Electronic Supplementary Material (ESI) for RSC Advances.

Plasmonic Ag@Cu_2O Core-Shell Nanostructures Exhibiting Near-Infrared Photothermal Effect

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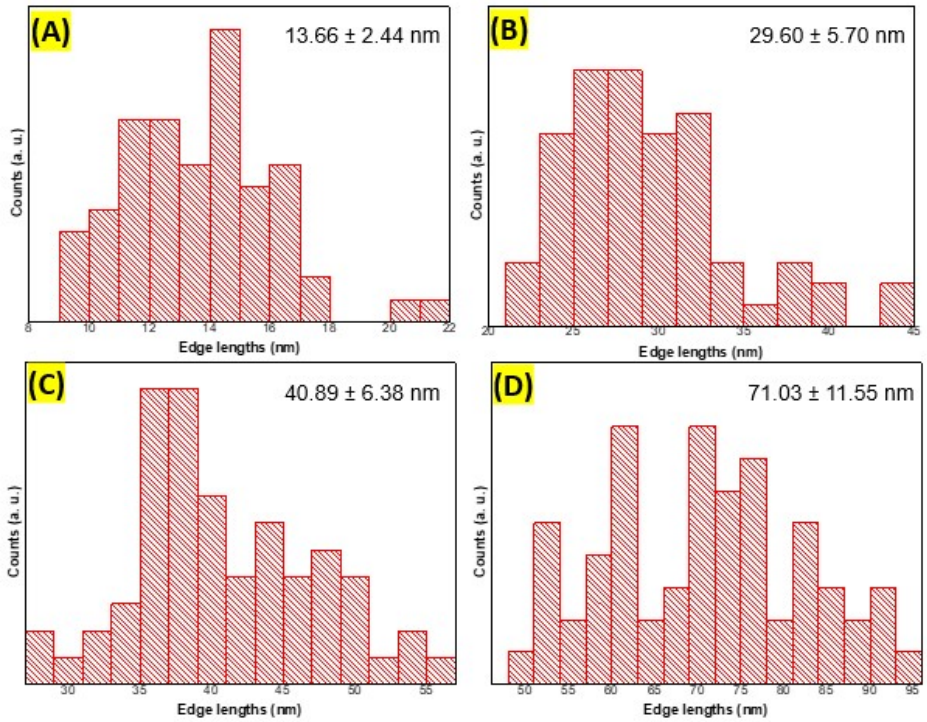

Fig. S1. Distribution of Cu_2O shell thickness measured from TEM images of Au@Cu_2O NPs synthesized using (A) 10 µL, (B) 20 µL, (C) 30 µL, (D) 40 µL of 0.1 M $Cu(NO_3)_2$.

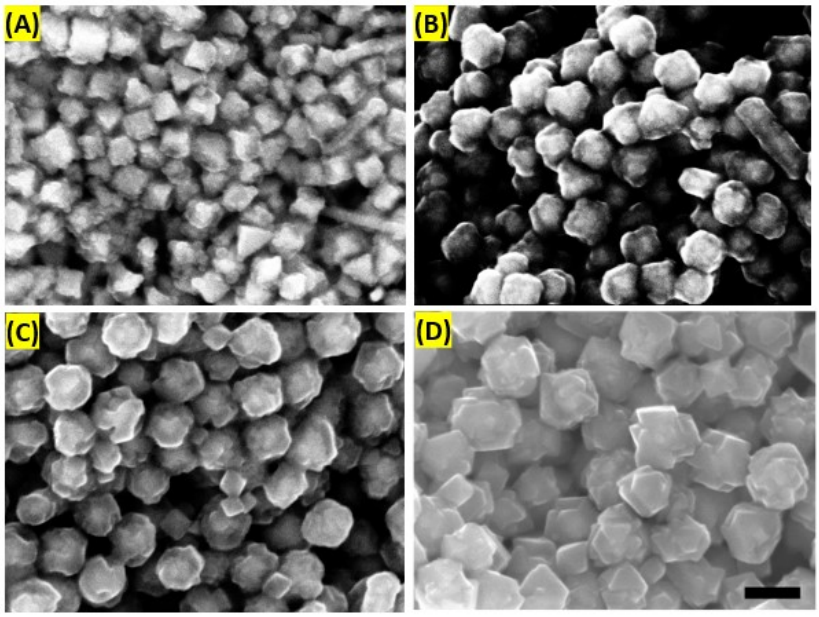

Fig. S2. SEM images of Ag@Cu_2O nanoparticles obtained using (A) 10 µL, (B) 20 µL, (C) 30 µL, (D) 40 µL of 0.1 M $Cu(NO_3)_2$.

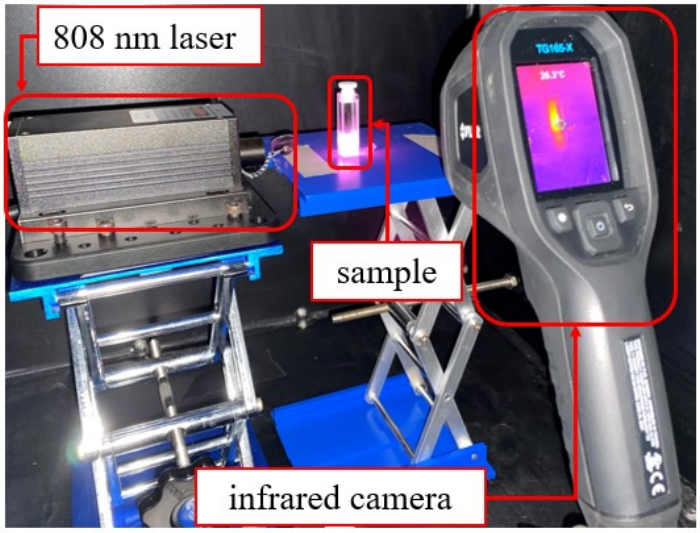

Fig. S3. Photothermal Heating Set Up.

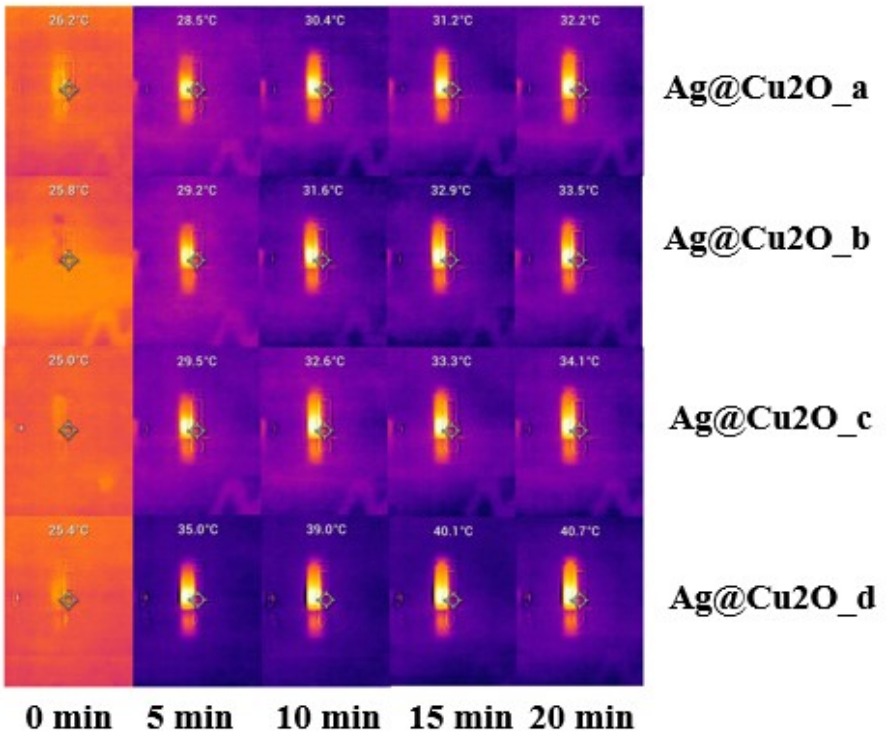

Fig. S4. Infrared thermal images showing temperature measurements of Ag@Cu_2O colloidal solutions synthesized adding (a)10 µL, (b)20 µL, (c) 30 µL, (d) 40 µL of 0.1 M $Cu(NO_3)_2$ under continuous 808 nm laser illumination.

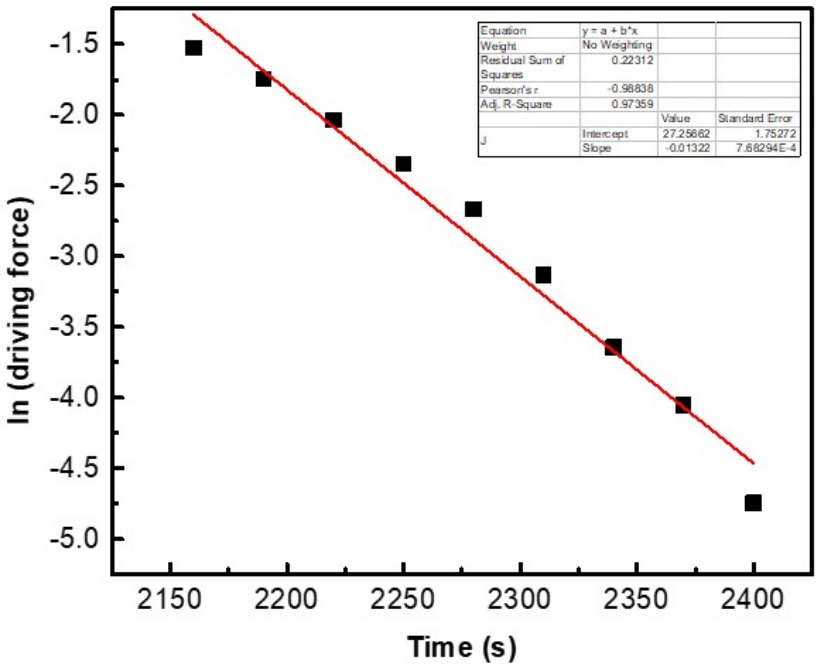

Fig. S5. The linear regression plot of the natural logarithm of driving force temperature against time used for calculation of the photothermal efficiency.