## **Electronic Supplementary Information**

## A one-pot approach using recyclable template to dual-responsive yolk-shell or Janus-like nanoparticles

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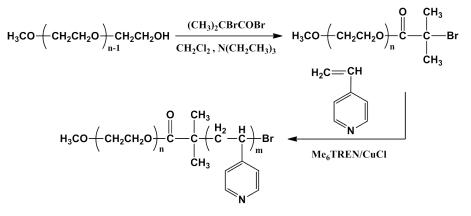


Figure S1 The synthesis route for diblock copolymer PEO-b-P4VP

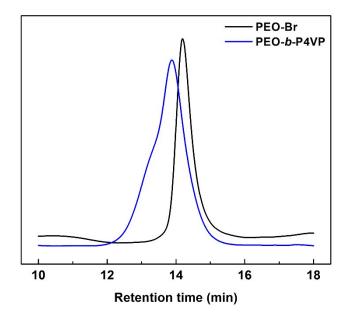


Figure S2 GPC curves of macro-initiator PEO-Br and diblock copolymer PEO-b-P4VP

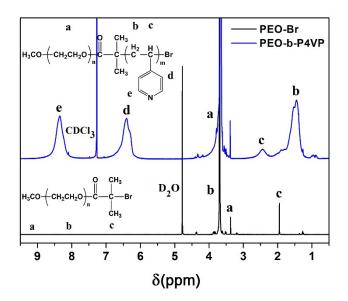


Figure S3 <sup>1</sup>H NMR spectra of macro-initiator PEO-Br and diblock copolymer PEO-b-P4VP

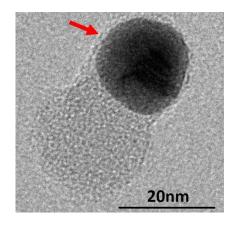


Figure S4 Molecular formula of PP probe

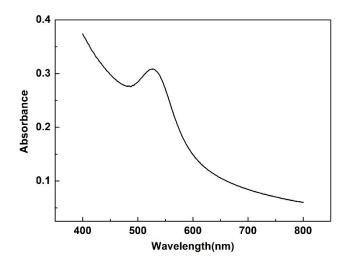


Figure S5 UV-vis spectrum of YSNs in water