

Electronic Supplementary Information (ESI) for

**Silver-decorated biodegradable polymer vesicles with
excellent antibacterial efficacy**

Kaidian Zou, Qiuming Liu, Jing Chen and Jianzhong Du^{a*}

*School of Materials Science and Engineering, Tongji University, 4800 Caoan Road, Shanghai,
201804, China.*

Fax: +86 (021) 69584723; Tel: +86 (021) 69580239; E-mail: jzdu@tongji.edu.cn

Fig. S1. Synthetic route to the biodegradable PCL-*b*-PAA diblock copolymer.

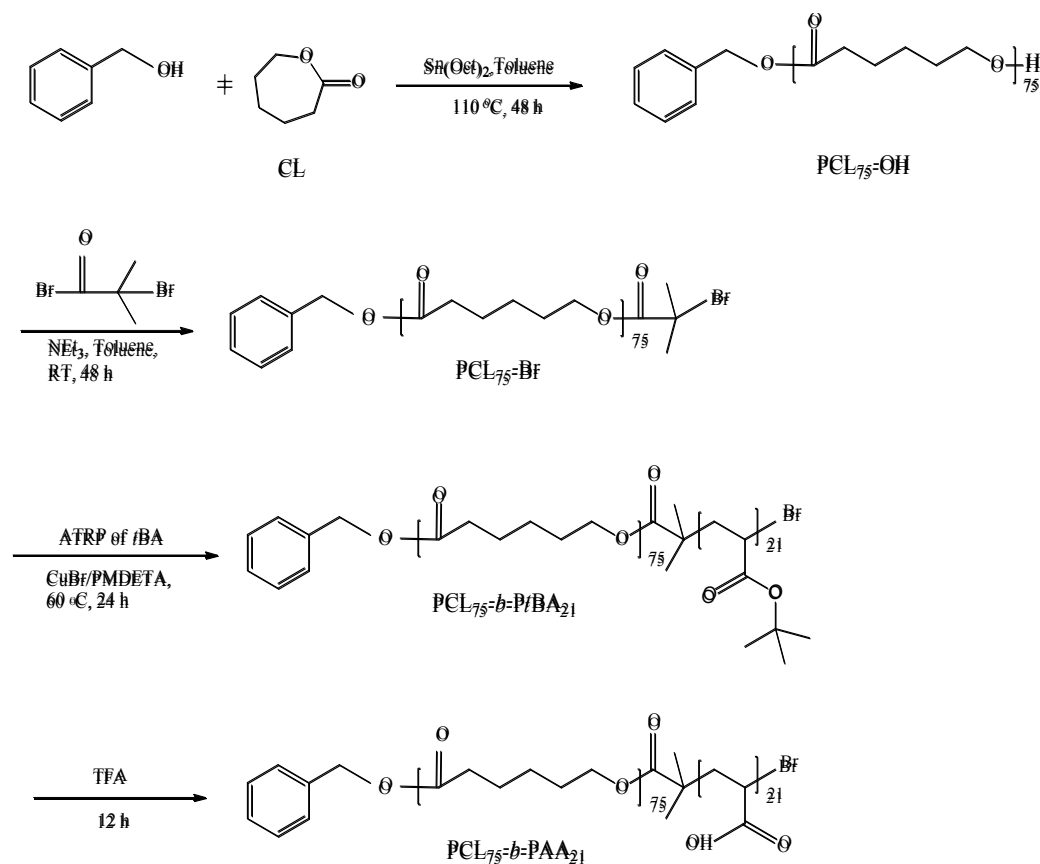


Fig. S2. GPC traces of PCL₇₅-*b*-PtBA₂₁ diblock copolymer and PCL₇₅-OH homopolymer, indicating the chain extension of the PCL₇₅-*b*-PtBA₂₁ diblock copolymer compared with PCL₇₅-OH homopolymer.

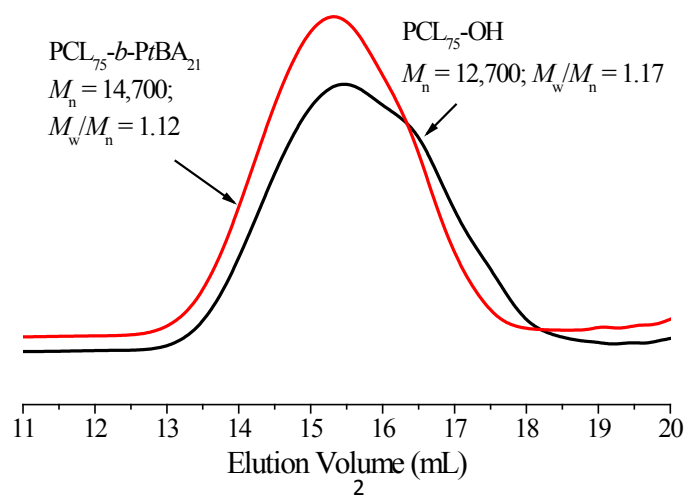


Fig. S3 Effect of solution pH on (a) z-averaged hydrodynamic diameters and (b) polydispersity index of polymer vesicles at 0.7 mg mL^{-1} by DLS.

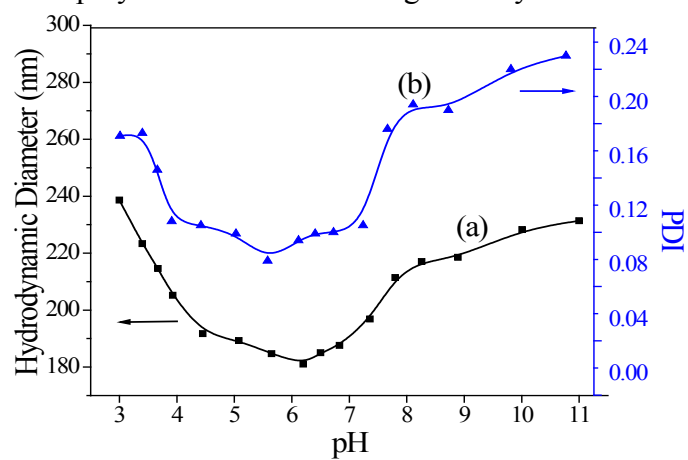
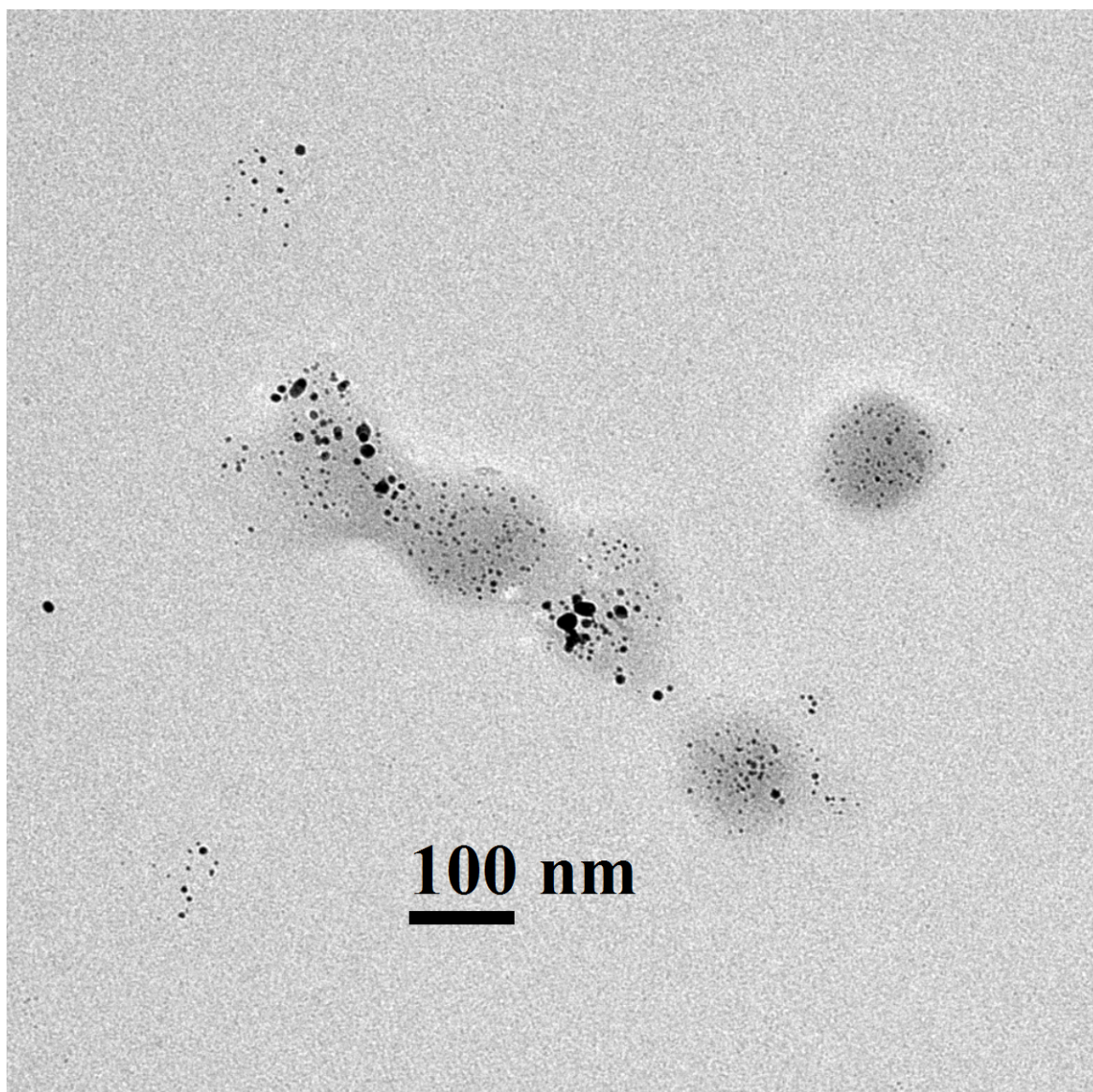


Fig. S4 TEM images of Ag-decorated polymer vesicles at pH 7.8.



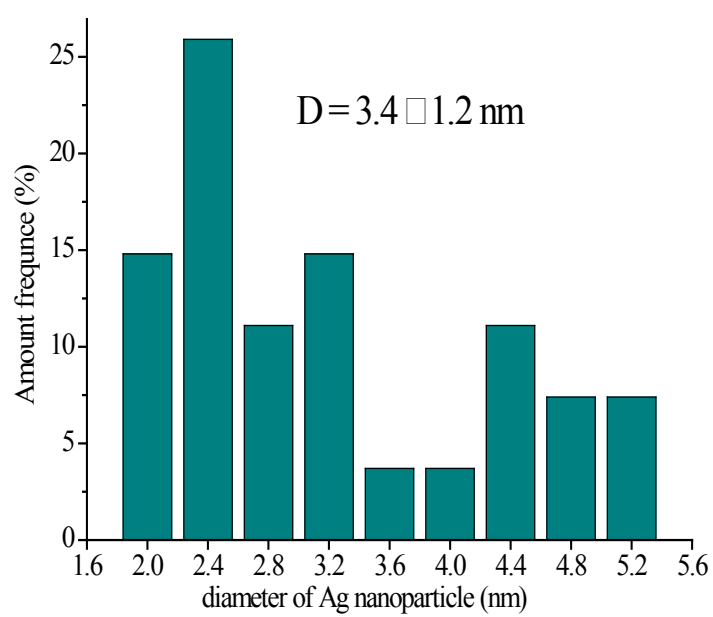
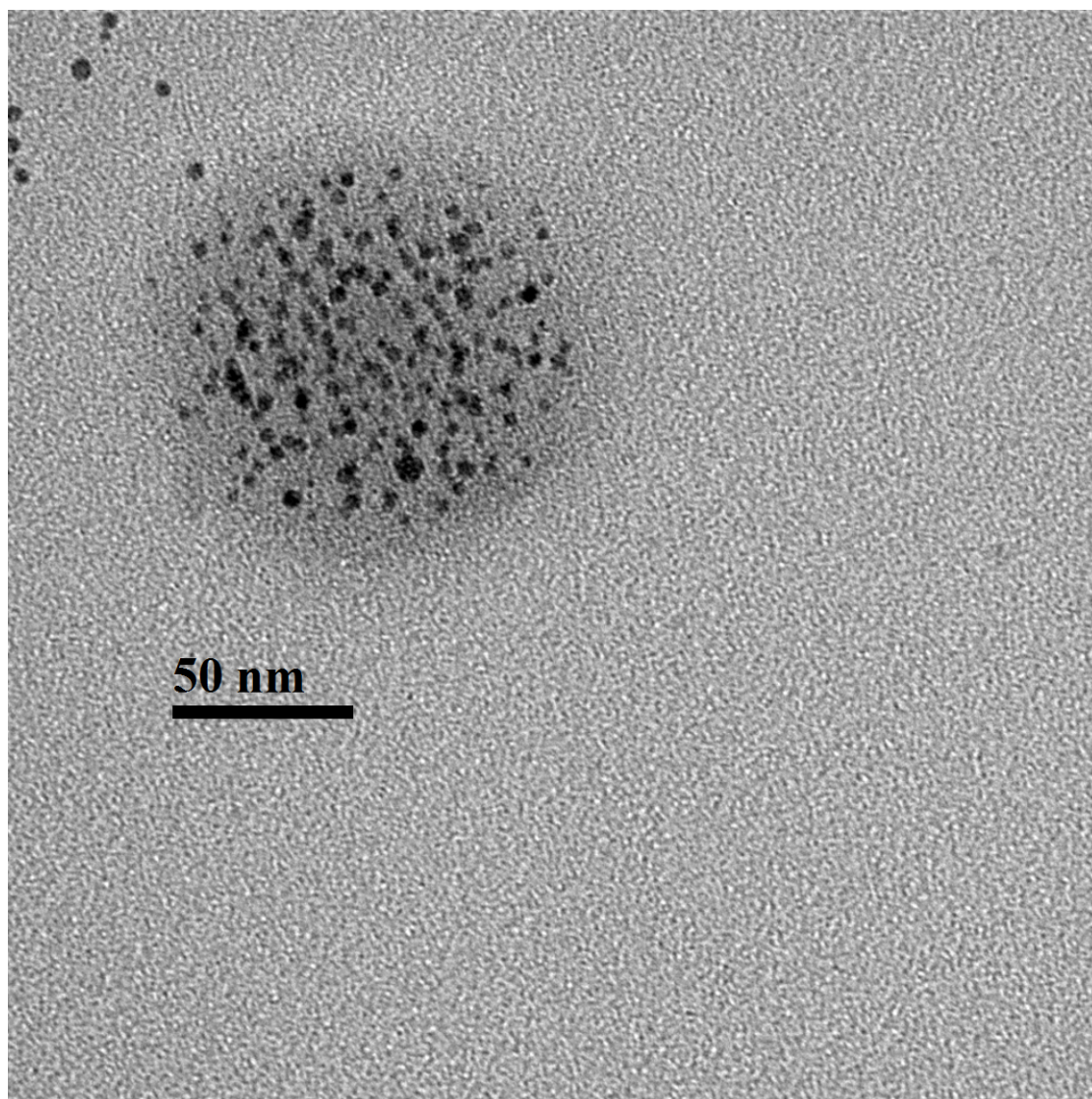


Fig. S5 Silver ions standard curve measured by AAS.

