

## Support information

### **Surface plasmon resonance enhanced bandedge emission of CdS-SiO<sub>2</sub> core-shell nanowires with gold nanoparticles attachment**

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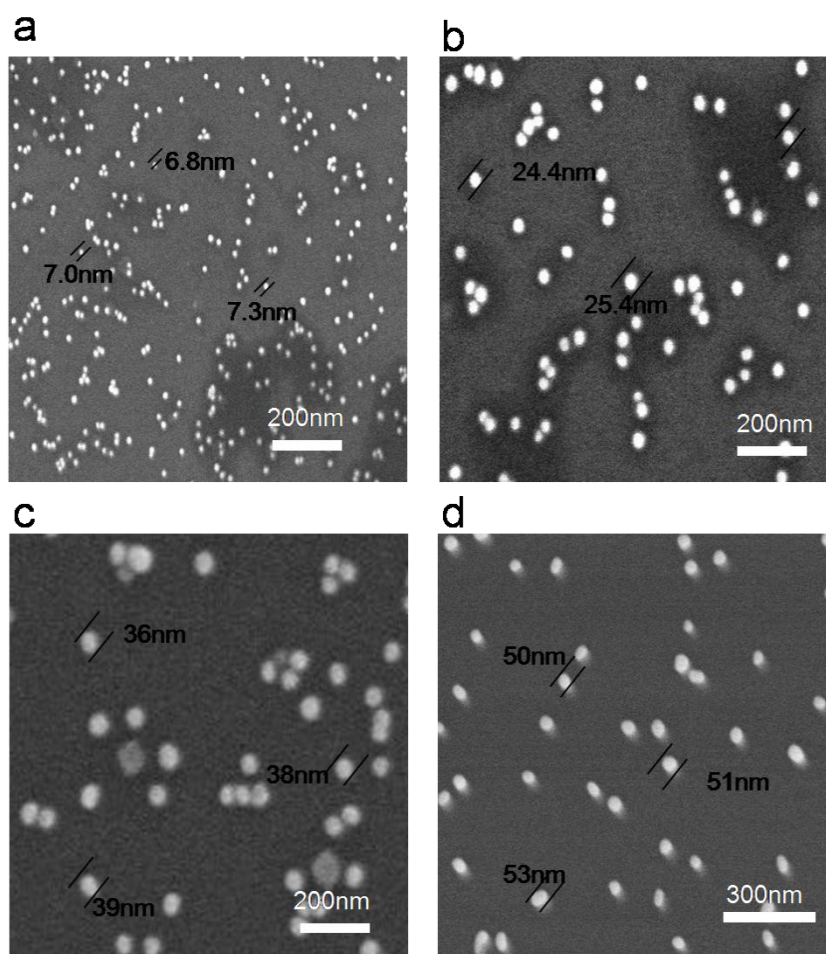


Figure S1 SEM images of gold nanoparticles with different size ~7 nm (a), ~25 nm (b), ~37 nm (c), ~52 nm (d), respectively.

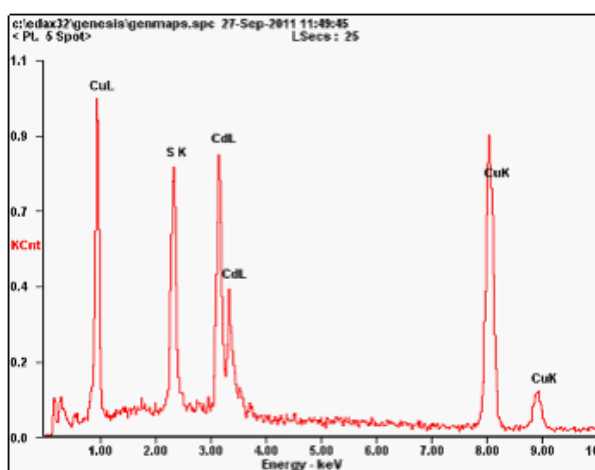


Figure S2 The EDS spectrum of as-prepared CdS NWs. (The observation of Cu comes from the Cu micro grid used for SEM test)

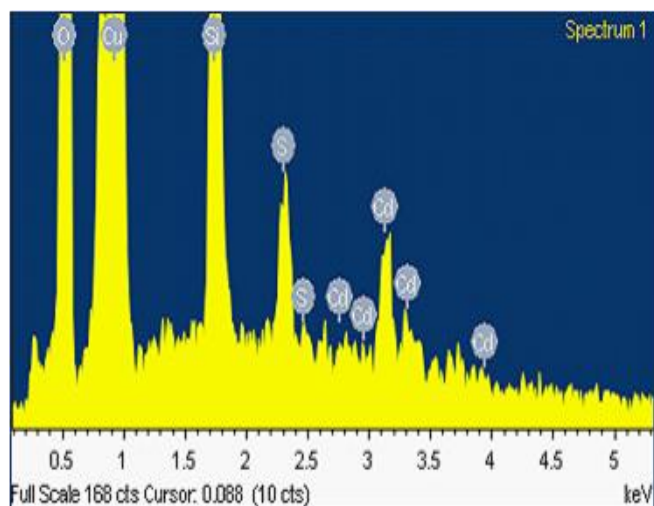


Figure S3 The EDS spectrum of as-prepared CdS-SiO<sub>2</sub> NWs. (The observation of Cu comes from the Cu micro grid used for SEM test)

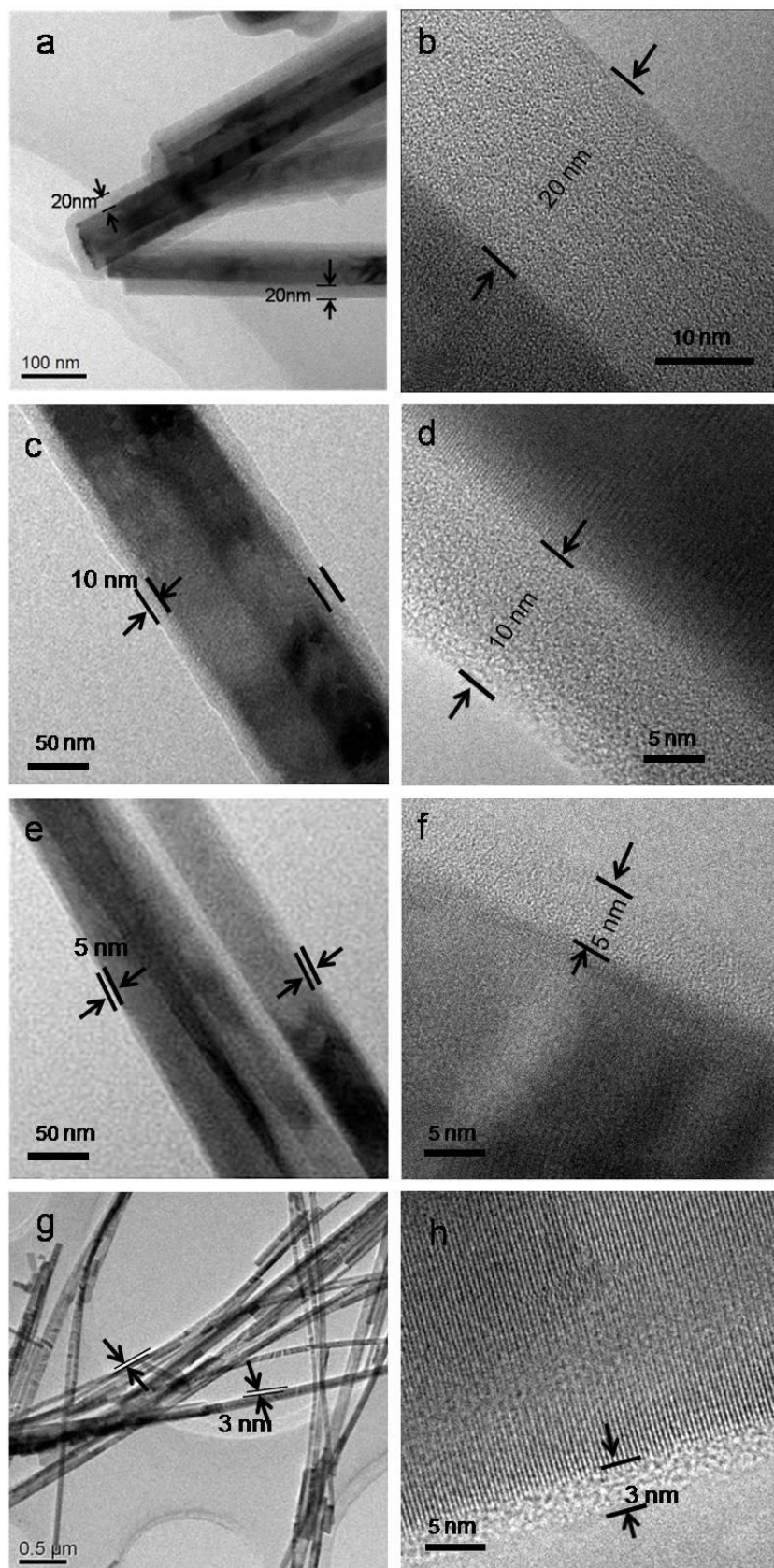


Figure S4 TEM images of CdS nanowires coating with different thicknesses of silica layers