

## Supporting Information:

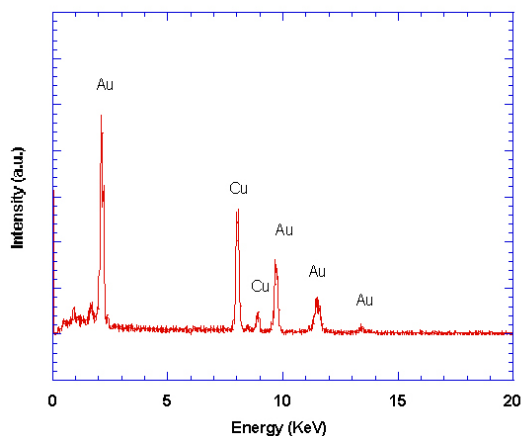


Figure I: Energy dispersive X-ray spectrum recorded on the gold nanorods prepared with silver ions addition. No Au/Ag alloying is observed in the final products.

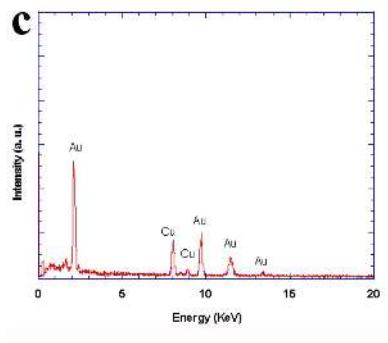
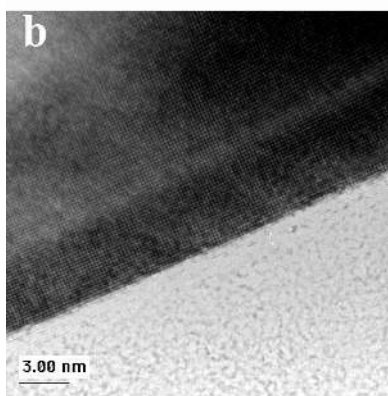
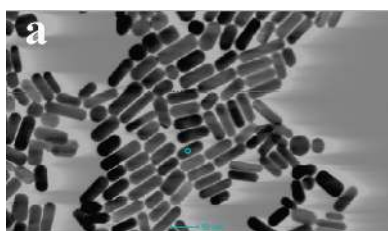


Figure II. (a) TEM image of gold nanorods prepared using Ag clusters as seeds during the photo-reduction of Au salt. (b). High resolution TEM image of an gold nanorod in (a). The growth directions of these nanorods are same as those prepared with silver ions addition. (c) EDX spectrum recorded on the gold nanorods prepared with Ag clusters as seeds.