

Electronic Supplementary Information

Visible sensing of conformational transition in model silk peptides based on gold nanoparticles indicator

Lan Jia^{a*}, Jiabing Zhang^b, SuMei Liu^a, Song Chen^{a*}, Jingxin Zhu^a

^a Key laboratory of interface science and engineering in advanced materials, ministry of education, College of Material Science and Engineering, Taiyuan University of Technology, Taiyuan, 030024, P. R. China

^b Department Pharmacy and Machinery, China Railway 12th Bureau Group Central Hospital, Taiyuan, 030024, P. R. China

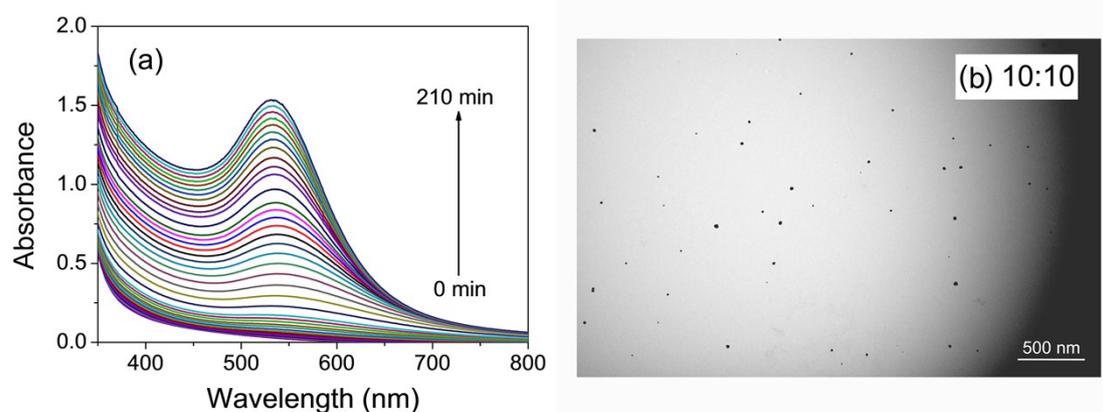


Fig. 1(a) The UV-Vis spectra of GY-14@Au NPs during the preparation process; (b) The TEM image of prepared GY-14@Au NPs.

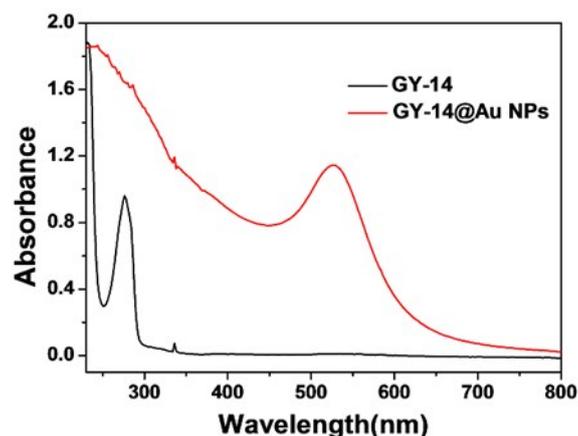


Fig. 2 The UV-Vis spectra of GY-14 before and after Au NPs reduction process.

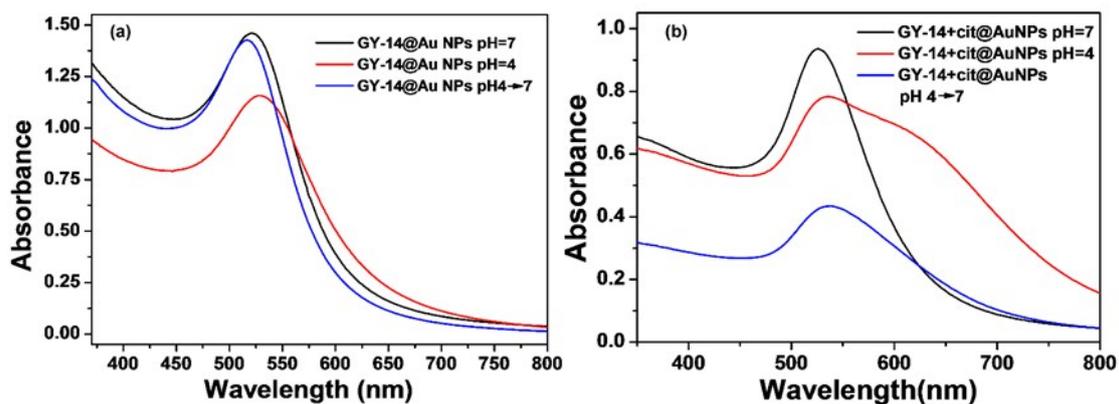


Fig. 3 The UV-Vis spectra of (a) GY-14@Au NPs and (b) GY-14+cit@Au NPs at different pH conditions.

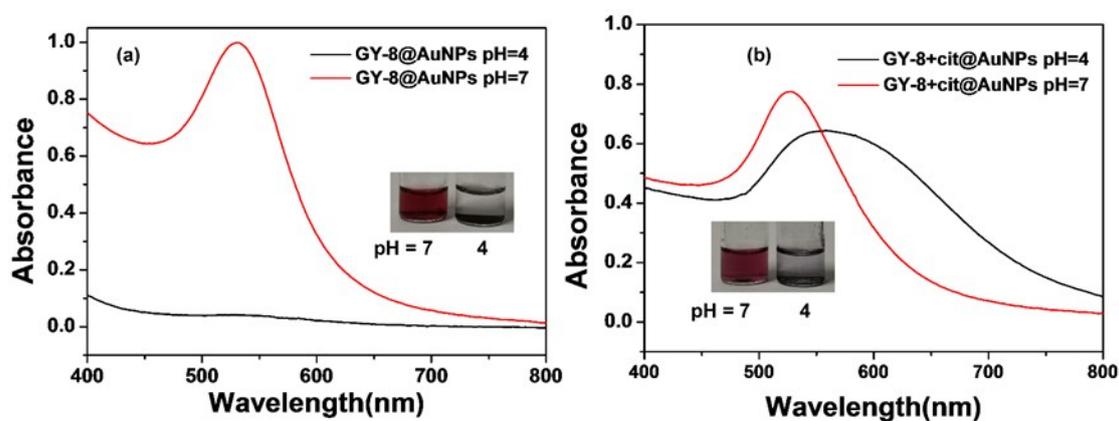


Fig. 4 The UV-Vis spectra of (a) GY-8@Au NPs and (b) GY-8+cit@Au NPs after 2h at different pH conditions.

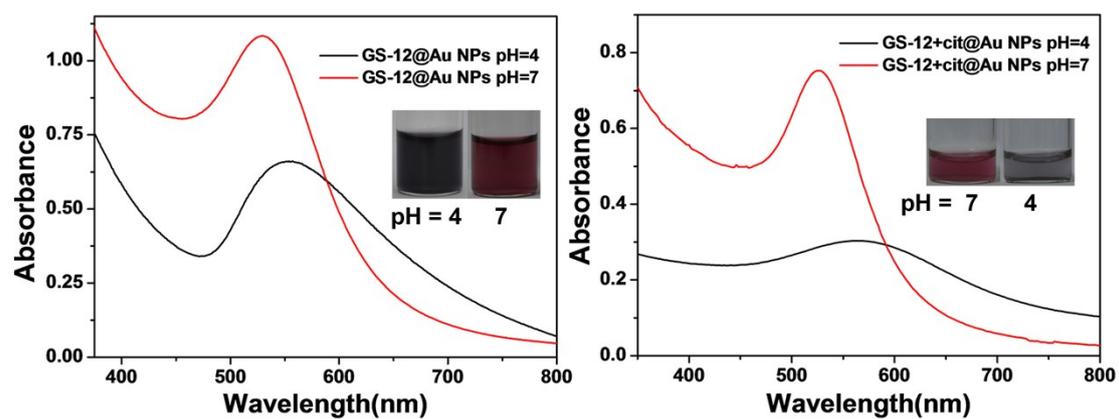


Fig. 5 The UV-Vis spectra of (a) GS-12@Au NPs and (b) GS-12+cit@Au NPs at different pH conditions.

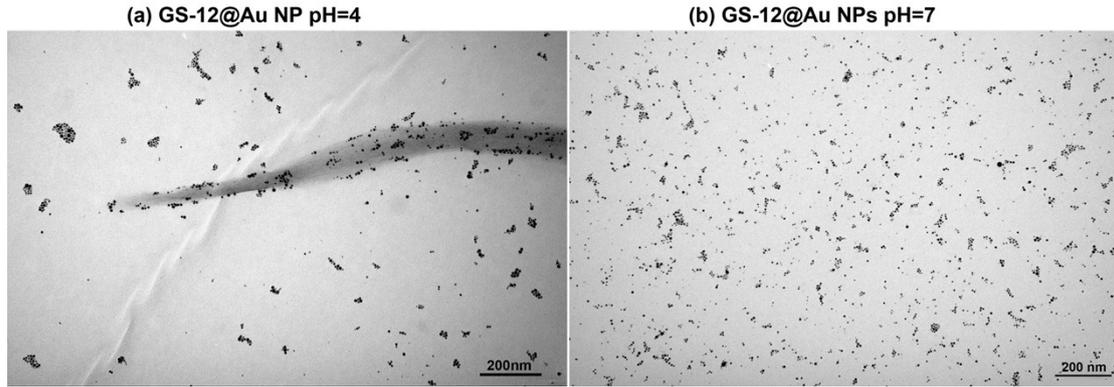


Fig. 6 The TEM image of (a) GS-12@Au NPs and (b) GS-12+cit@Au NPs at different pH conditions.

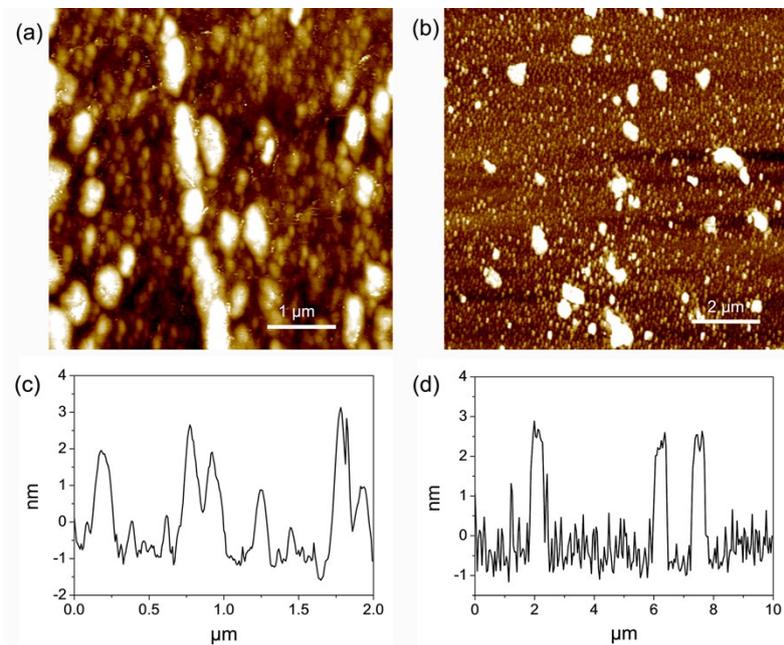


Fig.7 The AFM images and height analysis results of GY-14 at pH 4(a), (c) and pH 7(b), (d).

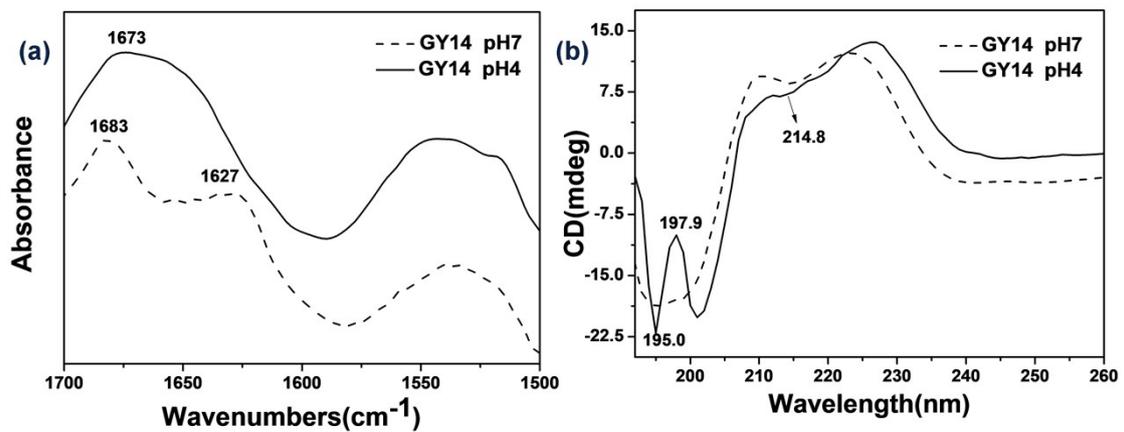


Fig.8 FTIR spectra (a) and CD spectra (b) of GY-14 at different pH conditions.

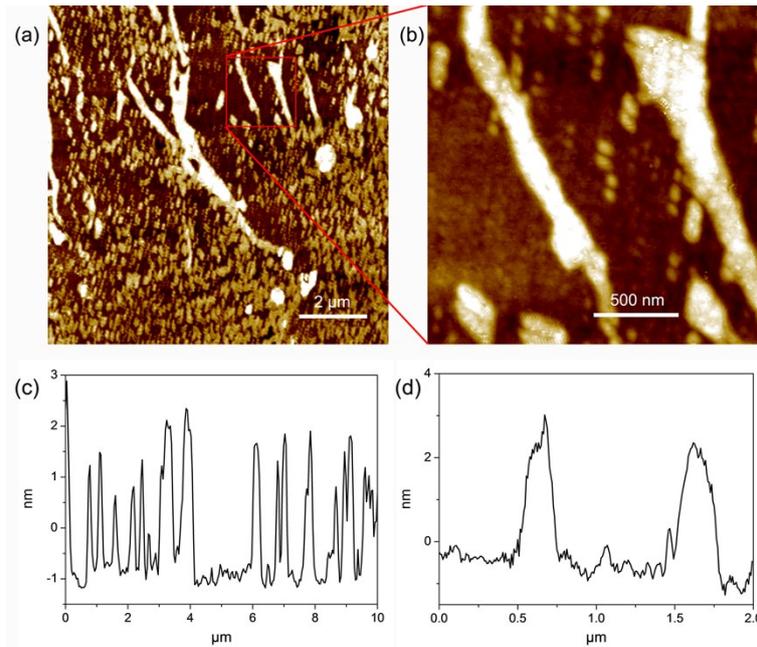


Fig.9 The AFM images and height analysis results of GY-14 with 10 mM Ca^{2+} ions (a), (c) and the magnified image (b), (d).

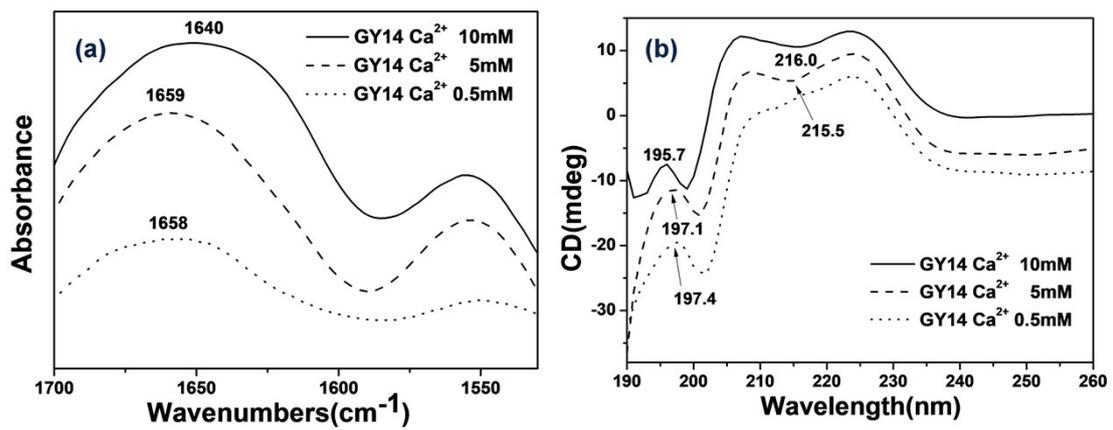


Fig.10 FTIR spectra (a) and CD spectra (b) of GY-14 with different concentration of Ca^{2+} .

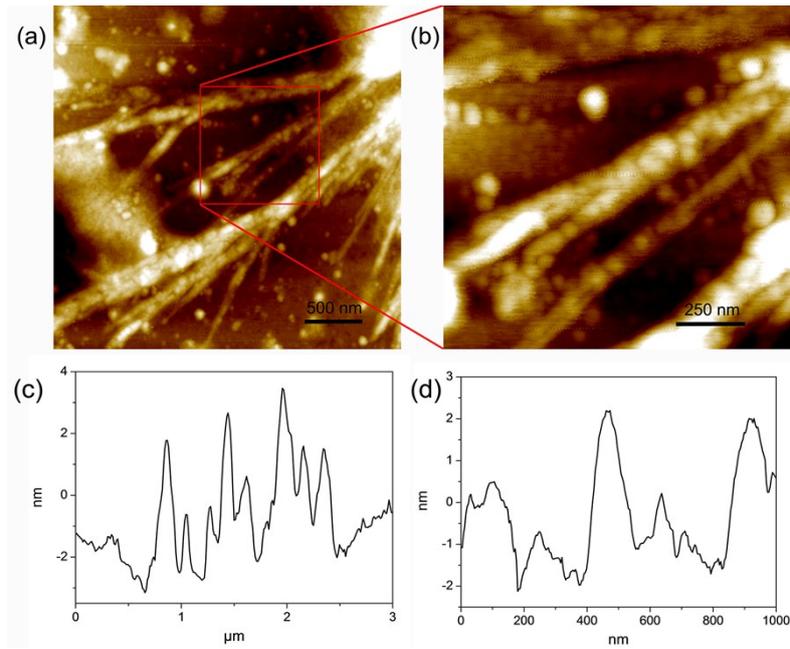


Fig.11 The AFM images and height analysis results of GY-14 induced by isopropanol solution (90%) (a), (c) and the magnified image (b), (d).