

Electronic Supplementary Information

Controllably Layer-by-Layer Self-assembled Polyelectrolytes/Nanoparticle Blend Hollow Capsules and Their Unique Properties

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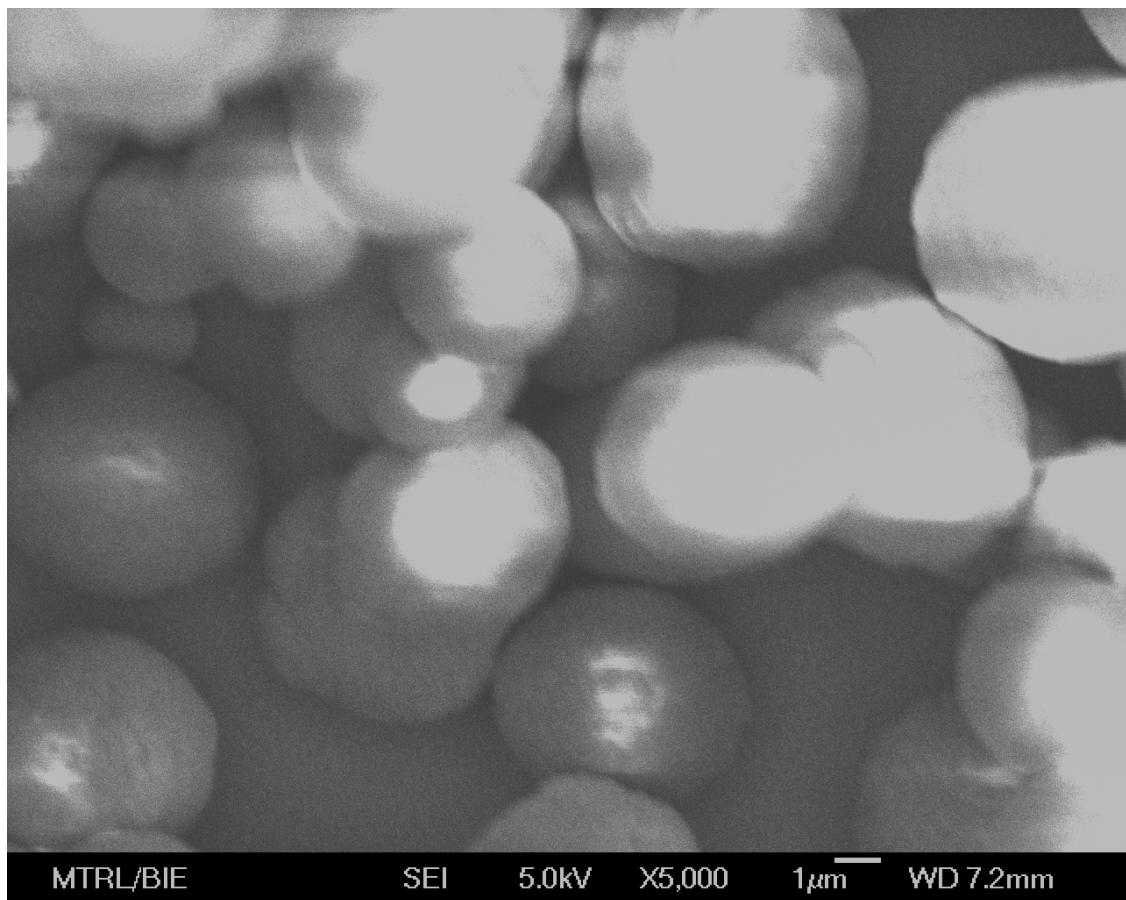


Fig. S1. FE-SEM image of the CaCO_3 microparticles.

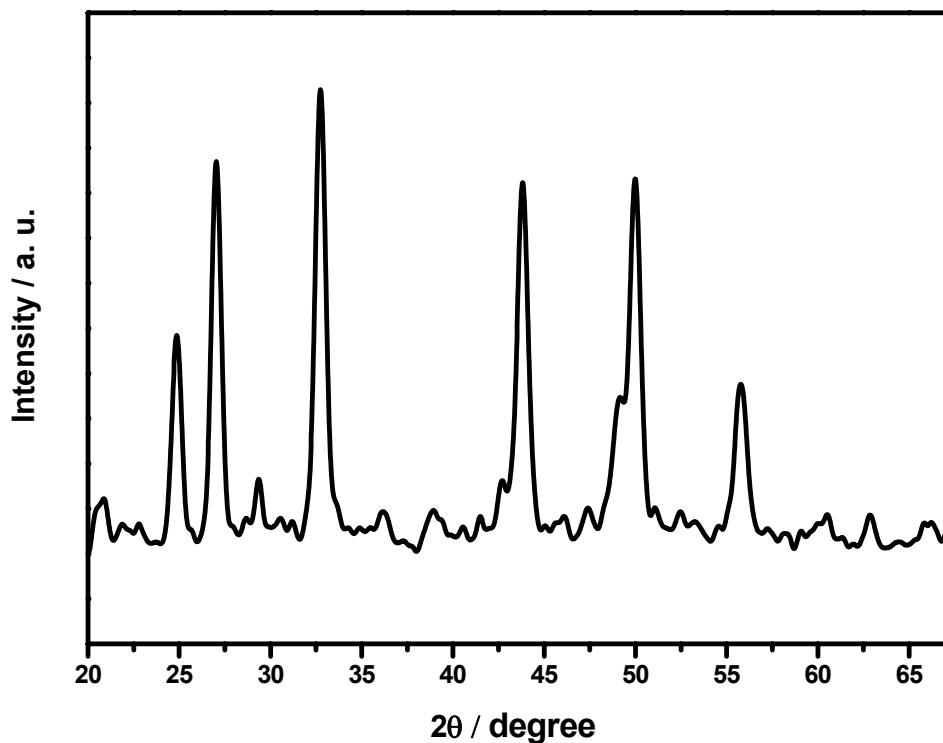


Fig. S2. XRD pattern of CaCO₃ microparticles.

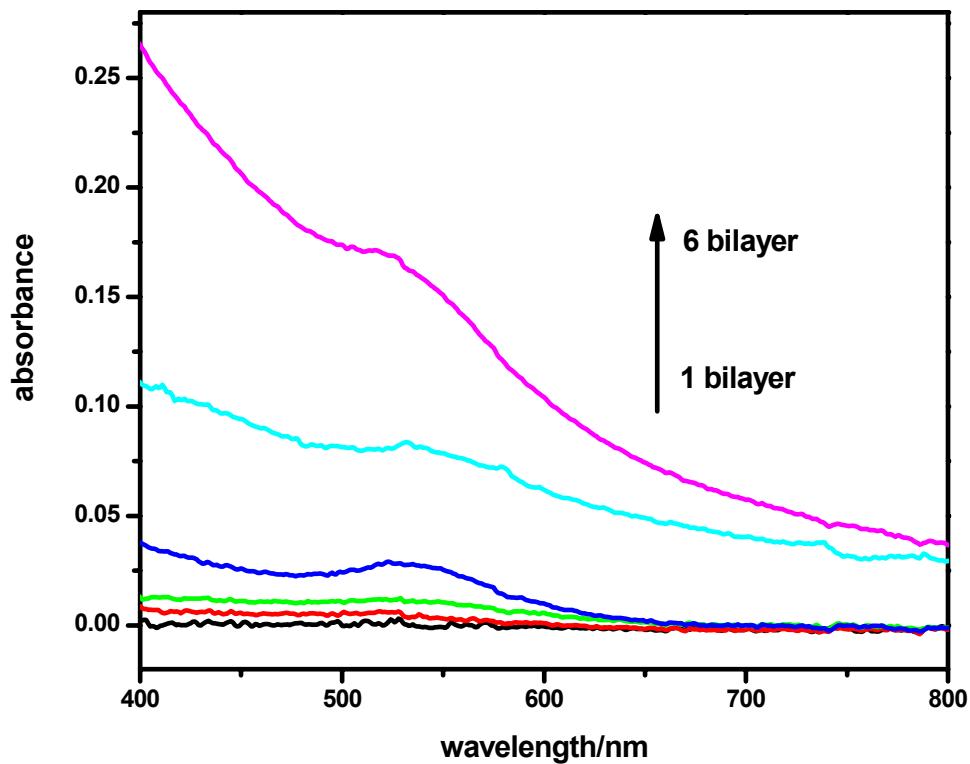


Fig. S3. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers assembled at PEI (1mg/ml) pH 9.0 and PAA (1mg/ml)-gold nanoparticle blend pH 3.2.

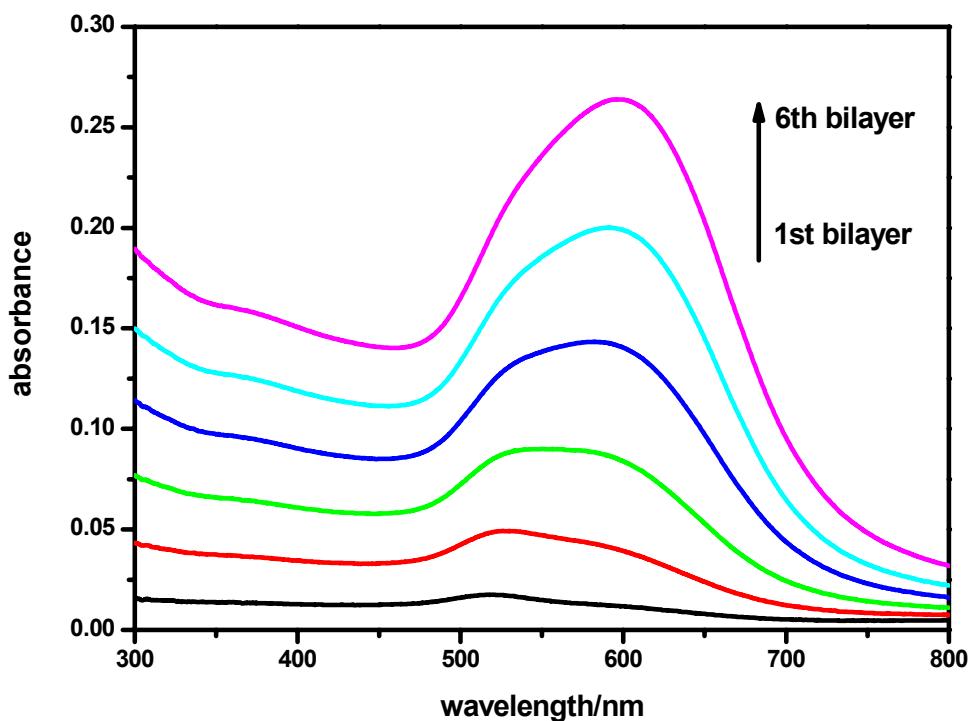


Fig. S4. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers assembled at PEI pH of 9.0 and PAA pH of 10 and PAA concentration of 0.001 mg/ml.

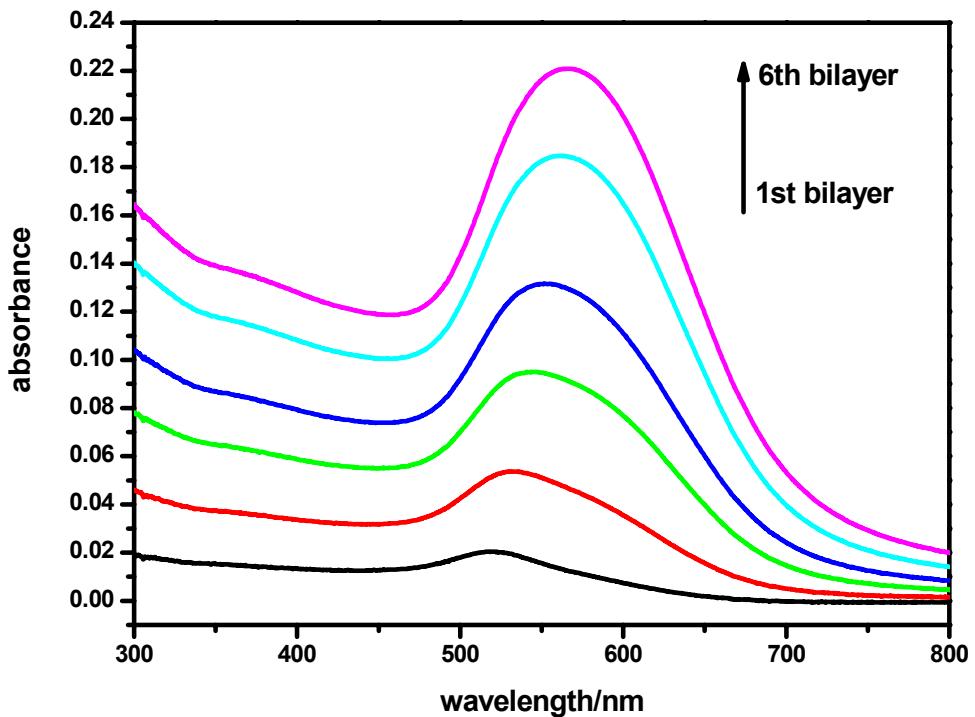


Fig. S5. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers assembled at PEI pH of 9.0 and PAA pH of 10 and concentration of 0.005 mg/ml.

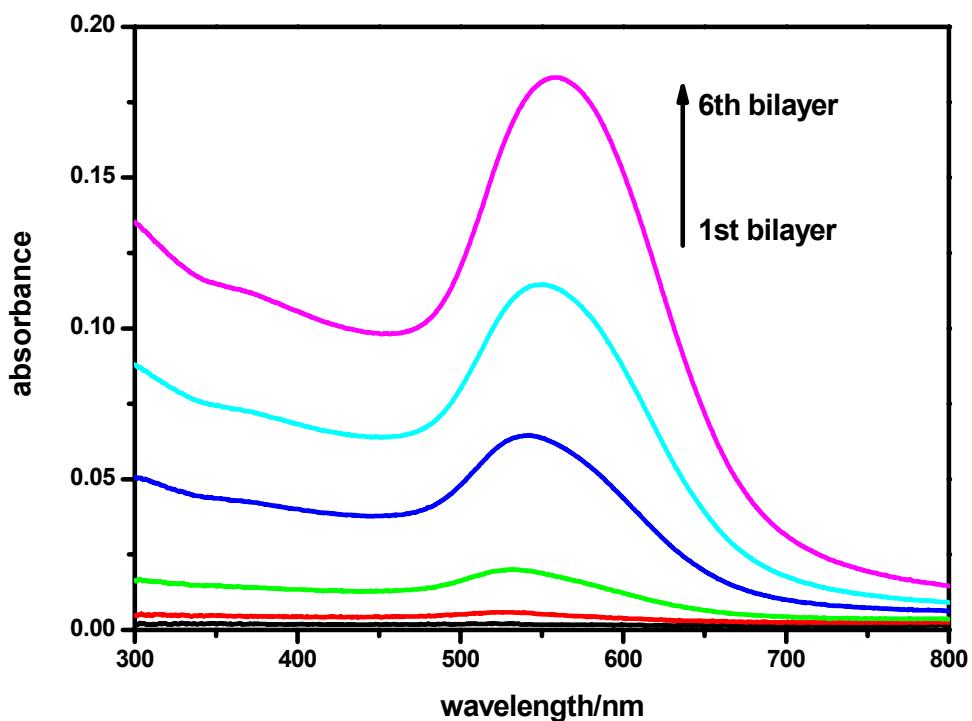


Fig. S6. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers assembled at PEI pH of 9.0 and PAA pH of 10 and concentration of 0.01 mg/ml.

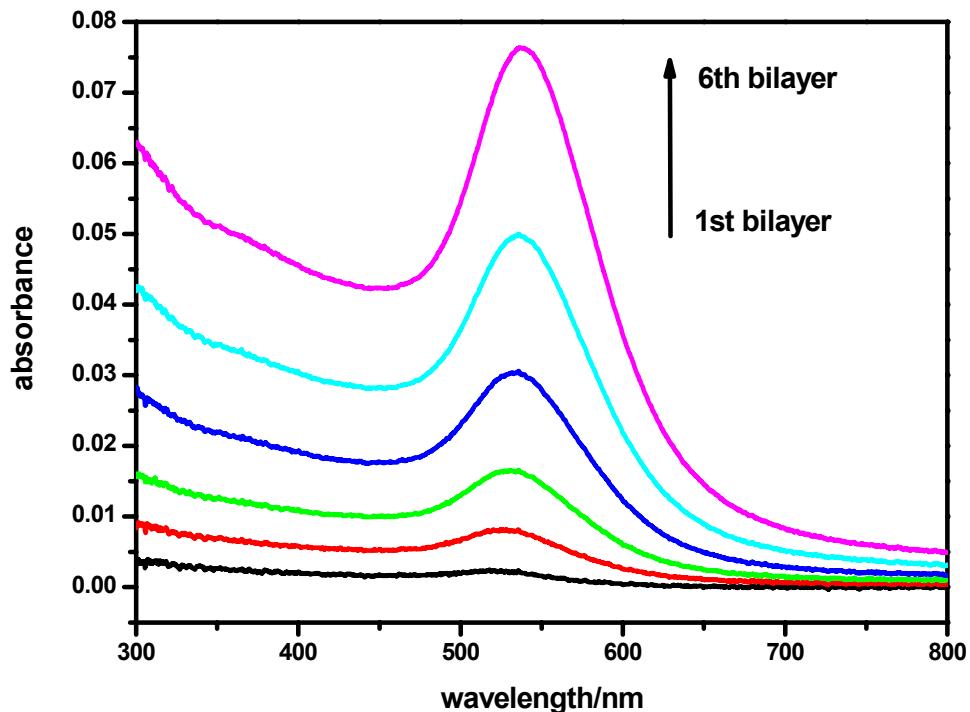


Fig. S7. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers assembled at PEI pH of 9.0 and PAA pH of 10 and concentration of 0.1 mg/ml.

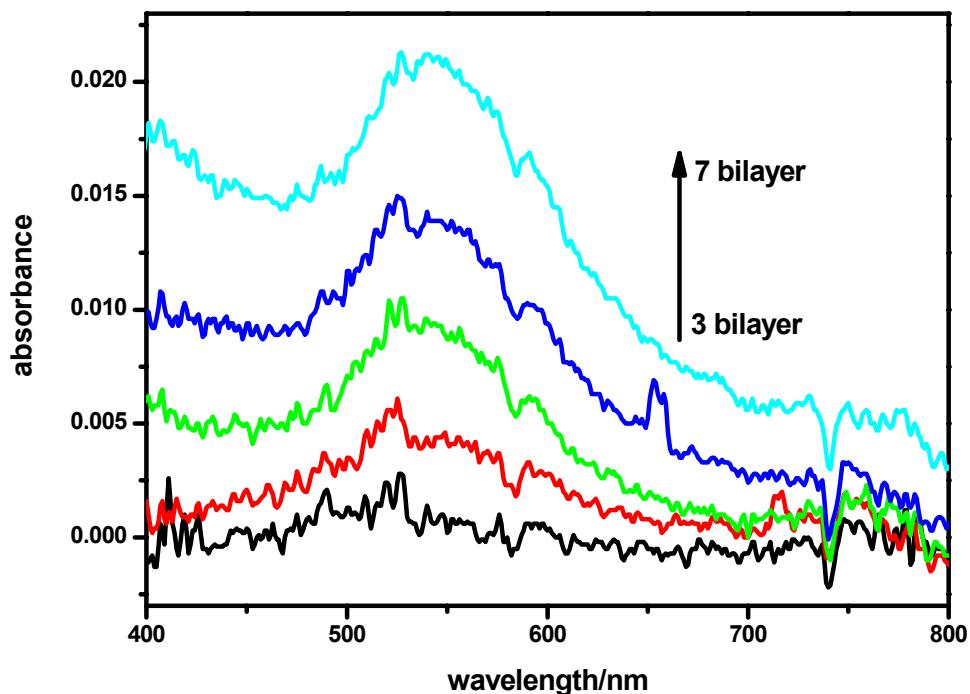


Fig. S8. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers assembled at PEI (1mg/ml) pH 3.5 and PAA (1mg/ml)-gold nanoparticle blend pH 3.2.

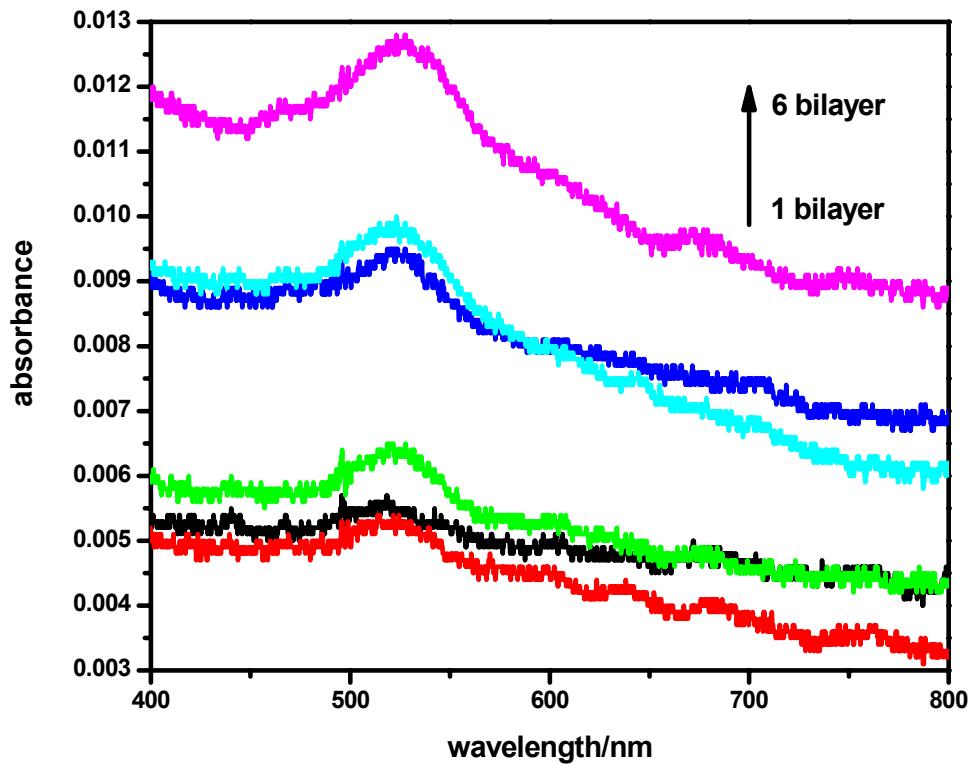


Fig. S9. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers assembled at PEI pH of 3.5 and PAA pH of 10 and concentration of 0.001mg/ml.

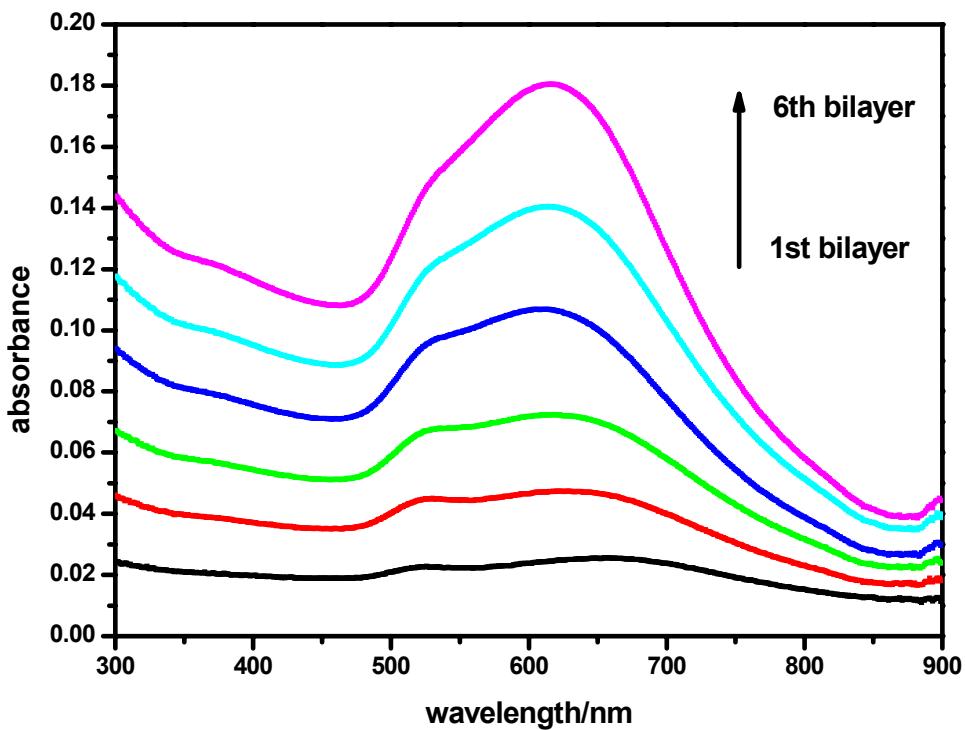


Fig. S10. UV-vis spectra of PEI/gold nanoparticles multilayers with different bilayers.

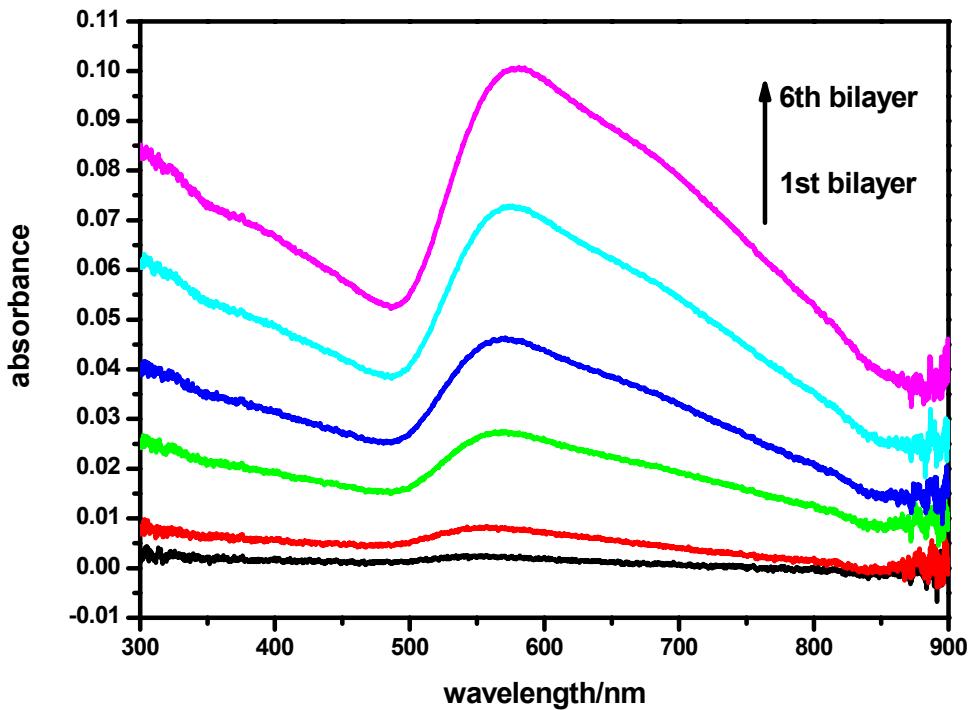


Fig. S11. UV-vis spectra of PEI/PAA-gold nanoparticles multilayers with different bilayers when 50nm gold nanoparticles are incorporated.

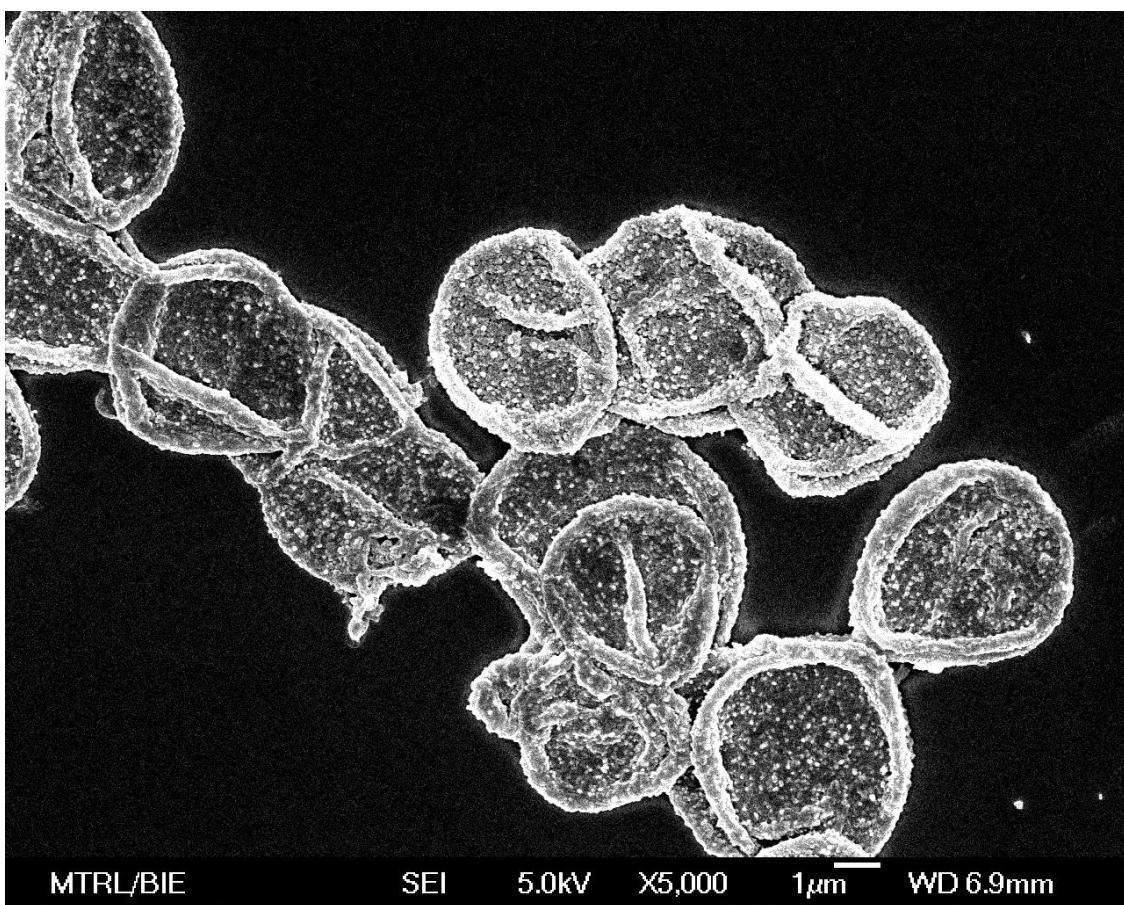


Fig. S12. FE-SEM images of the microcapsules fabricated with 50nm gold nanoparticles at PAA concentration of 0.01mg/ml.

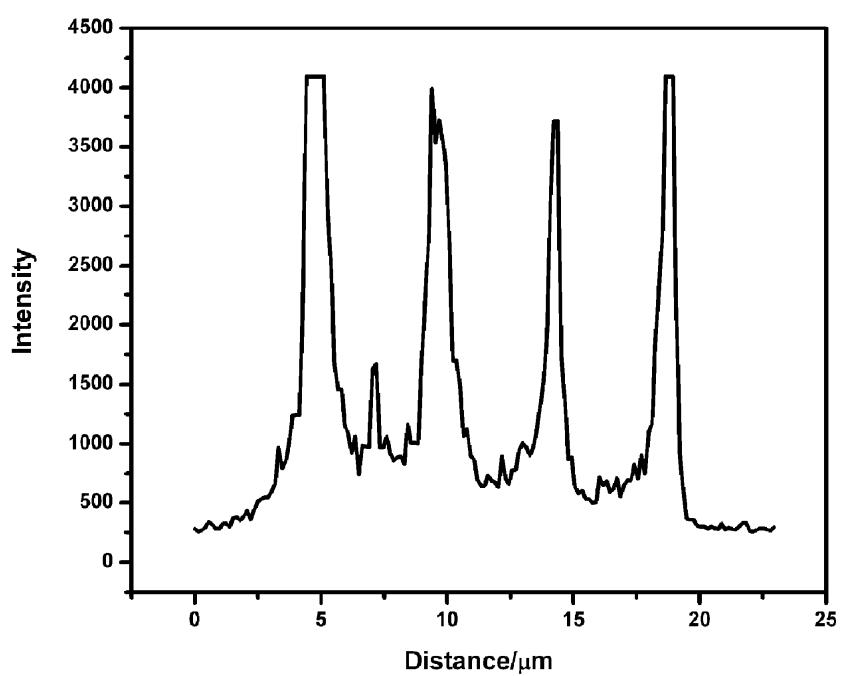
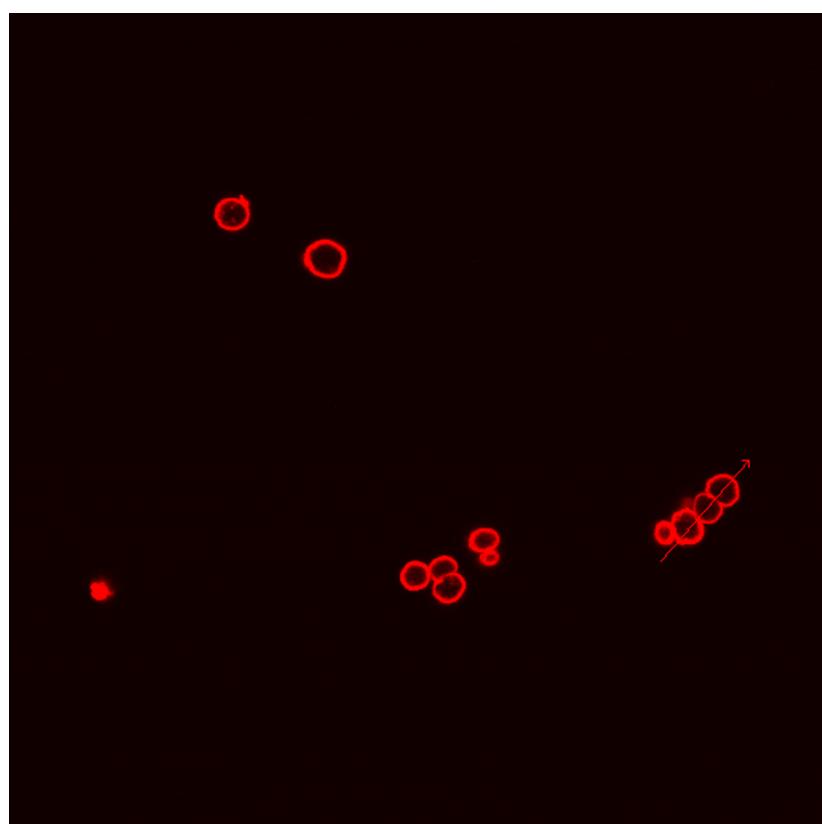


Fig. S13. CLSM images and the intensity profile of cy3-IgG loaded microcapsules along the line after thoroughly washing with PBS.