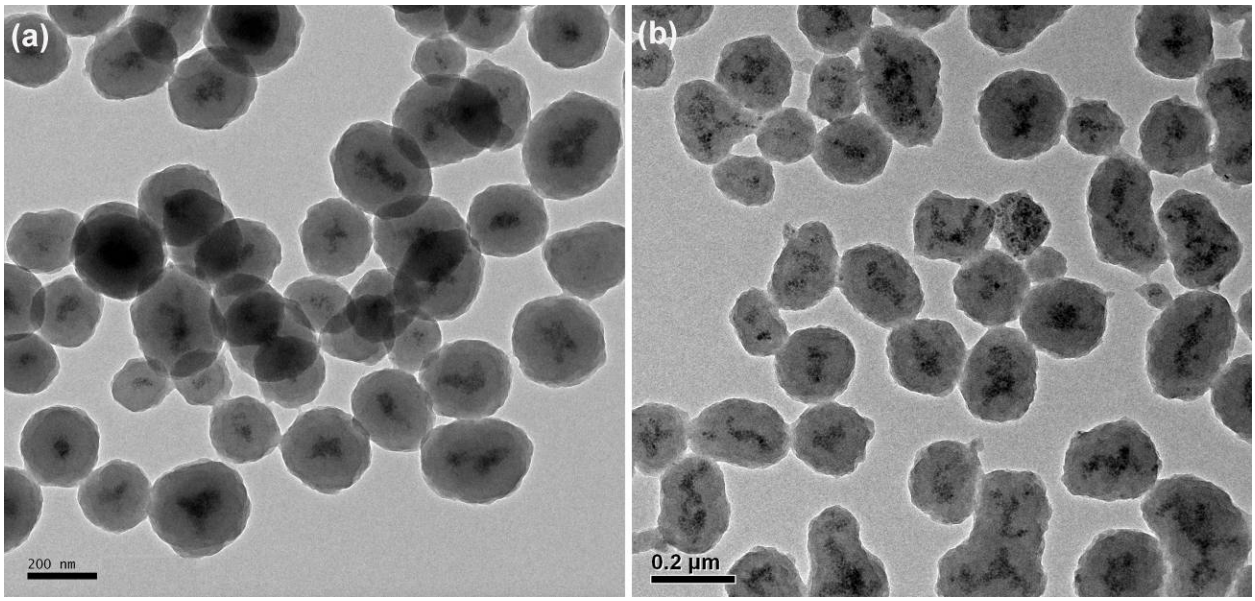

Figure S6. TEM images of Fe_3O_4@PZS- 2 before (a) and after (b) 160 days degradation in pH 7.4 PBS solution.

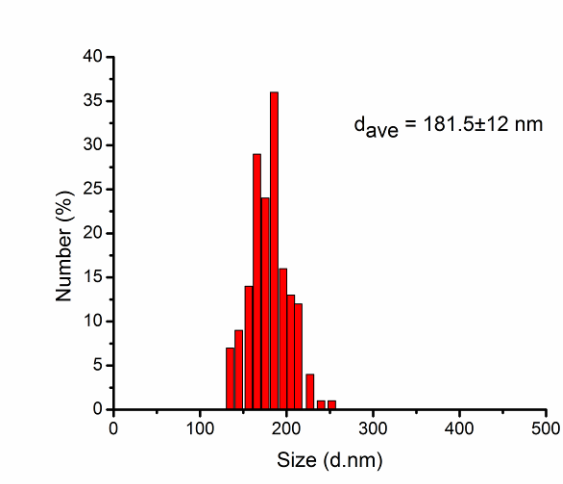

Figure S7. The size distribution of Fe_3O_4@PZS-2 after 160 days degradation in pH 7.4 PBS solution.