

Supporting Information

Seed-Mediated Synthesis of Ag Nanocubes with Controllable Edge Lengths in the Range of 30-200 nm and Comparison of Their Optical Properties

Qiang Zhang,^{†,‡,§} Weiyang Li,^{†,§} Christine Moran,[†] Jie Zeng,[†] Jingyi Chen,[†]
Long-Ping Wen,[‡] and Younan Xia^{†,*}

[†]*Department of Biomedical Engineering, Washington University, St. Louis, Missouri 63130*

[‡]*Hefei National Laboratory for Physical Sciences at the Microscale, University of Science
and Technology of China, Hefei, Anhui 230027, P. R. China*

[§]These two authors contributed equally to this work.

*Corresponding author: xia@biomed.wustl.edu

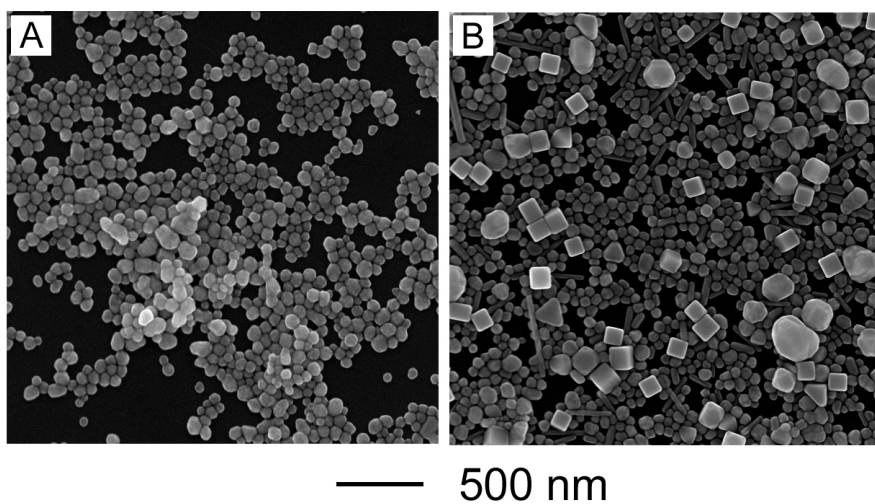


Figure S1. SEM images of Ag nanoparticles obtained when (A) CF_3COOAg instead of AgNO_3 was used for the seed-mediated growth and (B) a trace amount (0.125 mL, 3 mM) of HCl was introduced into the synthesis shown in (A).

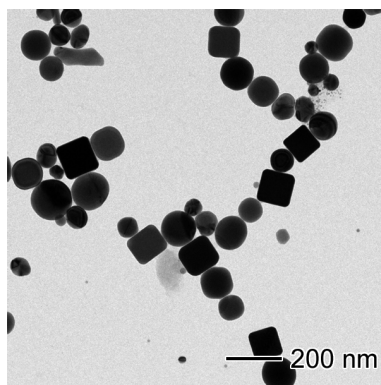


Figure S2. TEM image of Ag nanoparticles obtained by adding 0.93 mM HNO₃ after AgNO₃ had been added for 20 min in a standard synthesis.

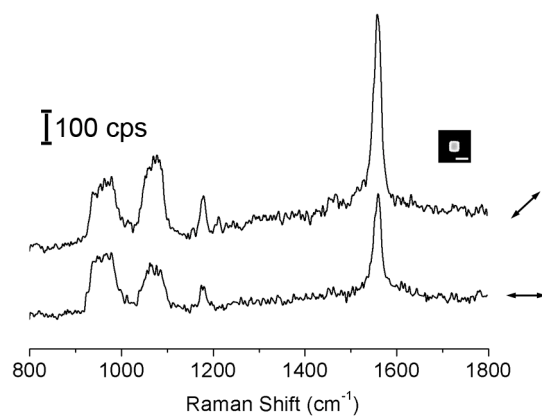


Figure S3. SERS spectra recorded from 82-nm Ag cubes under two laser polarization directions: along an edge (bottom trace) and along a face diagonal (top trace). The scale bars in the insets correspond to 100 nm. cps=counts per second.