Electronic Supplementary Material (ESI) for Polymer Chemistry.


# Synthesis and self-assembly of polyethersulfone based amphiphilic block copolymer as microparticles for suspension immunosensor

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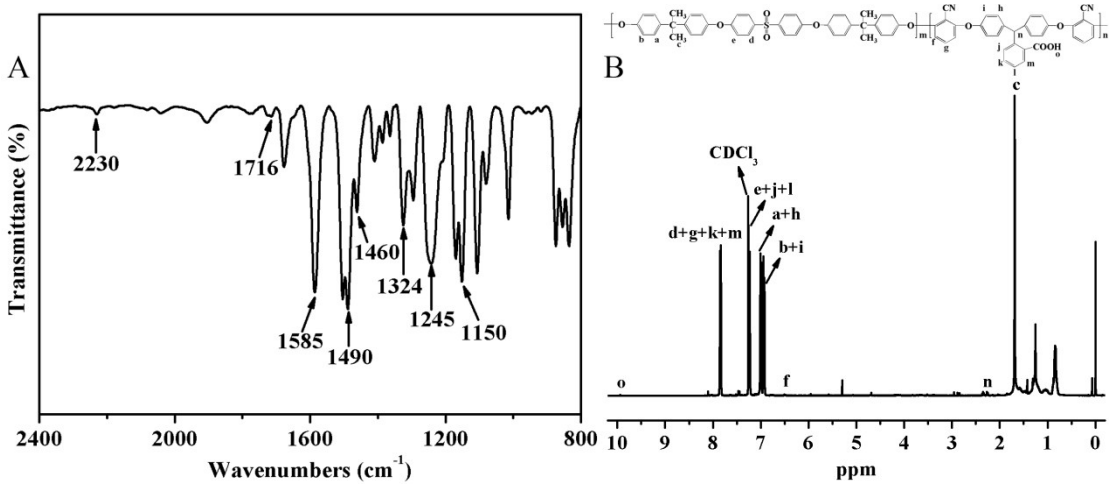


Fig. S1 The FTIR (A) and NMR (B) spectrum of synthesized PENS block copolymer.

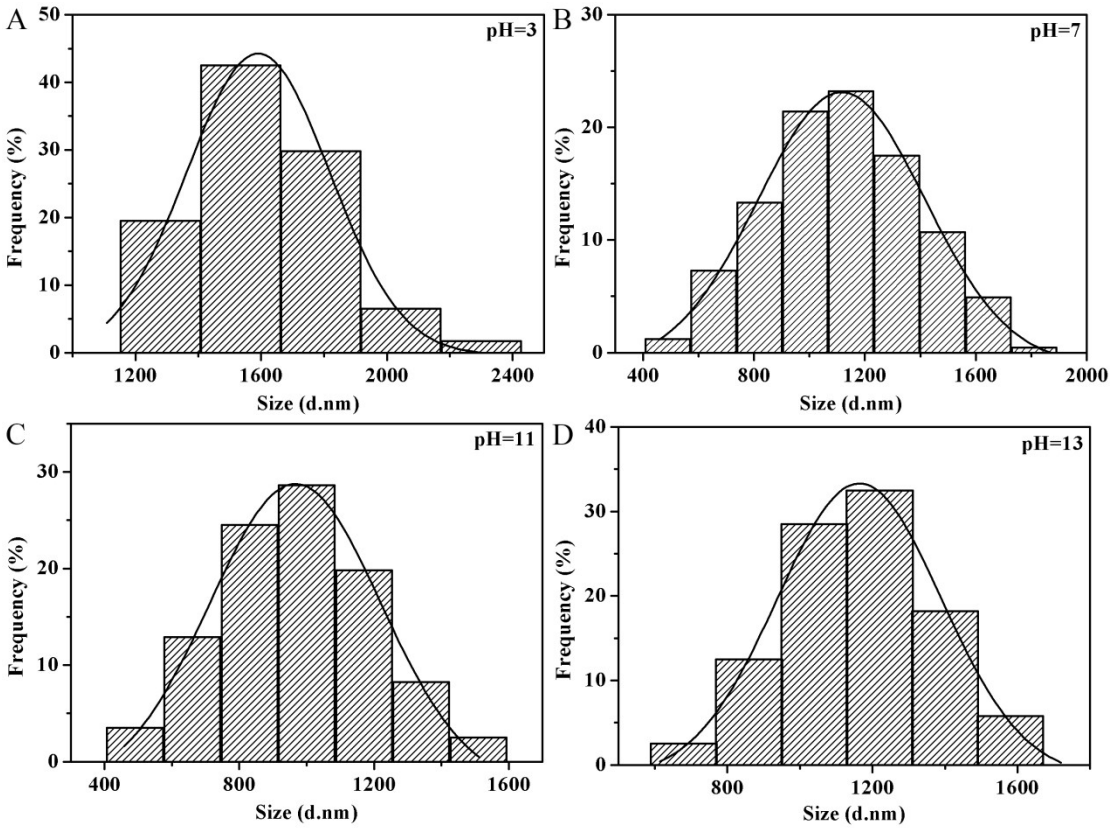


Fig.S2 The DLS size distribution histogram of PENS microparticles fabricated in the SDS stabilized o/w emulsion with different pH value of 3 (A), 7 (B), 9 (C), 11 (D), respectively.

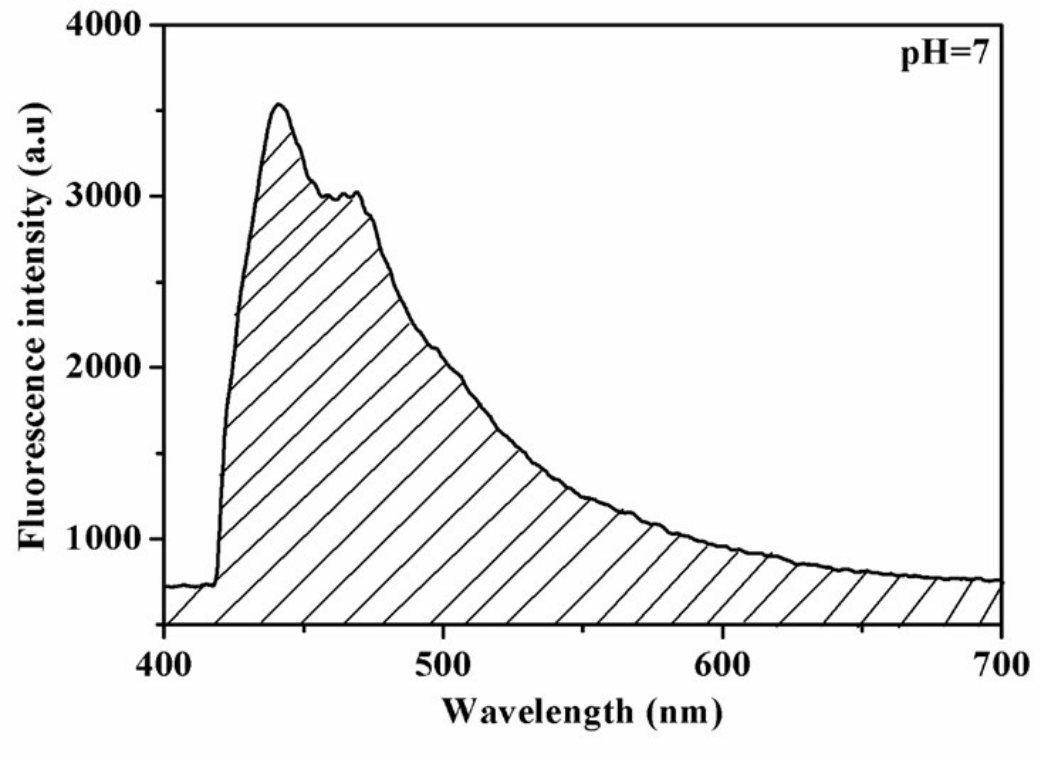


Fig.S3 The integration function used to calculate the fluorescence intensity of prepared PENS microparticles with Origin 8.5.

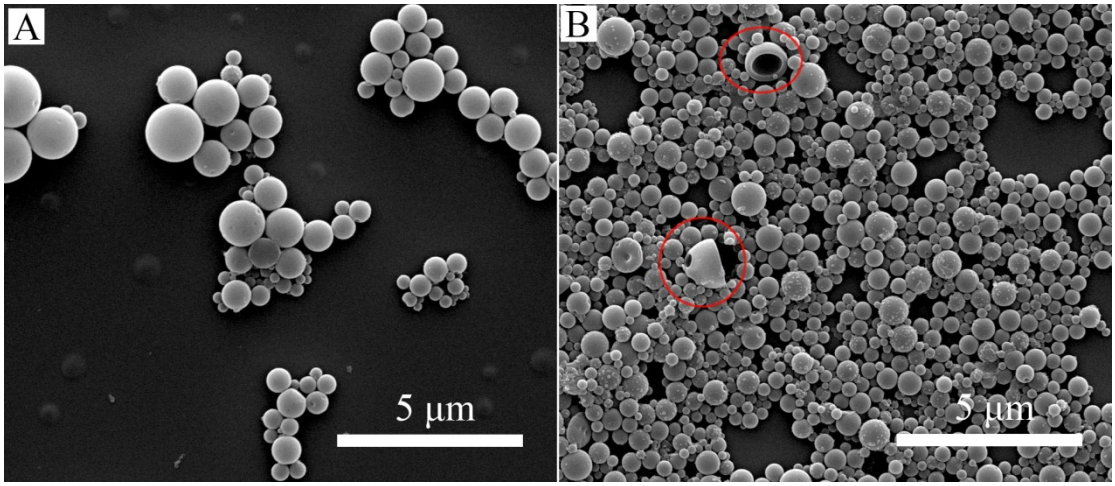


Fig.S4 The SEM images of PENS microparticles obtained in SDS stabilized O/W emulsion with an oil-to-water ratio of 1:8 (A) and 1:5 (B), respectively.

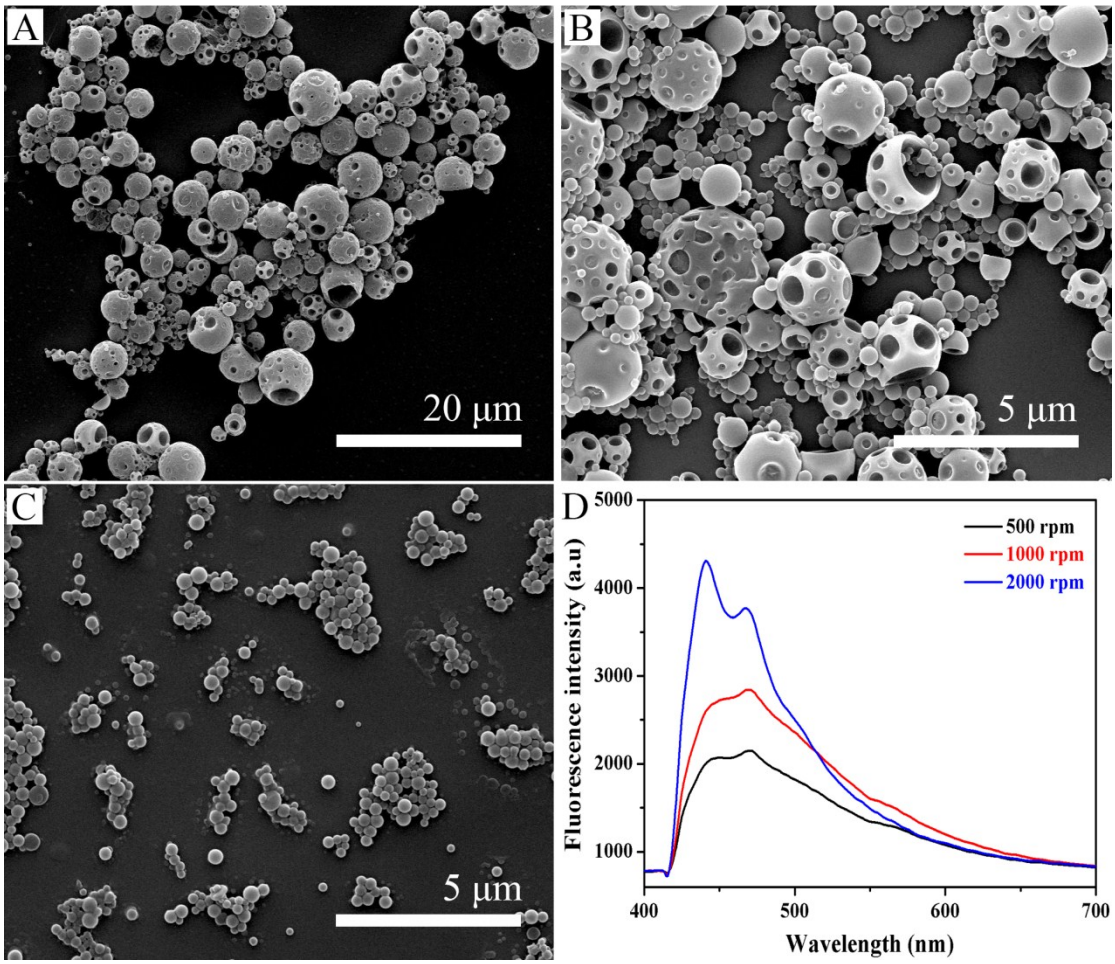


Fig.S5 The SEM images of PENS microparticles obtained in CTAB stabilized O/W emulsion using a stirring speed of 500 rpm (A), 1000 rpm (B), 2000 rpm (C), respectively, and the corresponding fluorescence emission spectra (D).

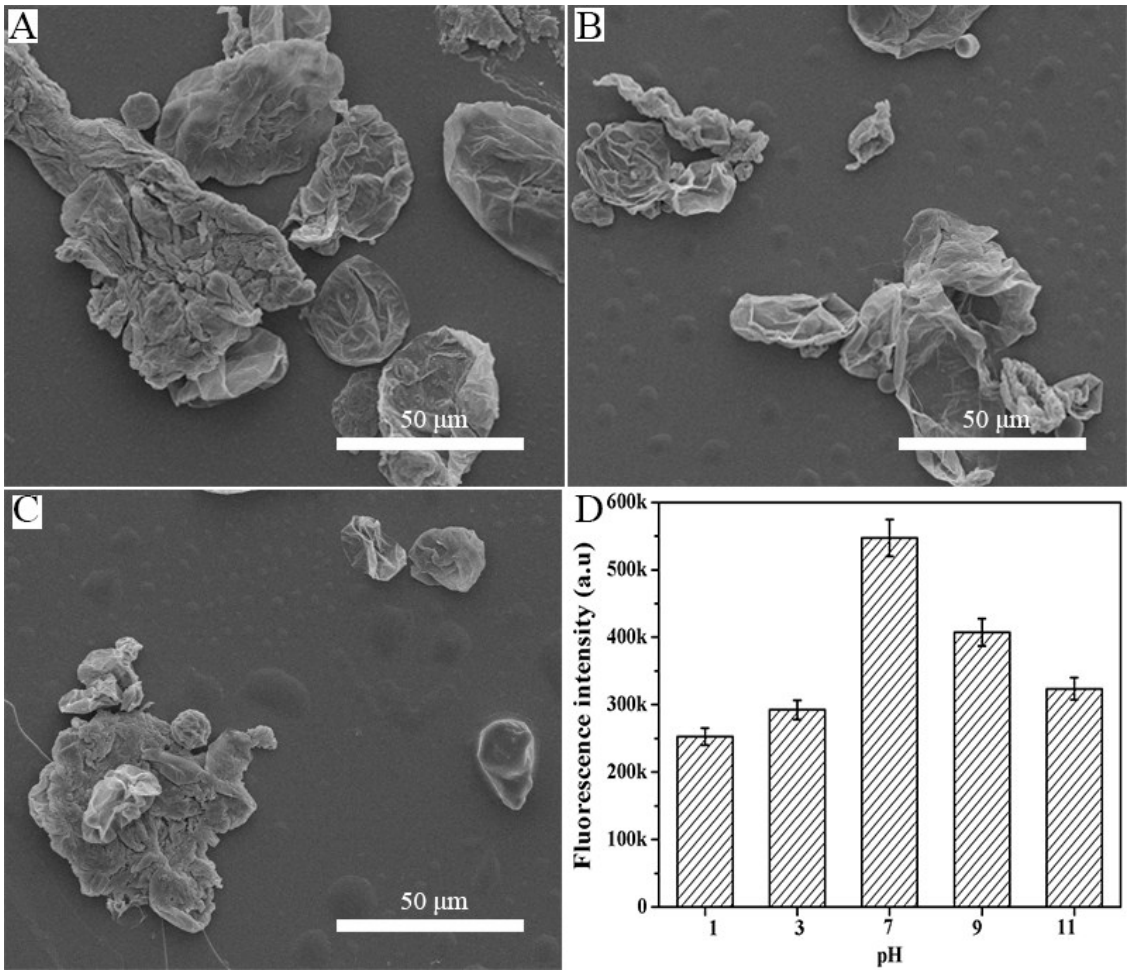


Fig.S6 The SEM images of PENS microparticles obtained in PVP involved O/W emulsion with the typical pH value of 5 (A), 7 (B), 9 (C), respectively, and the corresponding fluorescence emission intensities (D).

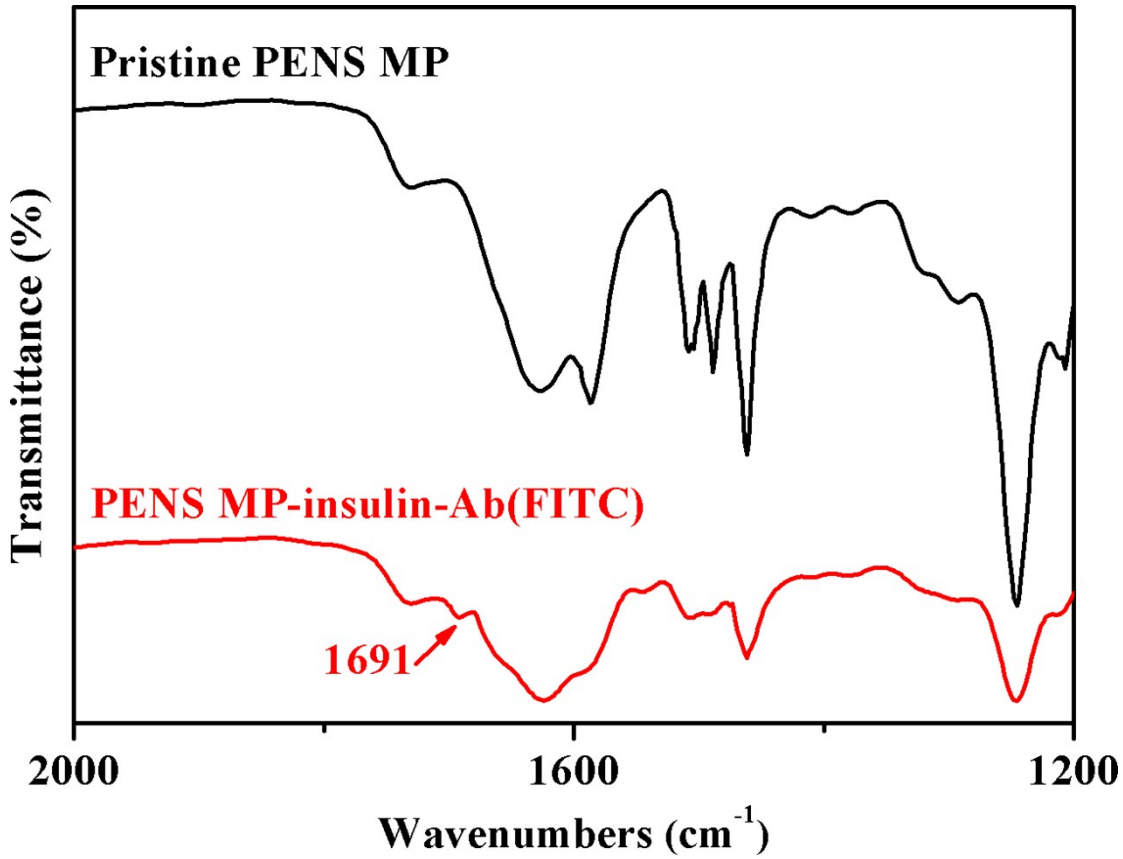


Fig.S7 The FTIR spectra of pristine PENS microparticles and anti-insulin modified PENS microparticles.

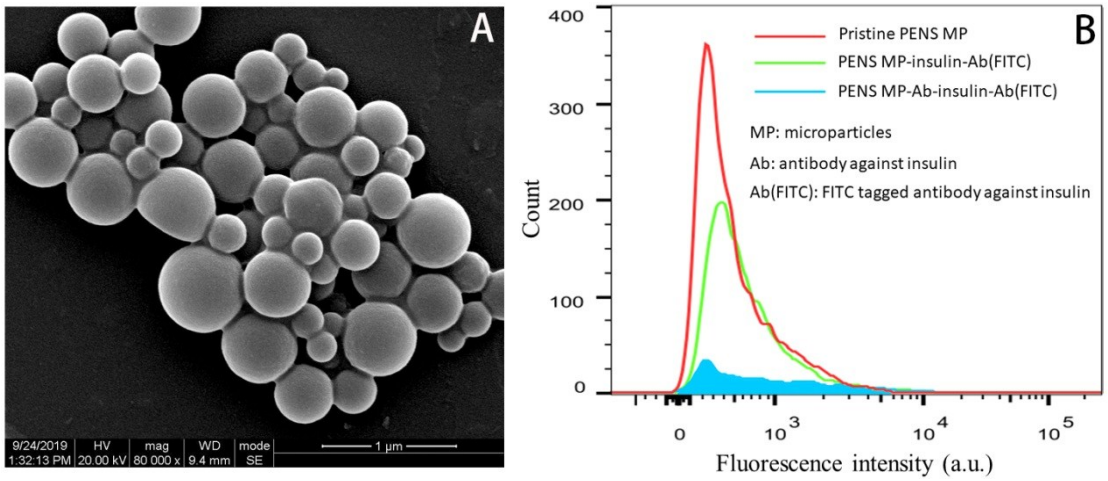


Fig.S8 The SEM morphology of PENS microparticles obtained in the emulsion using a stirring speed of 2000 rpm after surface modification of antibody against insulin (A), the flow cytometry response of PENS microparticles subjected to antibody, antigen and FITC tagged antibody binding (B).