

Supporting information

**Ag shell Morphology on Au nanorod core: Role of Ag precursor complex**

Kyoungweon Park, Lawrence F. Drummy, Richard A. Vaia\*

Materials and Manufacturing Directorate, Air Force Research Laboratory,  
Wright-Patterson AFB, Ohio 45433-7702 (USA)  
E-mail: [richard.vaia@wpafb.af.mil](mailto:richard.vaia@wpafb.af.mil)

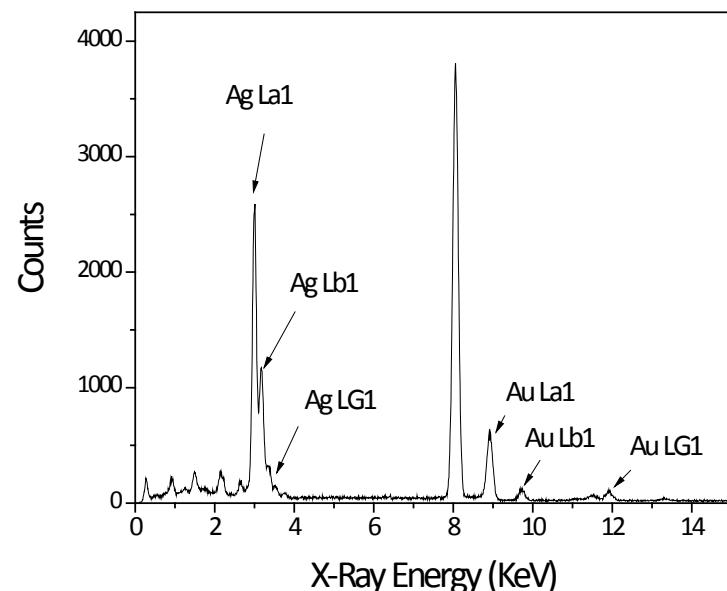


Fig.S1. A representative Energy-Dispersive X-ray spectrum of Au-Ag core shell nanoparticles. The spectrum was taken from the particles shown in Fig.4c. The atomic% ratio of Ag: Au is 96:4.

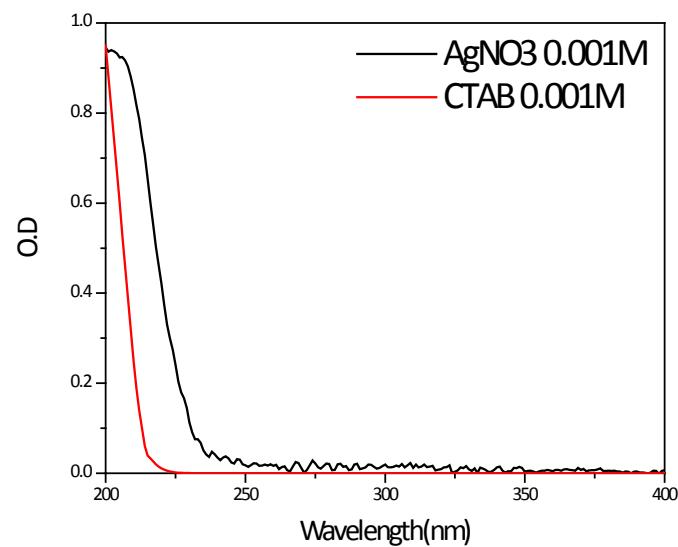


Fig.S2. UV-Vis spectra of 0.001M  $\text{AgNO}_3$  and 0.001M CTAB aqueous solution.

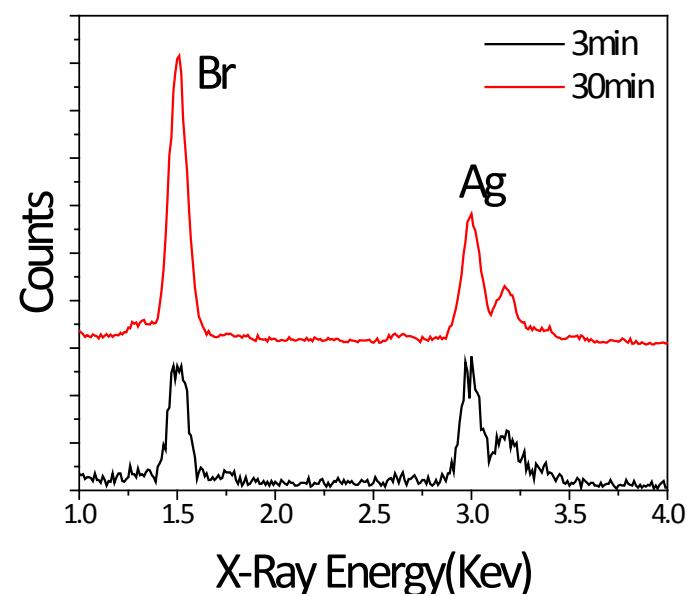


Fig.S3. Energy-Dispersive X-ray spectra of Ag-Br nanoparticles taken from the solution mixture of CTAB and  $\text{AgNO}_3$  at mixing ratio 10:1 after 3 min and 30 min of reaction. The

atomic% ratio of Ag: Br is 1:1 for the particles at 3 min and 1:2 for the particles at 30min aging.

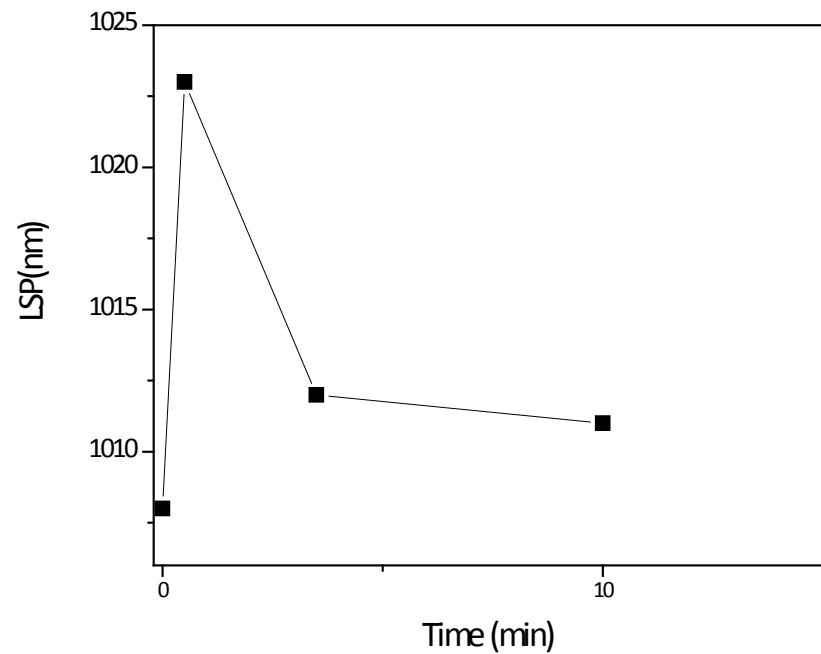


Fig.S4. The longitudinal surface plasmon peak of Au NR solution after adding  $\text{AgNO}_3$  solution as a function of time.