

Supporting Information

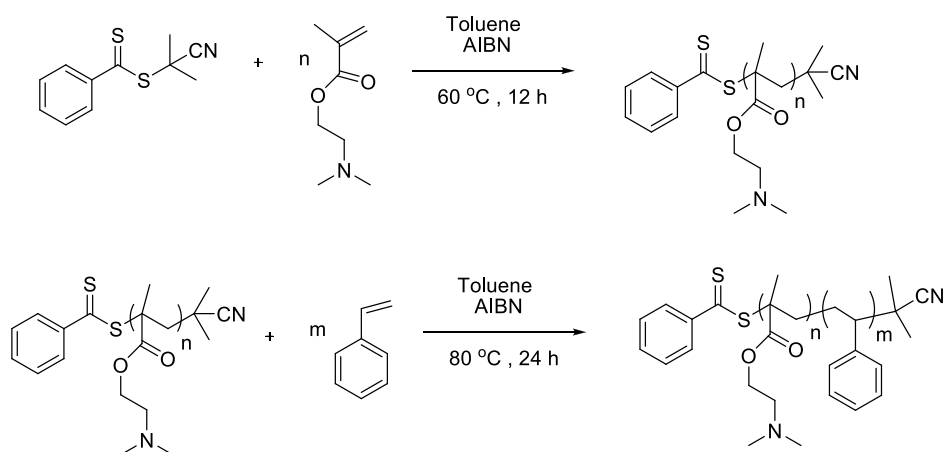
Preparation of Prussian blue containing polymeric nanocapsule via interfacial confined coordination in crosslinked inverse miniemulsion

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Scheme S1. Synthetic scheme for the preparation of PDMAEMA-CTA and PDMAEMA-*b*-PS copolymer.

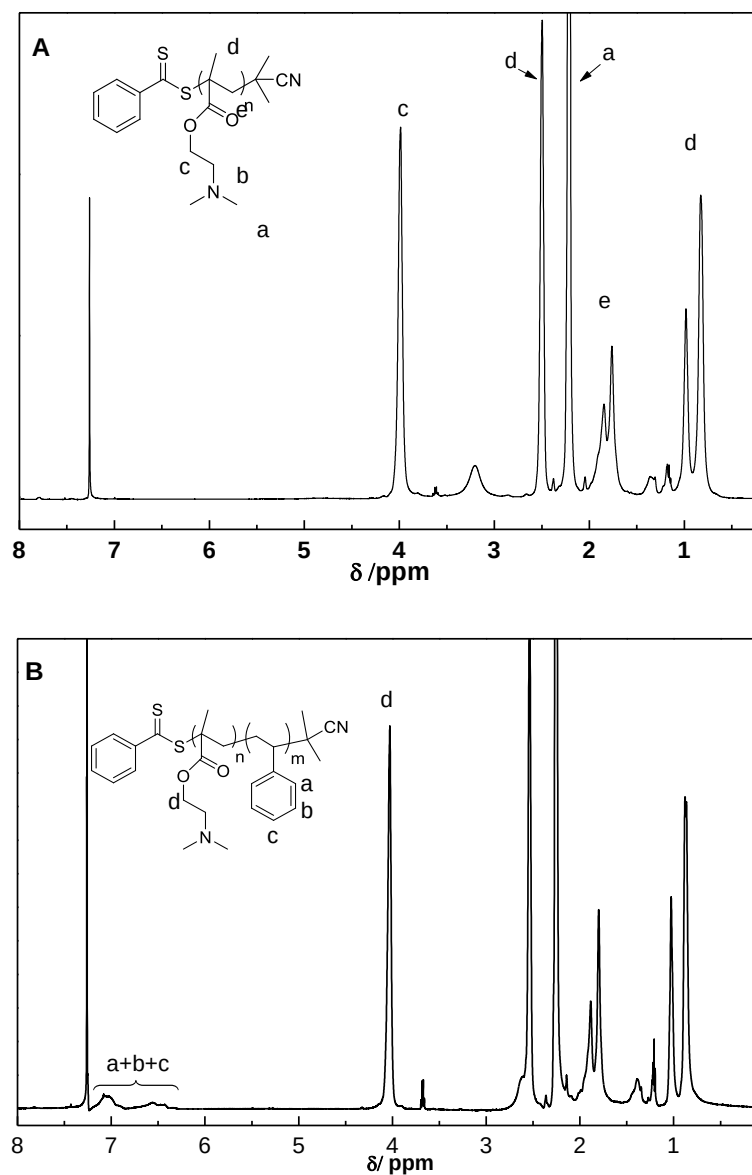


Figure S1. ¹H-NMR spectrum of poly((2-dimethylamino)ethyl methacrylate) PDMAEMA-CTA in CDCl₃(A) and ¹H-NMR spectrum of poly(2-dimethylamino)ethyl methacrylate)-block-polystyrene in CDCl₃ (B) .

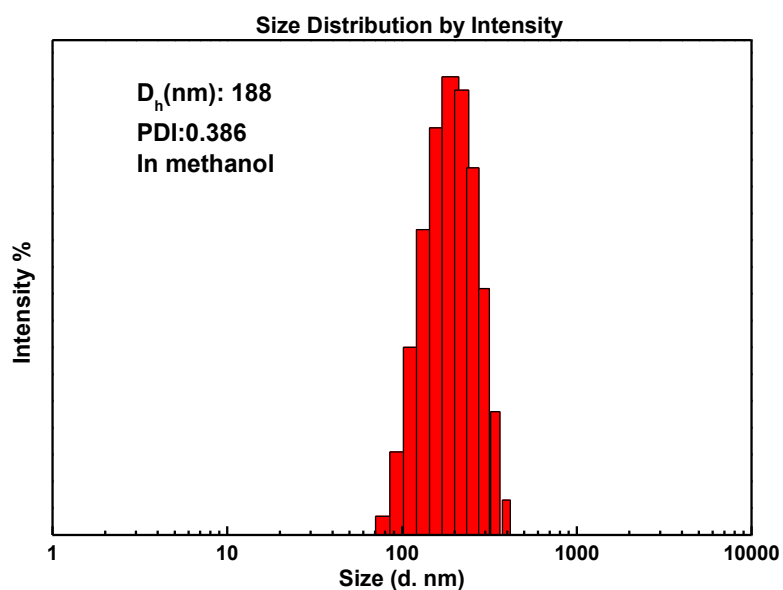


Figure S2. Diameter and polydispersity of cross-linked inverse miniemulsion in methanol. Inverse miniemulsion formulation; PDMAEMA-*b*-PS 0.065 g, toluene 6.5 g, distilled water 0.65 g, $K_4Fe(CN)_6 \cdot 3H_2O$ 0.013 g, BIEE 0.1 g. For DLS samples preparation, the cross-linked miniemulsion (0.2 g) was diluted into 10 g of methanol directly for DLS measurements.

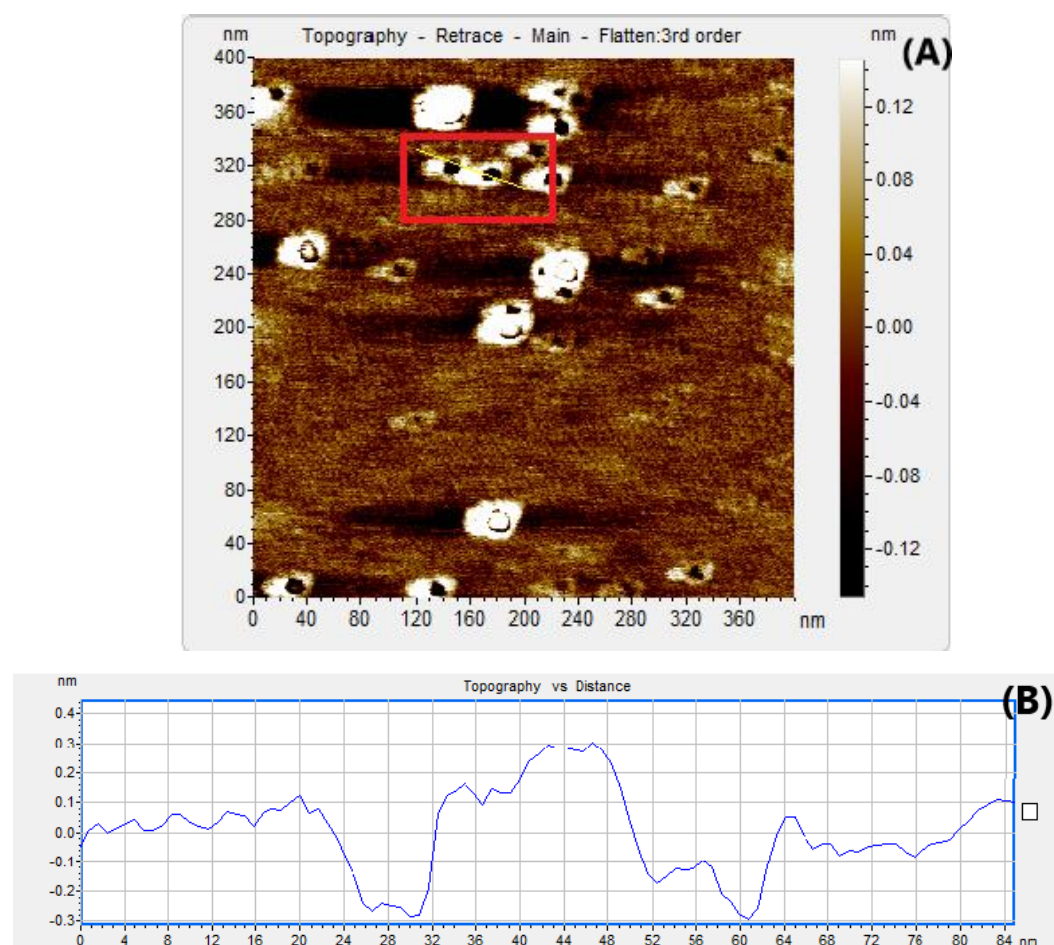


Figure S3. Height image(A)of tapping mode AFM micrograph is $0.4 \times 0.4 \mu\text{m}^2$, and Topography vs Distance image (B) of selected particles as red highlight in (A) .

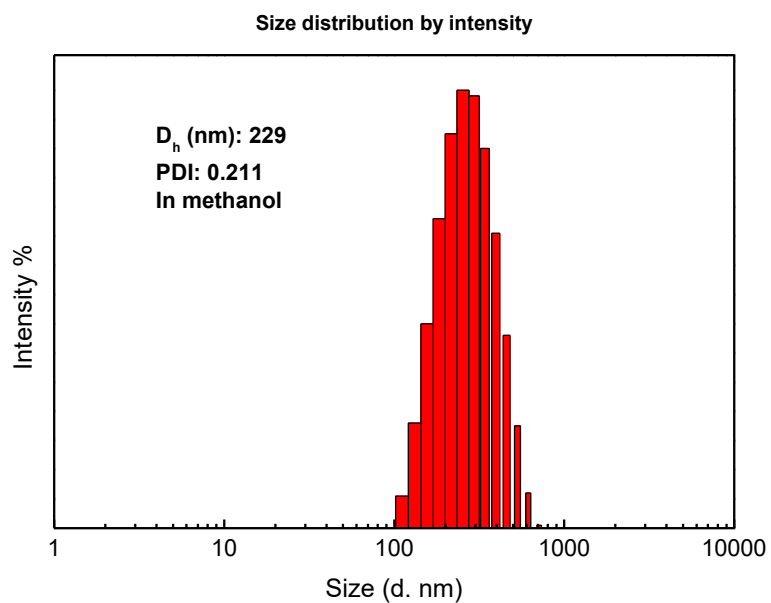


Figure S4. Diameter and polydispersity of inverse miniemulsion after coordination reaction in methanol. PB coated nanocapsules prepared using crosslinked nanocapsules with $\text{Fe}^{3+}/\text{Fe}^{2+} = 1:5$. For DLS samples preparation, the miniemulsion (0.2 g) was diluted into 10 g of methanol directly for DLS measurements.