

Supporting Information for

Fabrication of Gold Nanorods with Tunable Longitudinal Surface Plasmon Resonance Peaks by Reductive Dopamine

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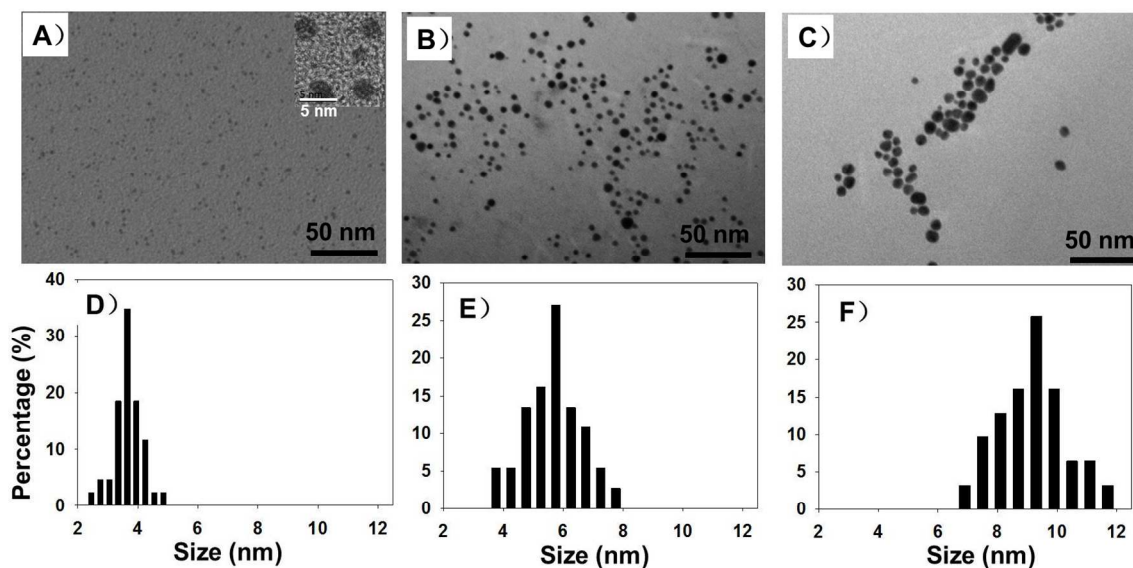


Figure S1. TEM images of gold seed A (A), B (B), and C (C); and the size distribution of gold seed A (D), B (E), and C (F) calculated from the corresponding TEM images.

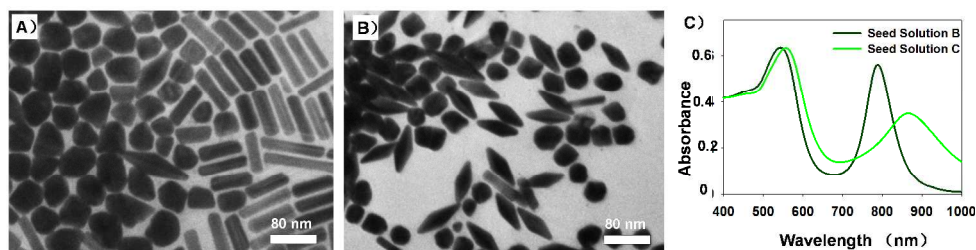


Figure S2. TEM images of the gold nanoparticles synthesized with seed solution B (A) and C (B); and their UV-vis-NIR absorption spectra (C).

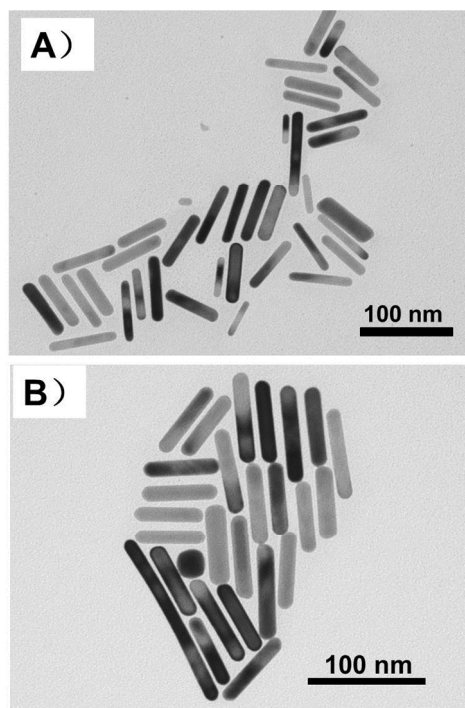


Figure S3. TEM images of the synthesized GNRs at 0.05 M (A) and 0.075 M (B) CTAB solution. AgNO_3 (70 μL , 0.1 M), Dopamine hydrochloride (20 mg in 0.5 mL water) and Seed solution A (160 μL) were used in preparation.

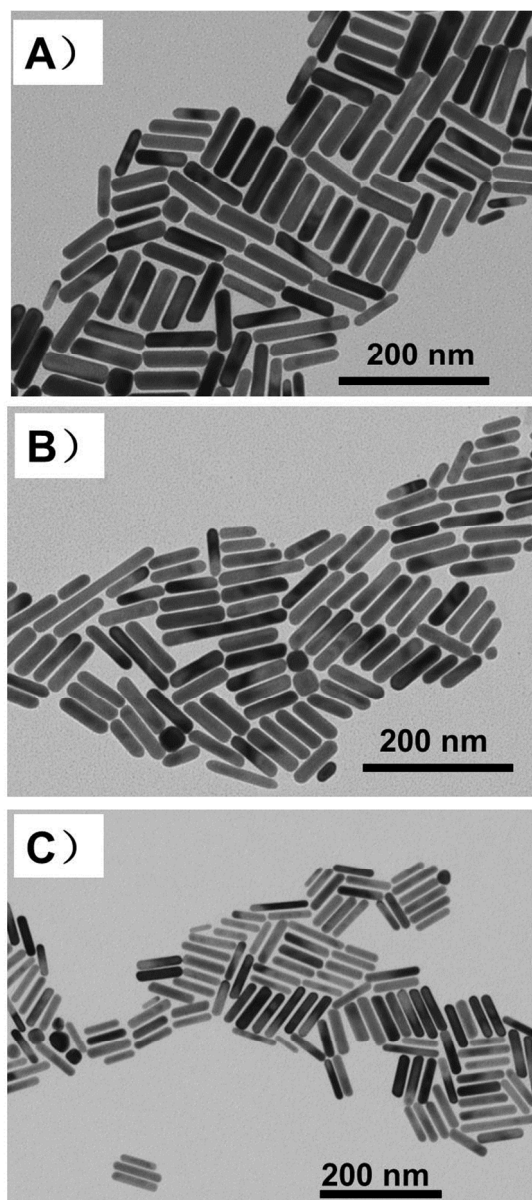


Figure S4. TEM images of GNRs prepared with 80 μL (A), 120 μL (B), and 200 μL (C) seed solution A. Other preparation parameters: AgNO_3 (70 μL , 0.1 M), Dopamine hydrochloride (20 mg in 0.5 mL water), and $[\text{CTAB}] = 0.1$ M.

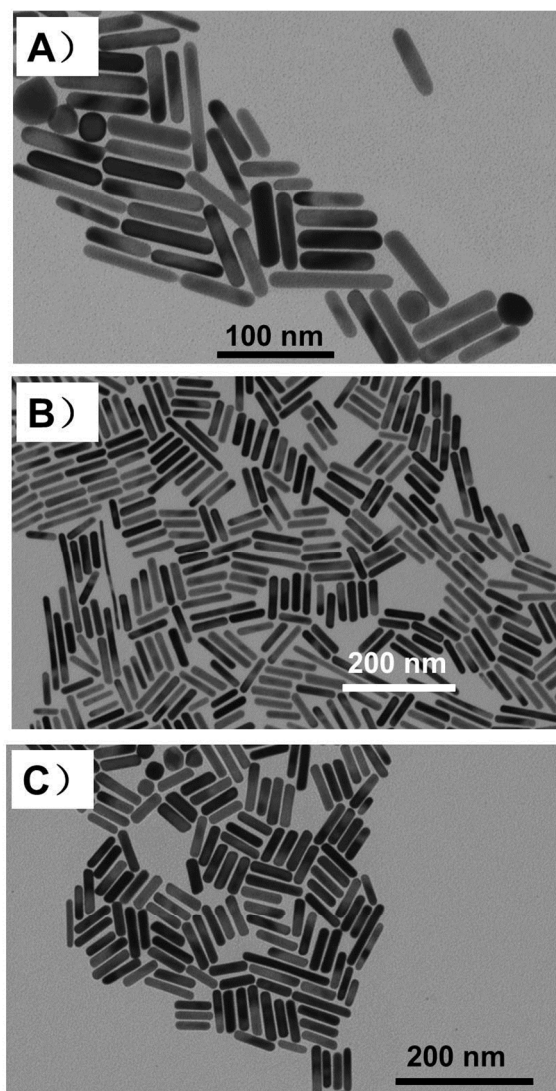


Figure S5. TEM images of GNRs prepared with 15 mg (A), 30 mg (A), and 40 mg (A) dopamine hydrochloride. Dopamine hydrochloride was dissolved in 0.5 mL water. Other preparation parameters: AgNO_3 (70 μL , 0.1 M), Seed solution A (160 μL), and $[\text{CTAB}] = 0.1 \text{ M}$.

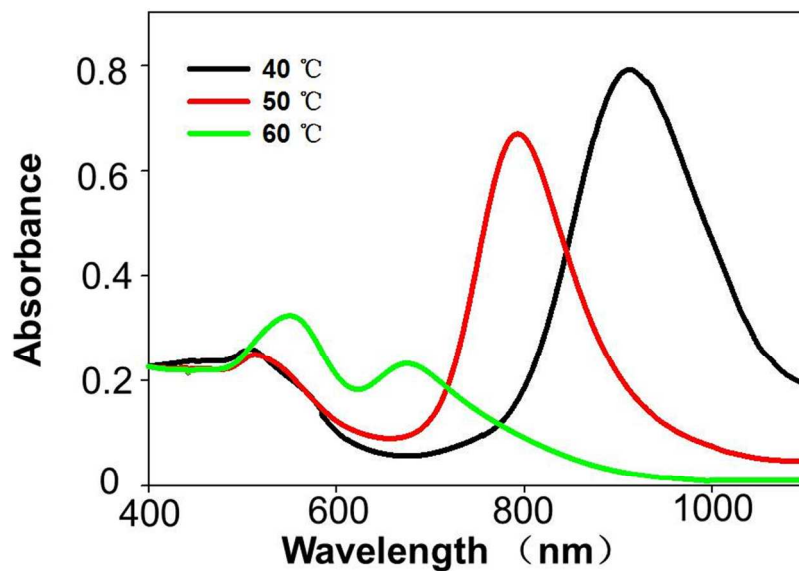


Figure S6. UV-vis-NIR absorption spectra of GNR prepared at 40, 50, and 60 °C. Other preparation parameters: AgNO₃ (70 μ L, 0.1 M), Dopamine hydrochloride (20 mg in 0.5 mL water), Seed solution A (160 μ L), and [CTAB] = 0.1 M.