

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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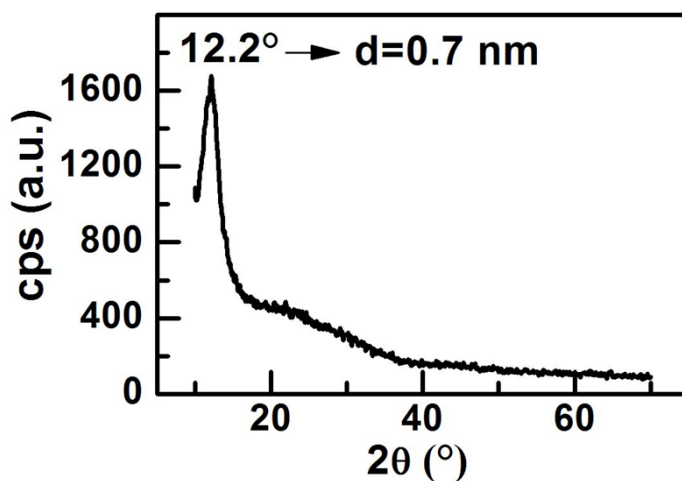


Fig. S1 XRD pattern of GO nanosheets.

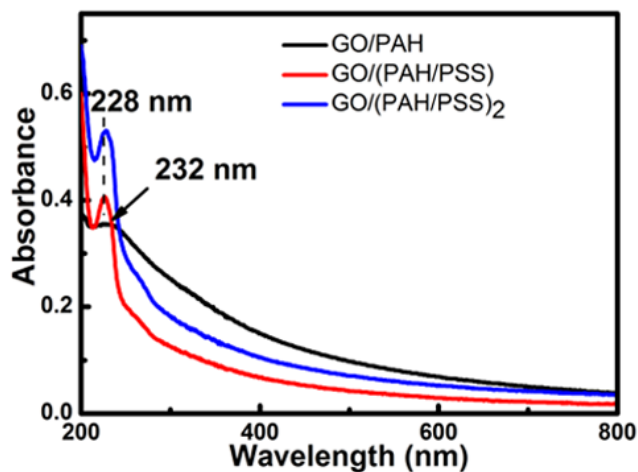


Fig. S2 UV-Vis spectra of GO-templated nanocapsules.

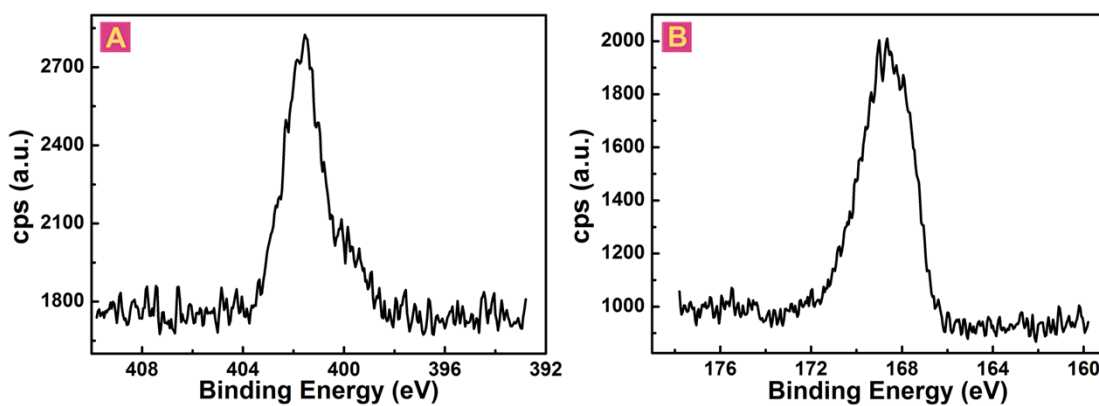


Fig. S3 N 1s (A) and S 2p (B) XPS spectra of GO/(PAH/PSS)₄ nanocapsules.

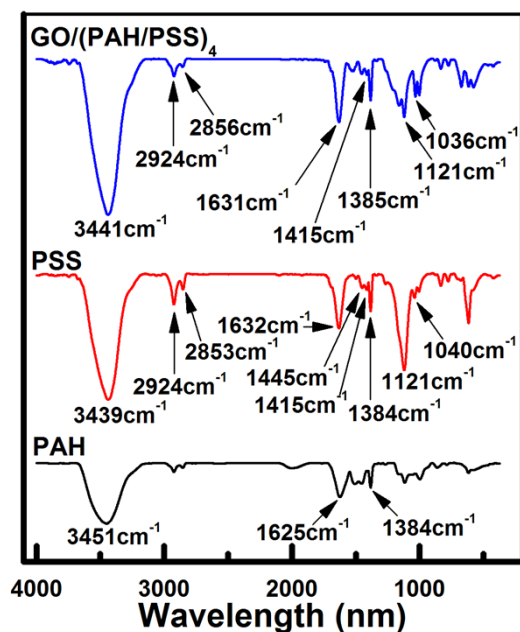


Fig. S4 FTIR spectra of GO/(PAH/PSS)₄ nanocapsules, pure PAH and PSS.

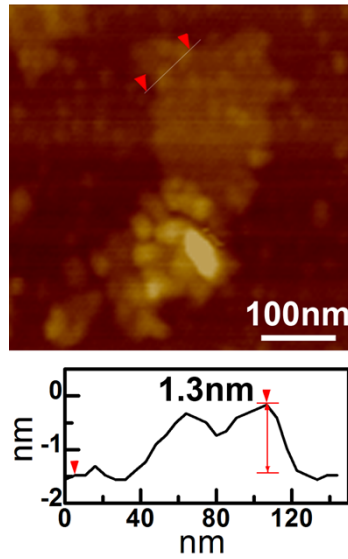


Fig. S5 AFM height image and section analysis of GO+PTX nanosheets.

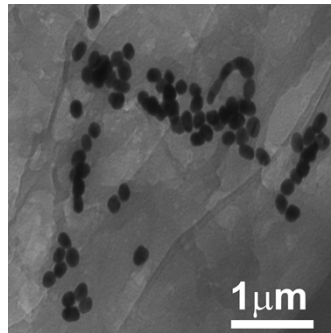


Fig. S6 TEM micrograph of a (GO+PTX)/(PAH/AuNPs)/(PAH/PSS)/PAH nanocapsule.

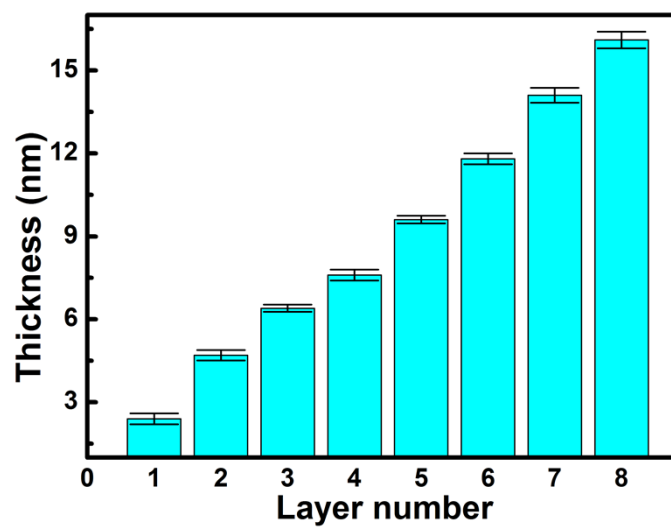


Fig. S7 The thickness increase of each layer in the assembly of GO/(PAH/PSS)₄ nanocapsules.

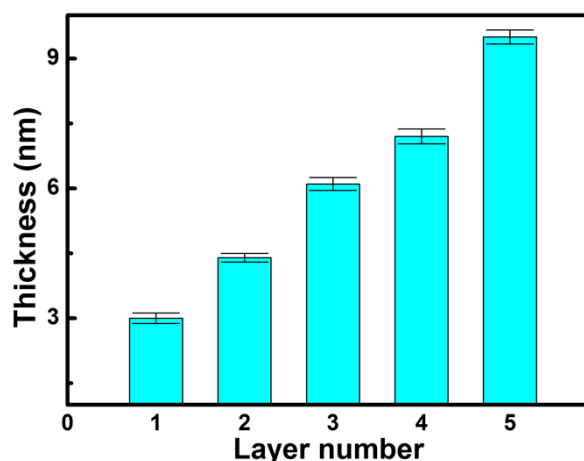


Fig. S8 The thickness increase in the assembly of (GO+PTX)/(PAH/AuNPs)/(PAH/PSS)/PAH nanocapsules.

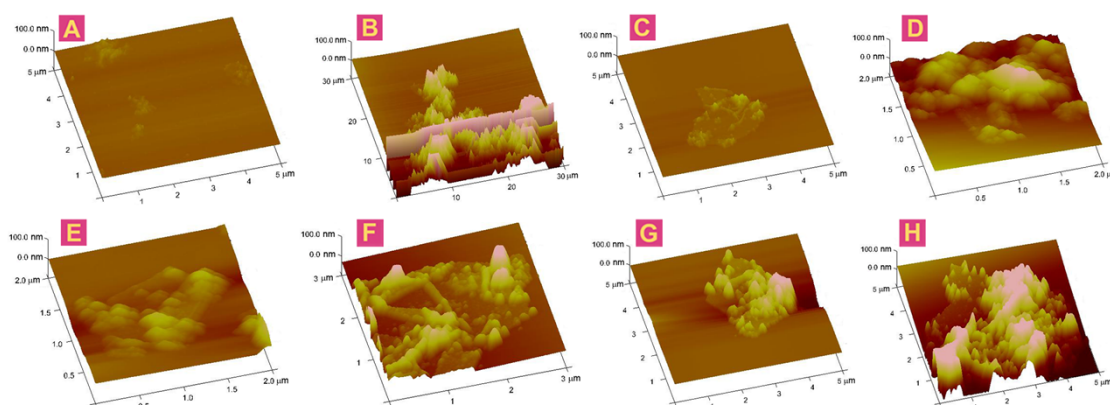


Fig. S9 AFM 3D topographical images of GO-templated nanocapsules of (A) GO/PAH, (B) GO/(PAH/PSS), (C) GO/(PAH/PSS)/PAH, (D) GO/(PAH/PSS)₂, (E) GO/(PAH/PSS)₂/PAH, (F) GO/(PAH/PSS)₃, (G) GO/(PAH/PSS)₃/PAH, and (H) GO/(PAH/PSS)₄.

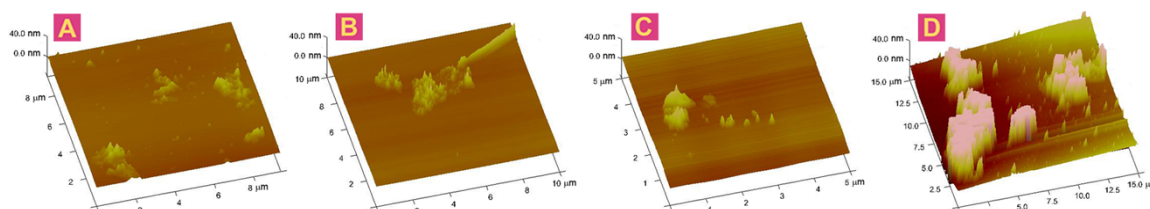


Fig. S10 AFM 3D topographical images of nanocapsules of (A) (GO+PTX)/PAH, (B) (GO+PTX)/(PAH/AuNPs), (C) (GO+PTX)/(PAH/AuNPs)/(PAH/PSS), and (D) (GO+PTX)/(PAH/AuNPs)/(PAH/PSS)/PAH.

Table 1 The average thickness of each layer in the assembly of GO/(PAH/PSS)₄ nanocapsules.

Layer number	Thickness (nm)
1	2.4
2	4.7
3	6.4
4	7.6
5	9.6
6	11.8
7	14.1
8	16.1

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

Layer number	Thickness (nm)
1	3.0
2	4.4
3	6.1
4	7.2
5	9.5