

APPENDIX A

Particle Size Analysis

A.1 Size distribution histogram

The average diameter of particles was calculated by measuring 100-300 individual particles using digital micrograph software (GMS 3) utilizing its length tool. The micrographs used for particle size measurements for nanoparticles of Ag, Cu, Au, and Au-Cu alloy are shown in the Figures A.1, A.2, and A.3, respectively.

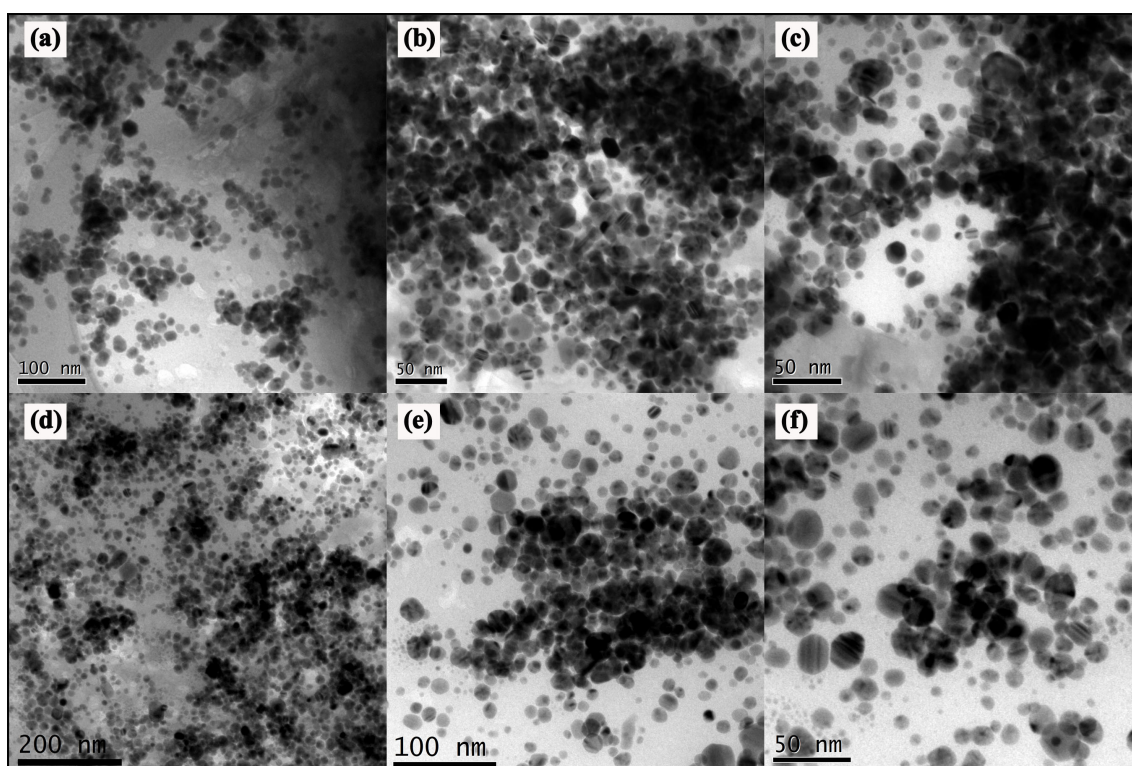


FIGURE A.1: BF TEM micrographs of Ag NPs with pH 9 (a-c) and pH 11 (d-f) .

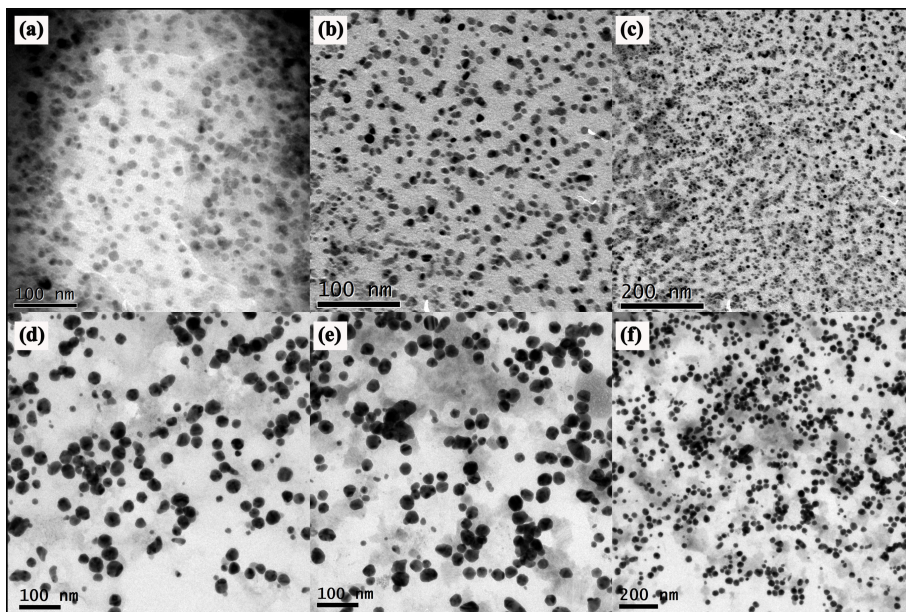


FIGURE A.2: BF TEM images of Cu NPs synthesized keeping pH 11 (a-c) and 1RS Au NPs (d-f).

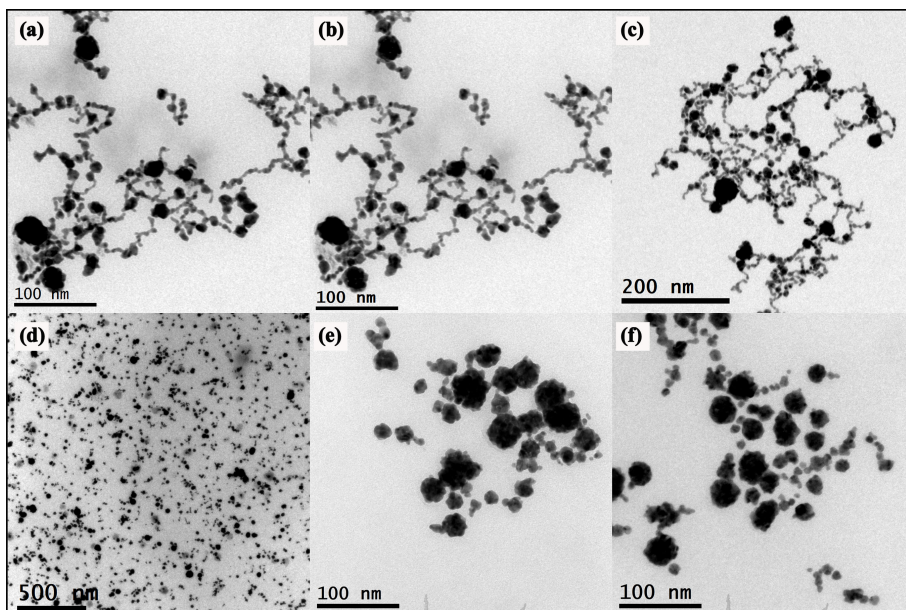


FIGURE A.3: BF TEM images with changing molar precursors ratio of Au and Cu as Au-Cu (3:1) (a-c) and Au-Cu (1:1) (d-f) .