Supporting Information

Realization of tunable localized surface plasmon resonance of Cu@Cu2O core-shell nanoparticles by PLD method

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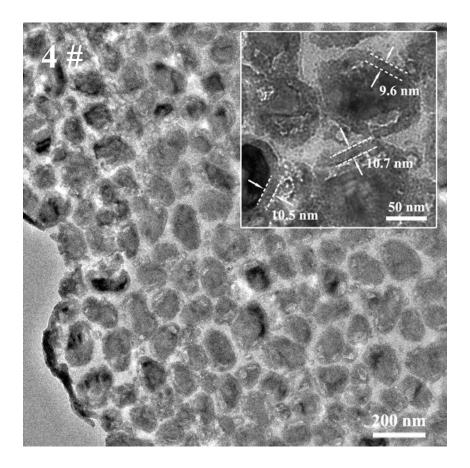


Figure S1. TEM images of sample 4#

As shown in Figure S1, the thickness of Cu₂O shell is consistently about 10 nm.

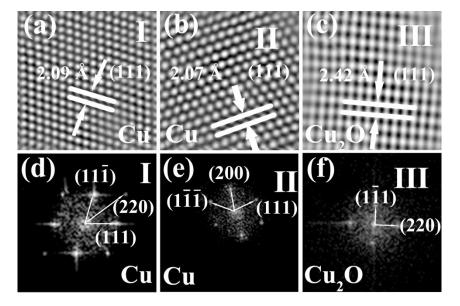


Figure S2. TEM images with detail information of region I, II and III in Figure 2. (a)-(c) IFFT images obtained from HRTEM images of region I, II and III in Figure 2; (d)-(f) FFT images obtained from HRTEM images of region I, II and III in Figure 2.

Figure S2 contains information about the crystal structure being calibrated, which is a supplement to Figure 2.

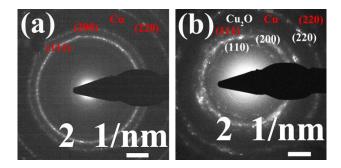


Figure S3. SAED images with detail information of (a) sample 1# and (b) sample 3#.

Figure S3 contains information about the crystal structure being calibrated, which is a supplement to Figure 2e, f.

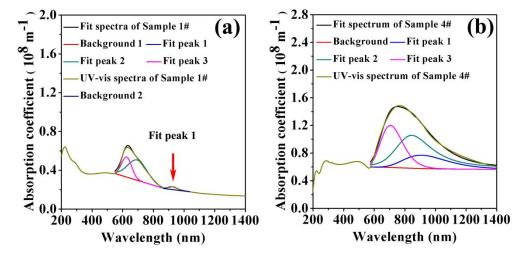


Figure S4. UV-vis absorption coefficient spectra of the NPs. (a) UV-vis sub-peaks fitting figure of sample 1#; (b)

UV-vis sub-peaks fitting figure of sample 4#.

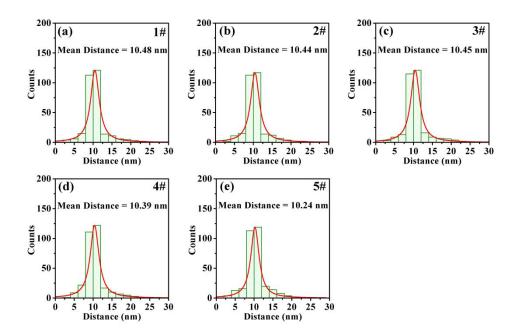


Figure S5. (a)-(e) The distribution histogram of distance between the NPs in sample 1-5#, respectively.