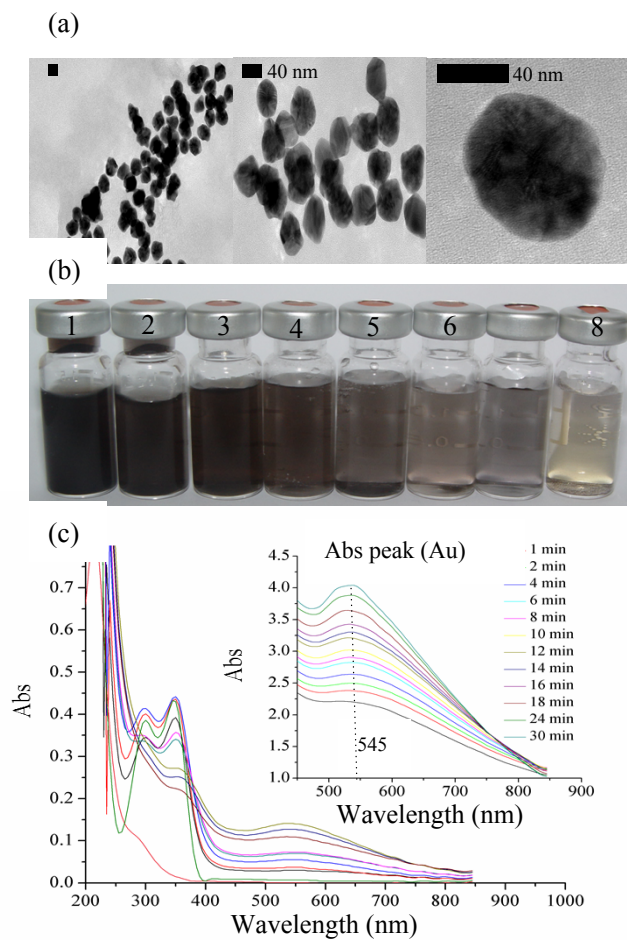


Support Fig. 1 The kinetic curve for different CL reaction.
Curve 1: luminol-Pep; Curve 2: luminol-HAuCl₄; Curve 3:
luminol-HAuCl₄-Pep. The corresponding concentrations of
luminol, HAuCl₄ and Pep were 2.5×10^{-4} , 2.5×10^{-5} and
 1.0×10^{-6} mol·L⁻¹, respectively.



Support Fig. 2 (a) The TEM of AuNPs in luminol-HAuCl₄ reaction at pH from 10.0 to 14.0. The corresponding concentrations of HAuCl₄ and luminol were 1.0×10^{-5} and 2.5×10^{-4} M, (b) The different color of AuNMs produced with different pH from 14.0 to 9.0 (1-8) in 30 min; (c) The UV-Vis spectrum of luminol-HAuCl₄ (2-9) were at the different pH of 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5 and 14.0, respectively (insert : The UV-Vis spectrum of luminol-HAuCl₄ for dynamic process at PH of 10.5).