

Supporting Information

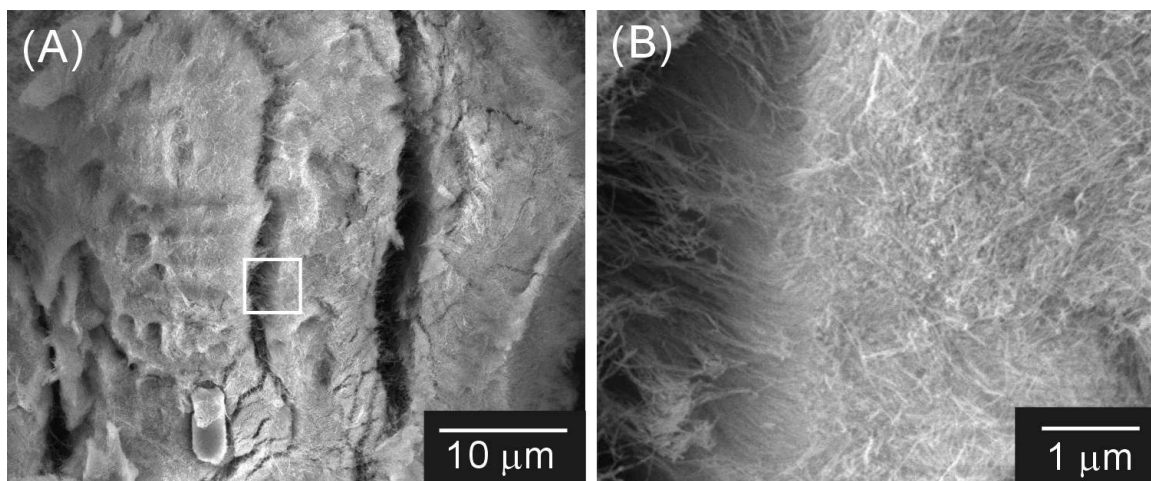


Figure 1. (A) Top-view SEM image of silver nanowire bundles. (B) Enlarged view of the marked area in (A).

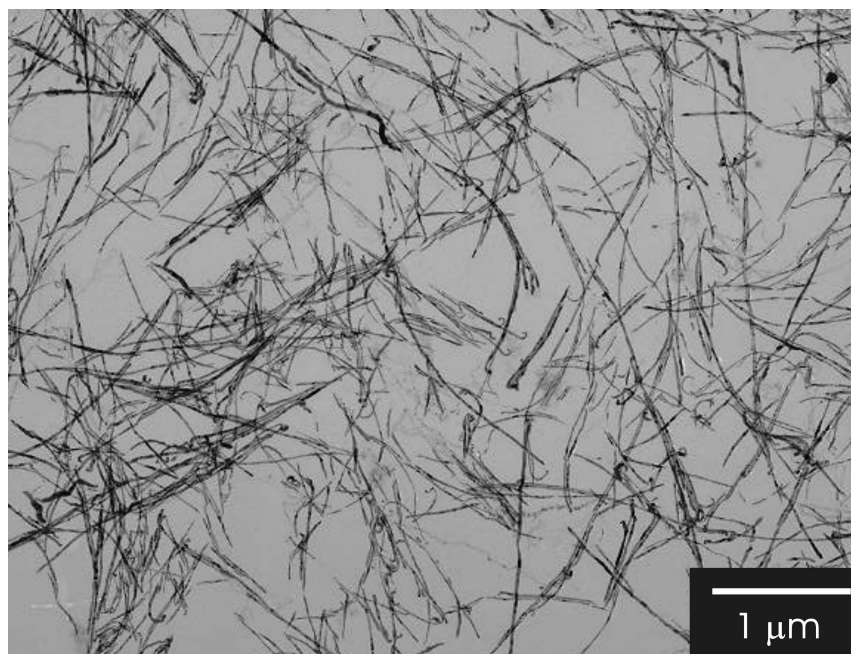


Figure 2. TEM image of dispersed silver nanowires.

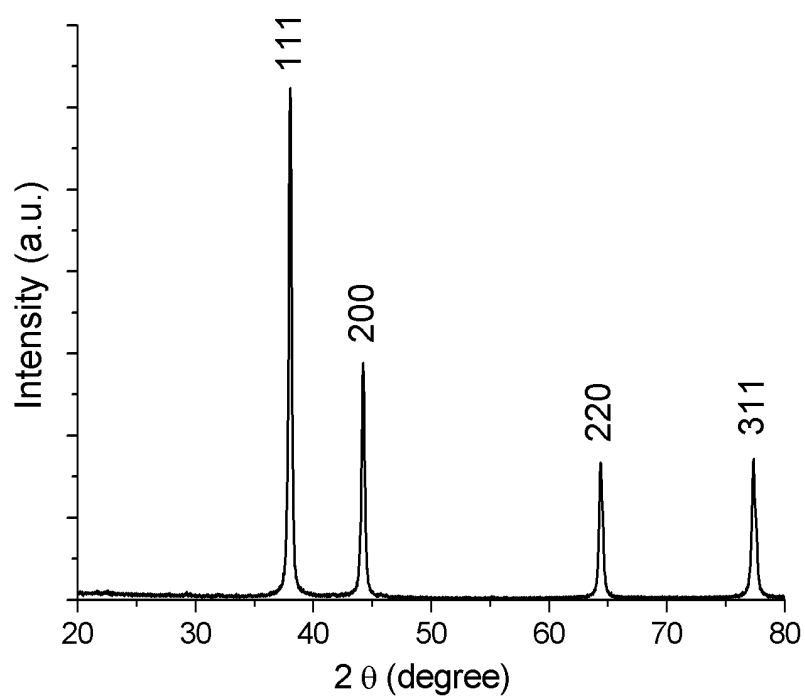


Figure 3. XRD pattern of silver nanowires.

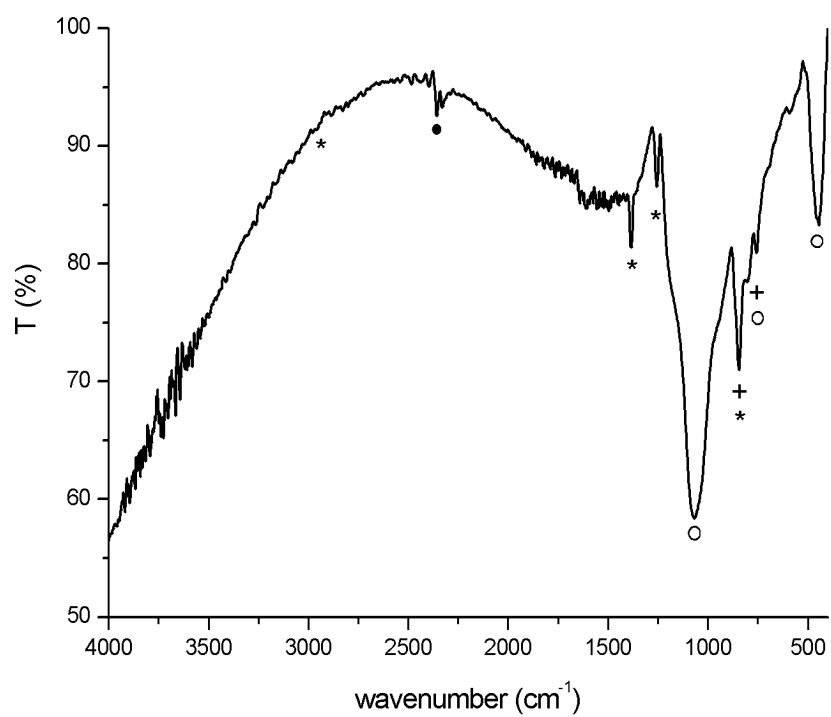


Figure 4. FT-IR spectrum of silver nanowires.

*: C-H, +: Si-Me, ○: Si-O, ●: CO₂

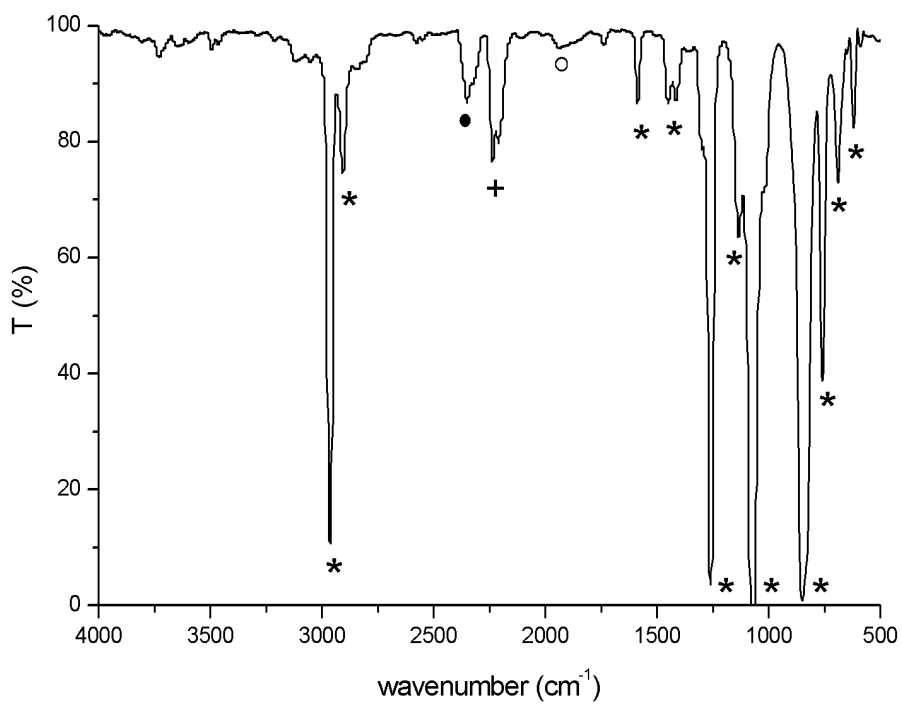


Figure 5. FT-IR spectrum of gas phase byproducts.

$$*: (\text{Me}_3\text{Si})_2\text{O}, +: \text{N}_2\text{O}, \circ: \text{NO}, \bullet: \text{CO}_2$$

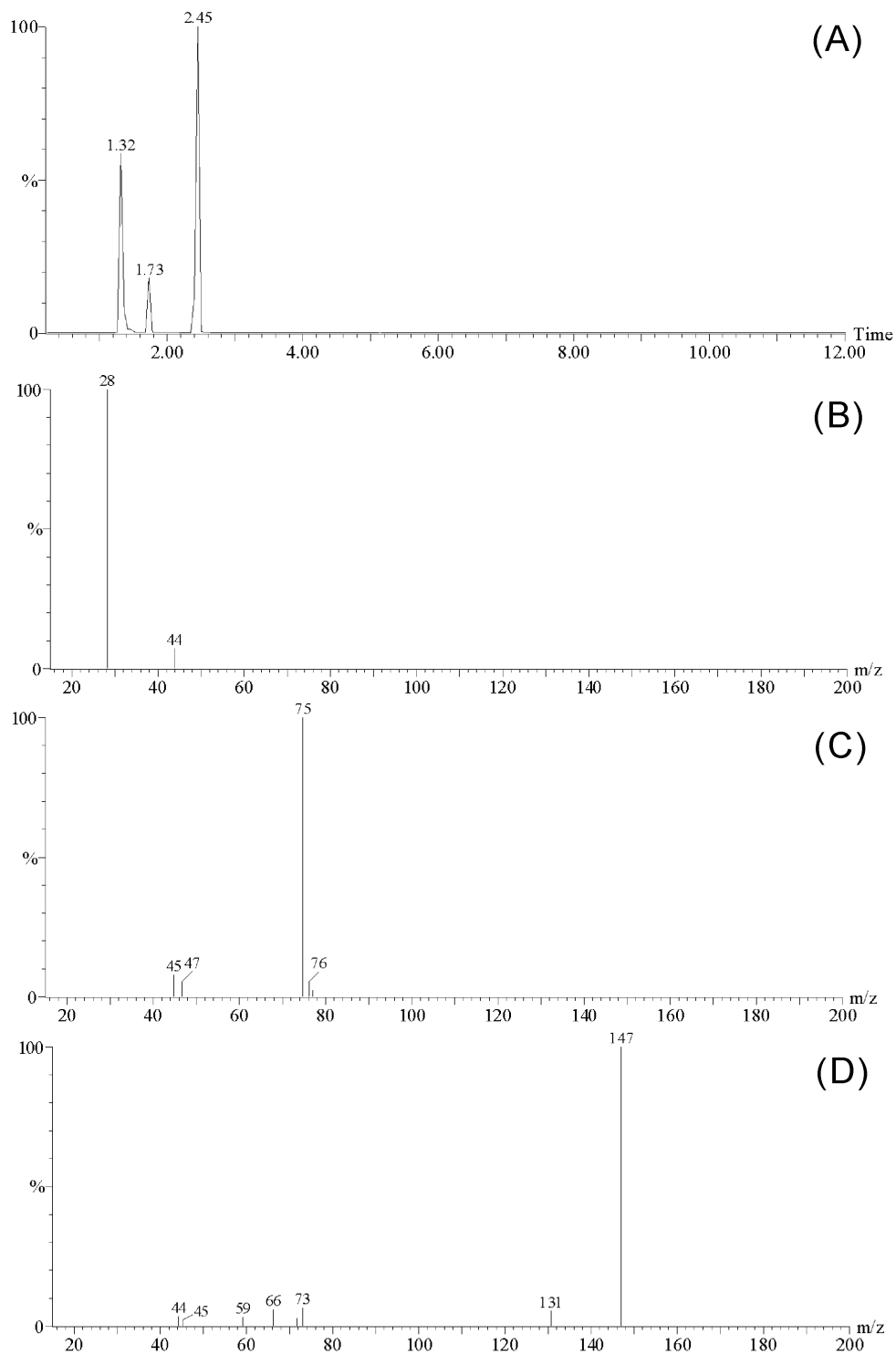


Figure 6. GC/MS data of gas phase byproducts. (A) Gas chromatogram. EI-Mass spectra of gas phase byproducts at (B) 1.32 min: air, (C) 1.73 min: trimethylsilane, (D) 2.45 min: hexamethyldisiloxane.

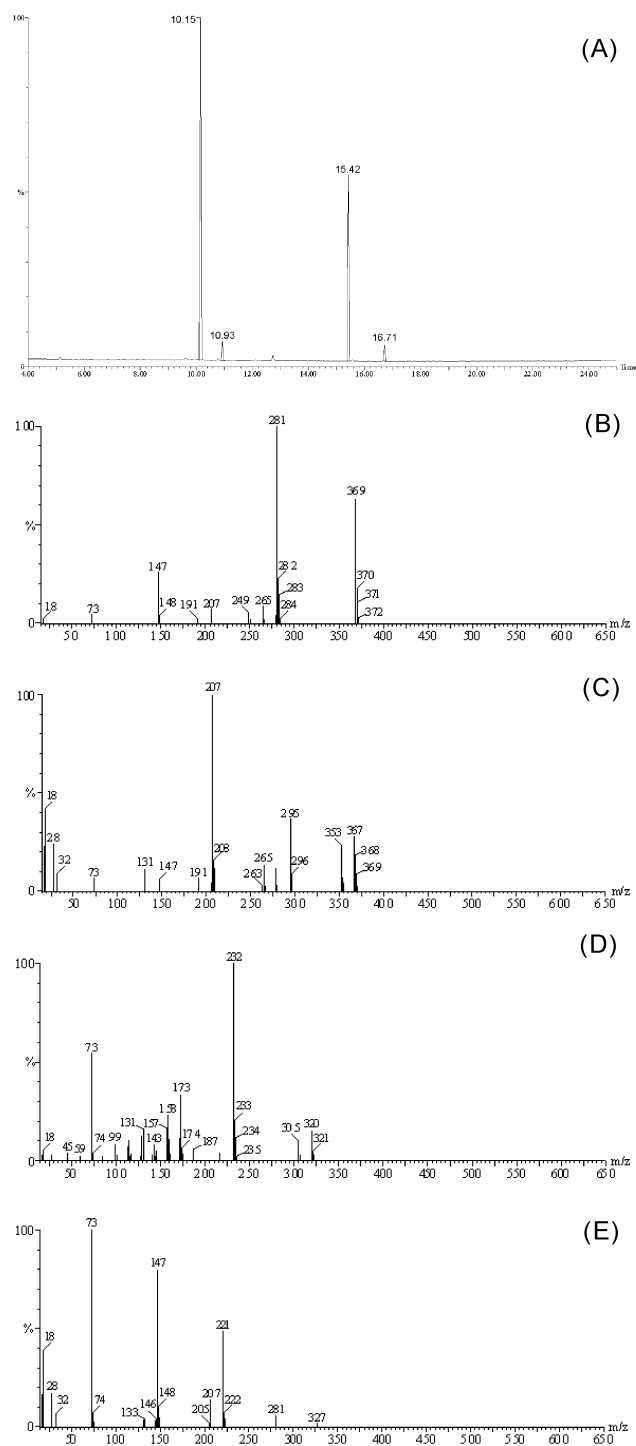


Figure 7. GC/MS data of THF soluble byproducts. (A) Gas chromatogram. EI-Mass spectra of soluble byproducts at (B) 10.15 min: $(\text{Me}_3\text{SiO})_4\text{Si}$, (C) 10.93 min: $\text{Me}_3\text{SiO}(\text{Me}_2\text{SiO})_2\text{SiMe}_3$, (D) 15.42 min: $(\text{Me}_3\text{Si})_4\text{Si}$. (E) 16.71 min: silicone polymer.

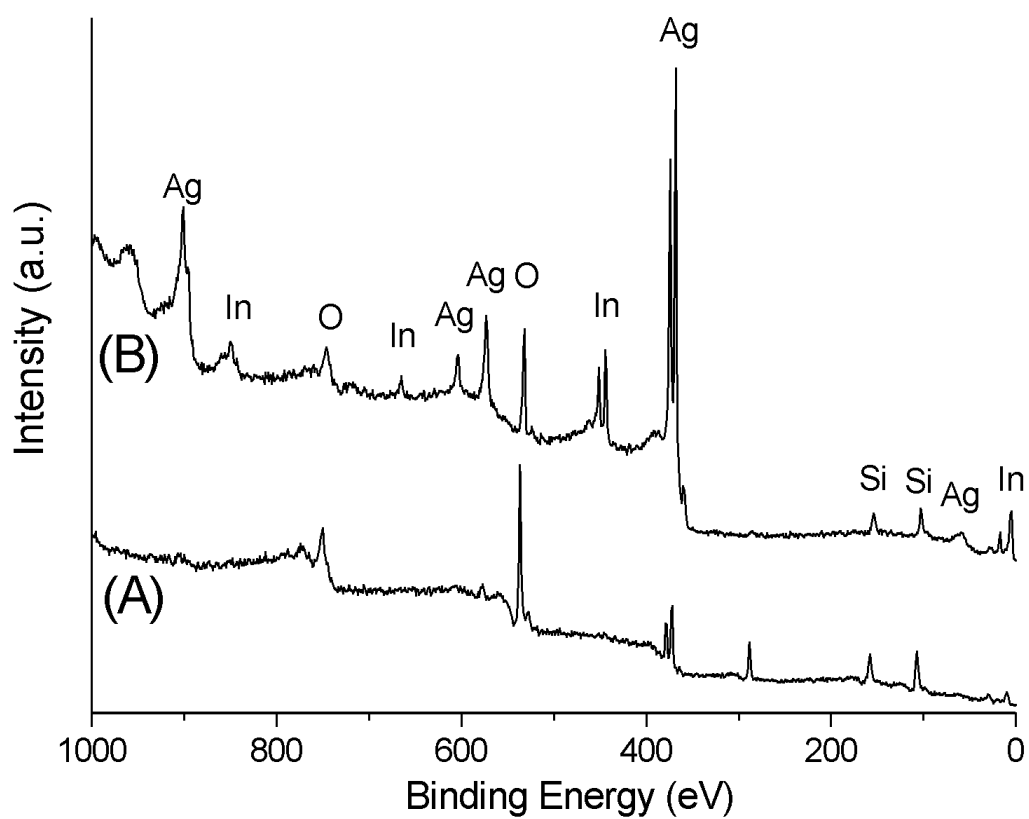


Figure 8. XPS survey spectra of silver nanowires. (A) as-received, (B) after Ar⁺ sputtering for 10 min. In metal is used as the sample holder.

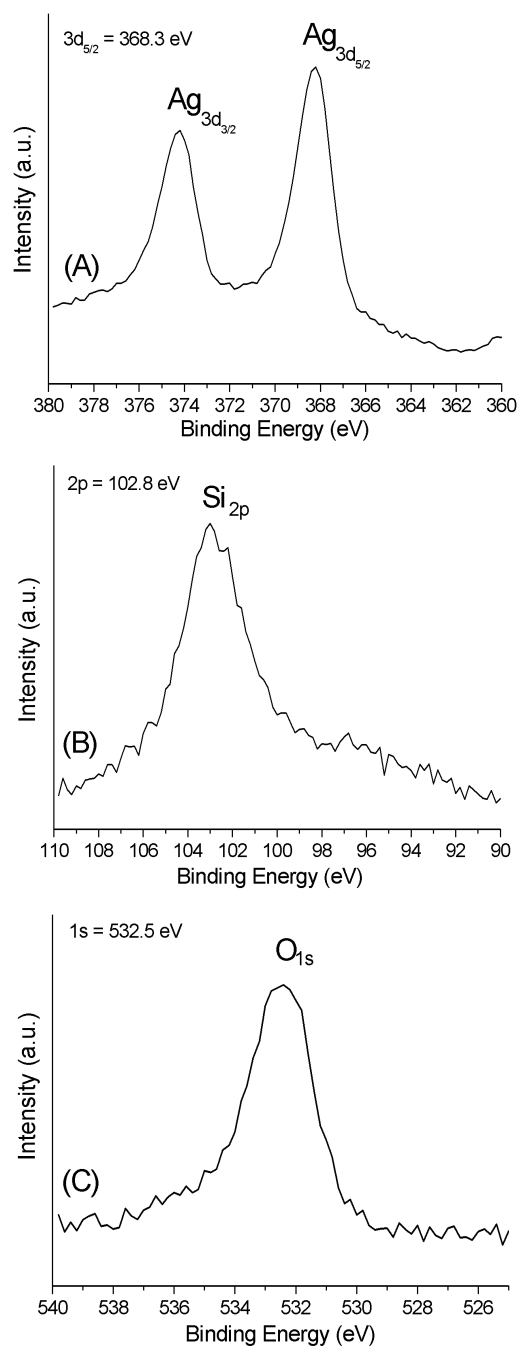


Figure 9. High Resolution XPS spectra of silver nanowires. (A) Ag, (B) Si, (C) O.

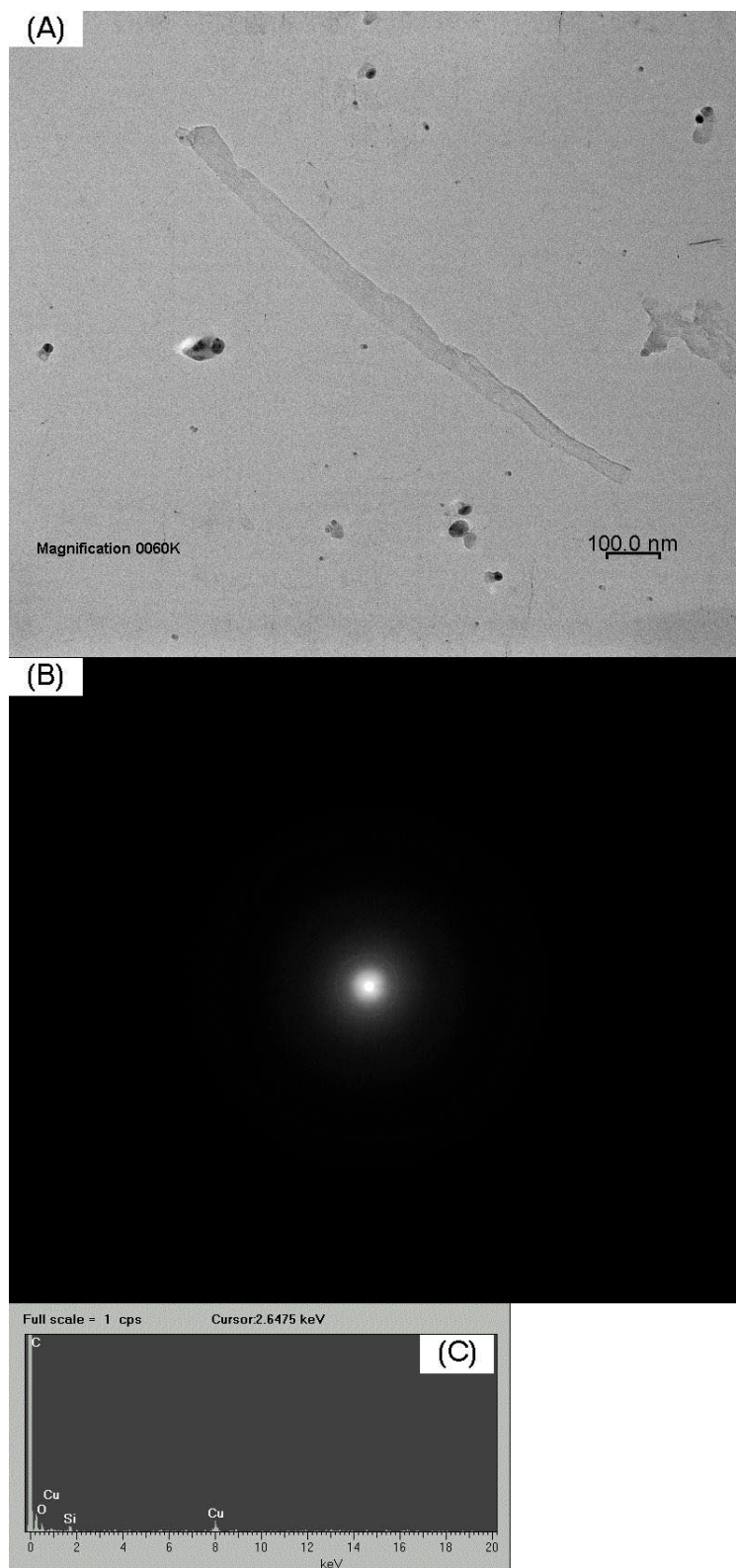


Figure 10. TEM study of a shell removed from a nanowire after the Ag core was dissolved in concentrated HNO_3 . (A) Image, (B) ED, (C) EDS.