Supporting Information

DNA stabilized Ag-Au alloy nanoclusters and its application as sensing probes for mercury ions

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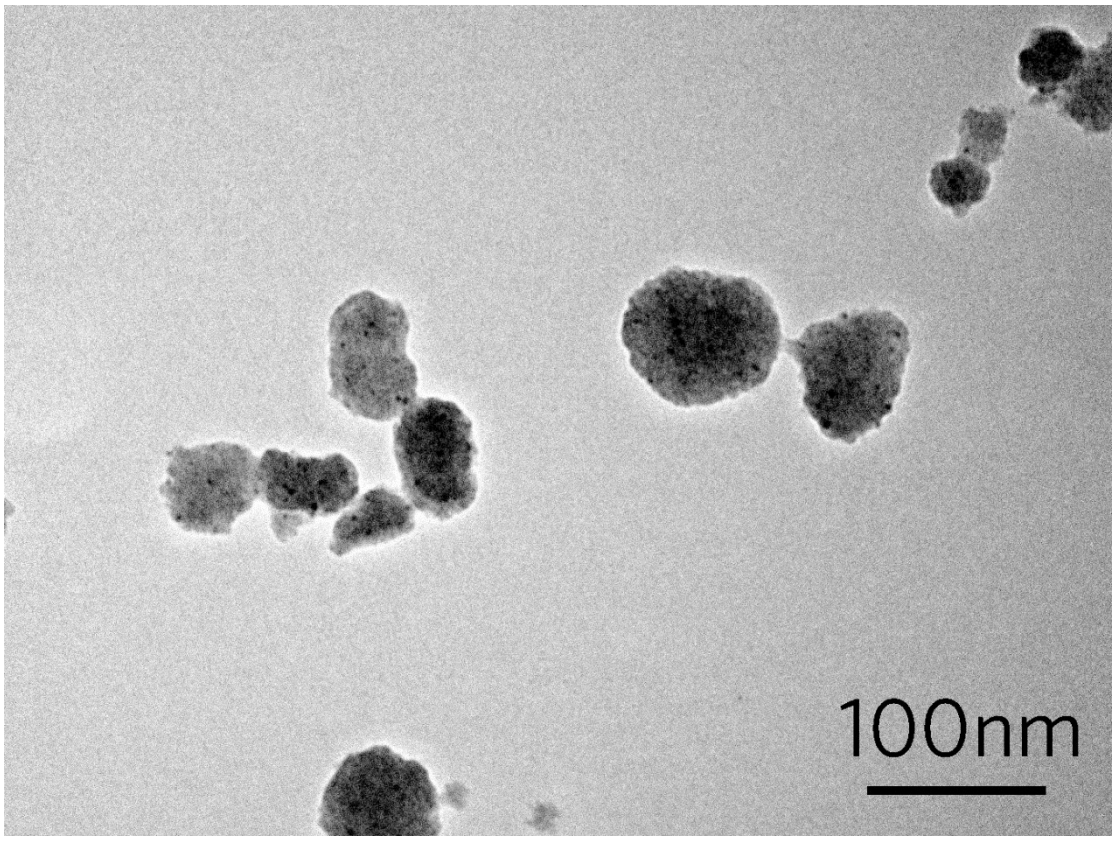

Figure S1. TEM graph of the products prepared by reducing the DNA and metal precursors when the proportion of Ag: Au is 0:1.

a

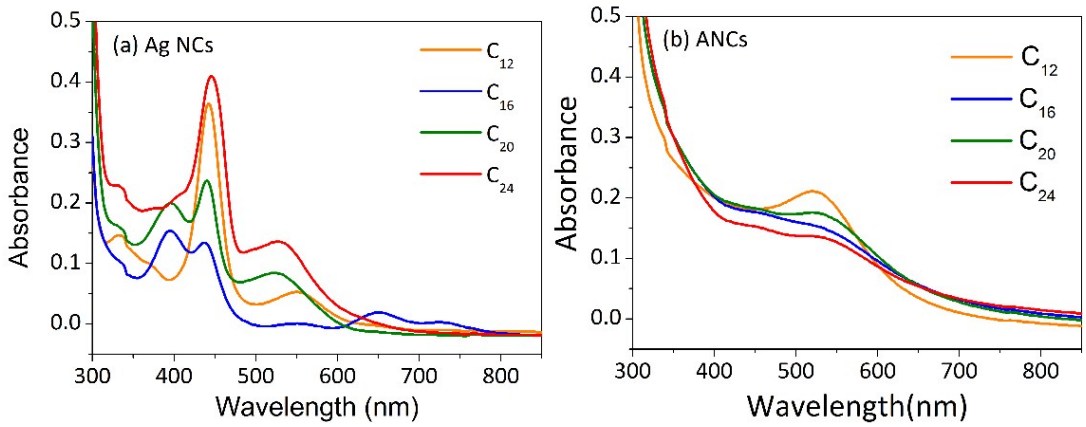

Figure S2. Absorption spectra of Ag NCs (a) and ANCs (b) using DNA template with different chain length. A series of peaks can be find in the Ag NCs, which leads to quite different fluorescence properties. But the ANCs shows the similar absorption spectra, implying they have similar structures.

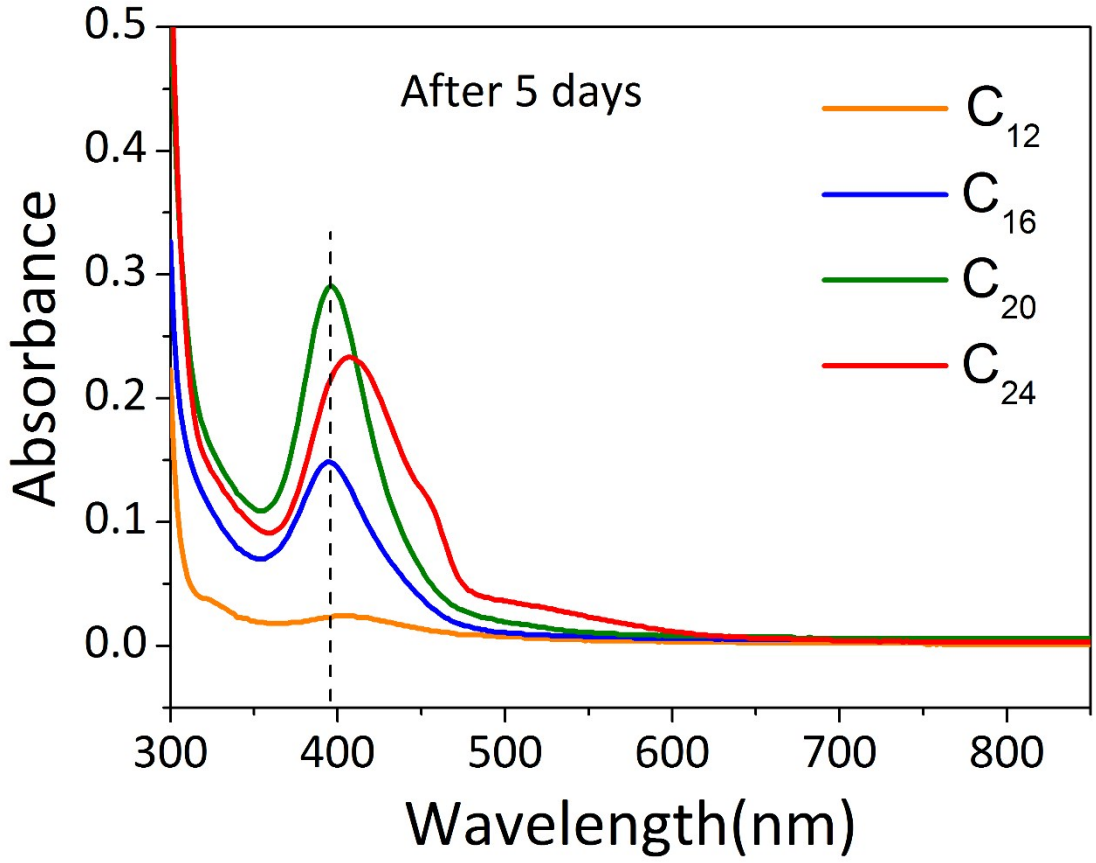

Figure S3. The absorption spectra of Ag NCs scaffold by different DNA with different chain length.

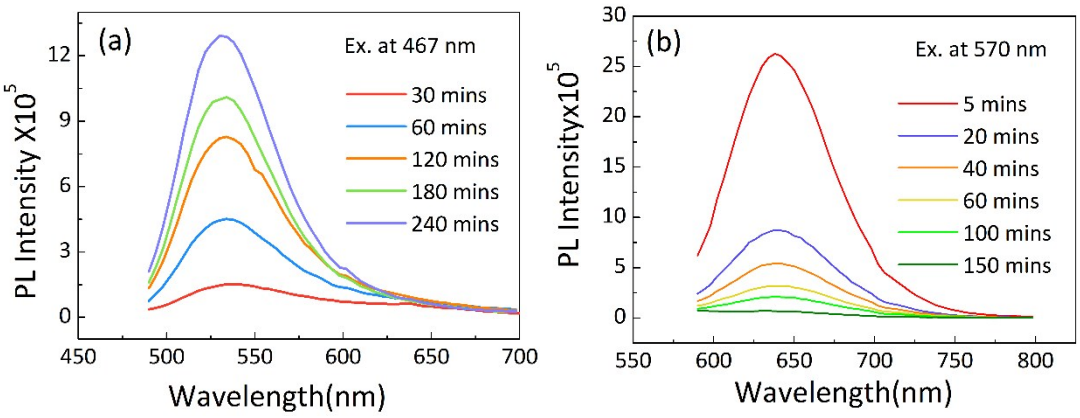

Figure S4. The luminescence intensity change of Ag NCs at 535 nm (a) and 640 (b) in different time after reduction, the corresponding excitation wavelength was 467 nm and 570 nm, respectively.

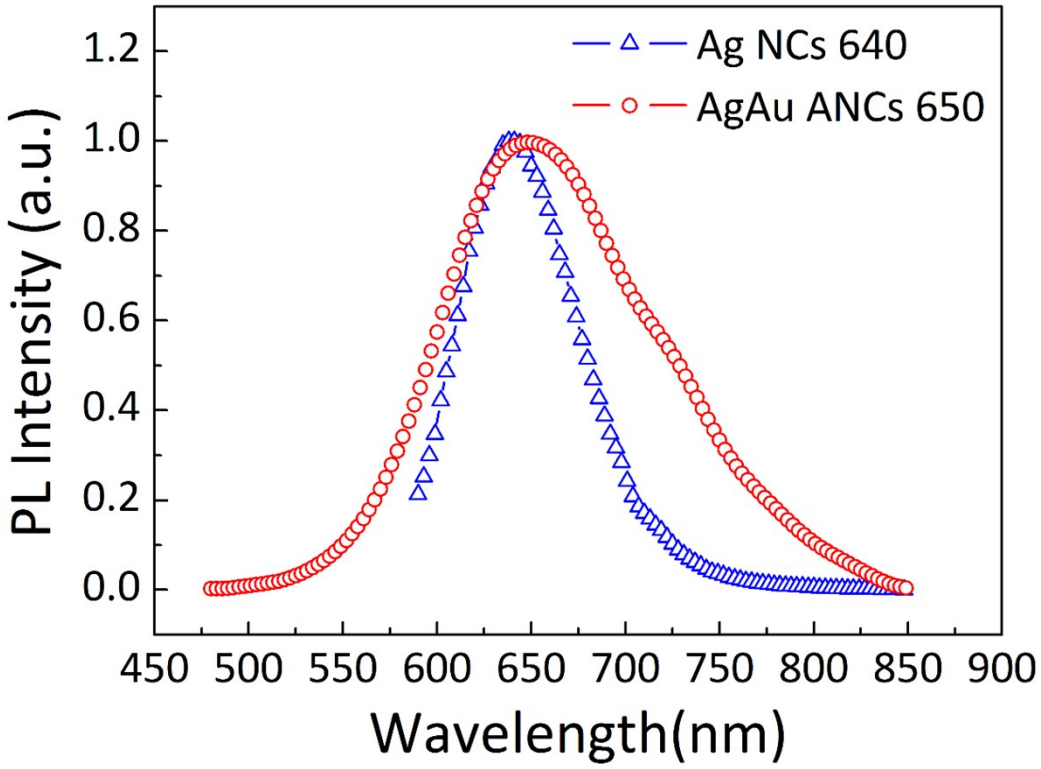

Figure S5. The red emission (at 640 nm) of Ag NCs and the red emission (at 650 nm) of Ag-Au ANCs.

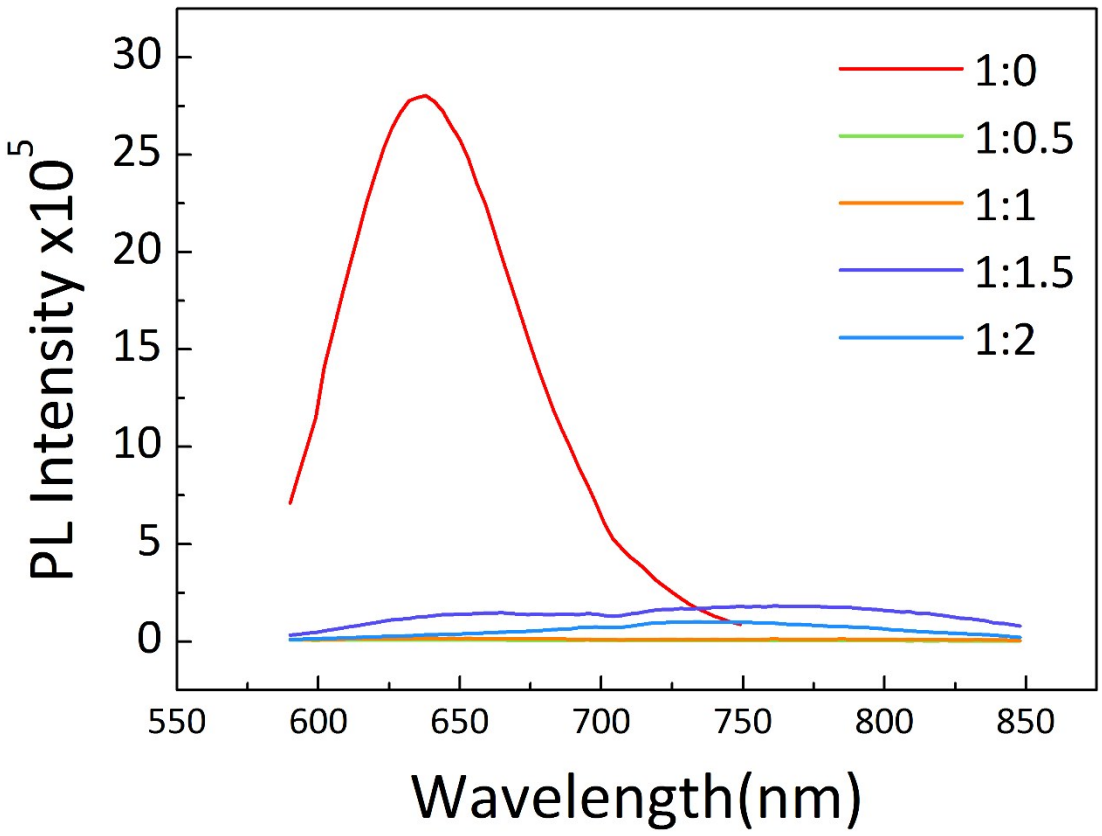

Figure S6. The photoemission spectra of Ag-Au ANCs with different proportion of Ag and Au at 570 nm excitation. When the content of gold increased to 1:0.5 and 1:1, the emission at 650 nm was completely quenched, and new weak red emission occurred as the content increased to 1:1.5 and 1:2.