Electronic Supporting Information

Aggregation inhibition for graphene oxide nanosheets in polyelectrolyte solutions and the assembly of nanocapsules with graphene oxide nanosheets as template

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Fig. S1 XRD pattern of GO nanosheets.
Fig. S2 UV-Vis spectra of GO-templated nanocapsules.

Fig. S3 N 1s (A) and S 2p (B) XPS spectra of GO/(PAH/PSS)$_4$ nanocapsules.

Fig. S4 FTIR spectra of GO/(PAH/PSS)$_4$ nanocapsules, pure PAH and PSS.
Fig. S5 AFM height image and section analysis of GO+PTX nanosheets.

Fig. S6 TEM micrograph of a (GO+PTX)/(PAH/AuNPs)/(PAH/PSS)/PAH nanocapsule.

Fig. S7 The thickness increase of each layer in the assembly of GO/(PAH/PSS)$_4$ nanocapsules.
Fig. S8 The thickness increase in the assembly of (GO+PTX)/(PAH/AuNPs)/(PAH/PSS)/PAH nanocapsules.

Fig. S9 AFM 3D topographical images of GO-templated nanocapsules of (A) GO/PAH, (B) GO/(PAH/PSS), (C) GO/(PAH/PSS)/PAH, (D) GO/(PAH/PSS)$_2$, (E) GO/(PAH/PSS)$_2$/PAH, (F) GO/(PAH/PSS)$_3$, (G) GO/(PAH/PSS)$_3$/PAH, and (H) GO/(PAH/PSS)$_4$.

Fig. S10 AFM 3D topographical images of nanocapsules of (A) (GO+PTX)/PAH, (B) (GO+PTX)/(PAH/AuNPs), (C) (GO+PTX)/(PAH/AuNPs)/(PAH/PSS), and (D) (GO+PTX)/(PAH/AuNPs)/(PAH/PSS)/PAH.
Table 1 The average thickness of each layer in the assembly of GO/(PAH/PSS)$_4$ nanocapsules.

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Table 2 The average thickness of each layer in the assembly of (GO+PTX)/(PAH/AuNPs)/(PAH/PSS)/PAH nanocapsules.

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