

Au-Cu₂S heterodimer formation via oxidization of AuCu alloy nanoparticles and *in situ* formed copper thiolate

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SUPPORTING INFORMATION

Figure S1. X-ray diffraction patterns of the as-prepared AuCu alloy NPs and Au-Cu₂S heterodimers.

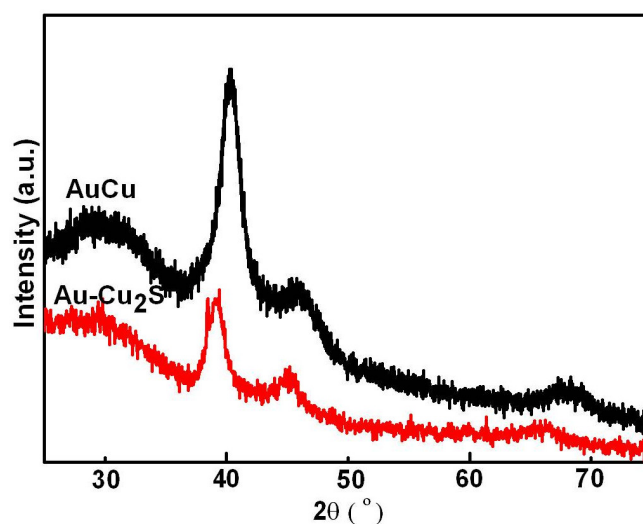


Figure S2. Temporal evolution of heterodimer morphologies observed by TEM with reaction time of (a) 5 min and (b) 80 min.

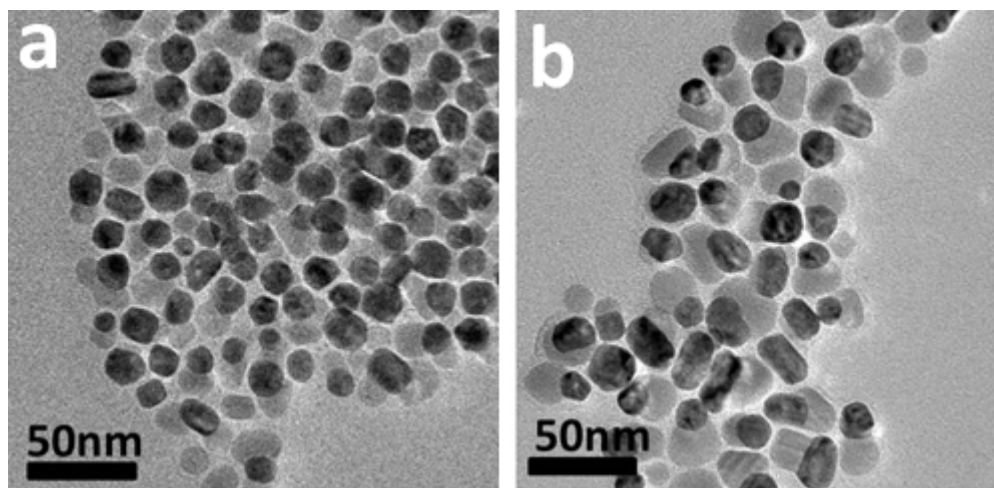


Figure S3. TEM image of AuCu NPs reacted with DDT under the protection of nitrogen.

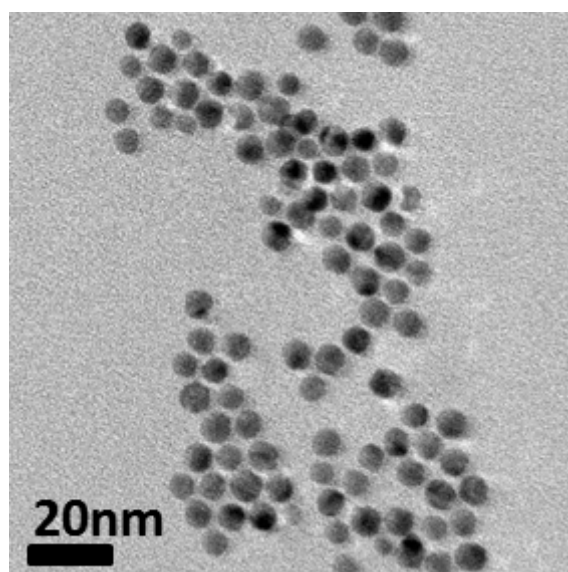


Figure S4. TEM image of the NPs formed by adding Cu(I)-DDT complexes into Au seeds solution under air at 180 °C.

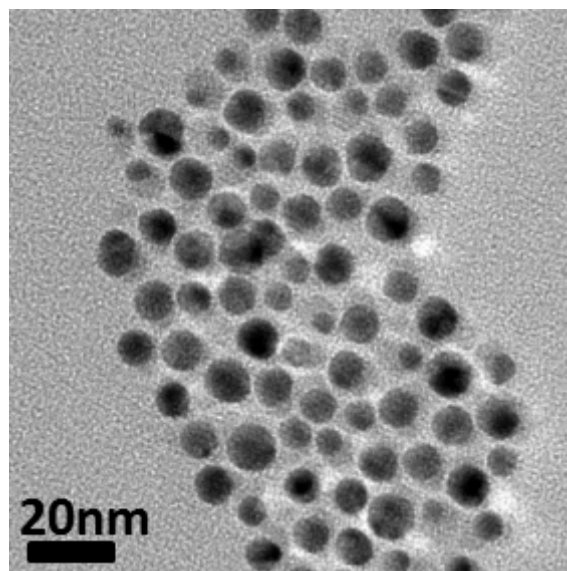


Figure S5. TEM image of the obtained NPs by adding S into AuCu NPs solution under nitrogen at 100 °C.

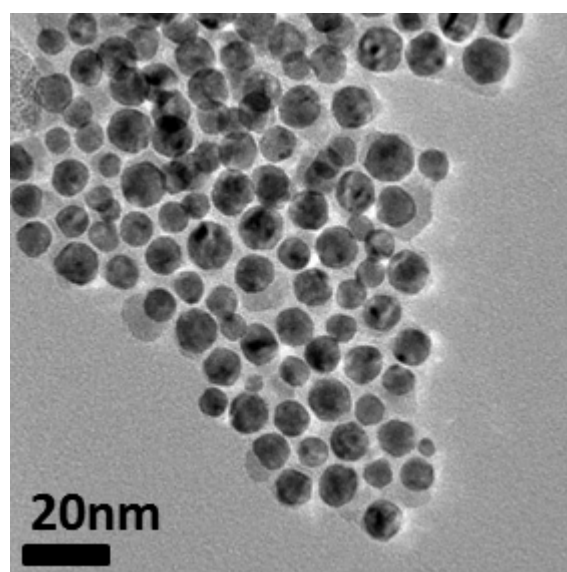


Figure S6. TEM images of AuCu nanoparticles reacted with (a) DDT, (b) DDT + OAm, (c) S, and (d) S + OAm.

