

## Electronic Supplementary Information

for

Laser-induced modification of dog-bone-like Au nanorods for accurate  
growth of well-defined cylindrical structures

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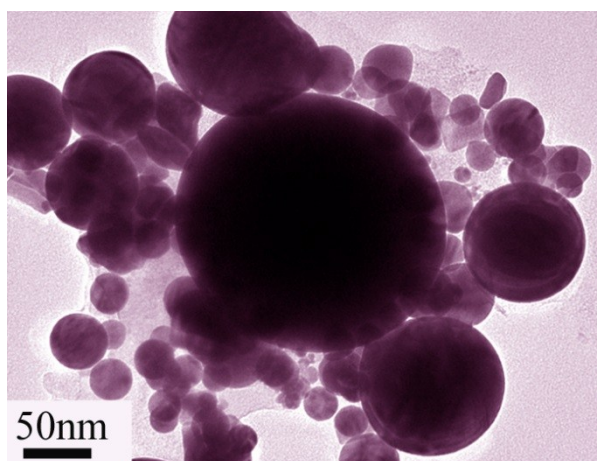


Fig. S1 The TEM image of the poly-dispersed Au nano-spheres instead of Au NRs will be generated by 532 nm low- power ( $\sim 5\text{W}/\text{cm}^2$ ) laser irradiation of the irregular Au NRs

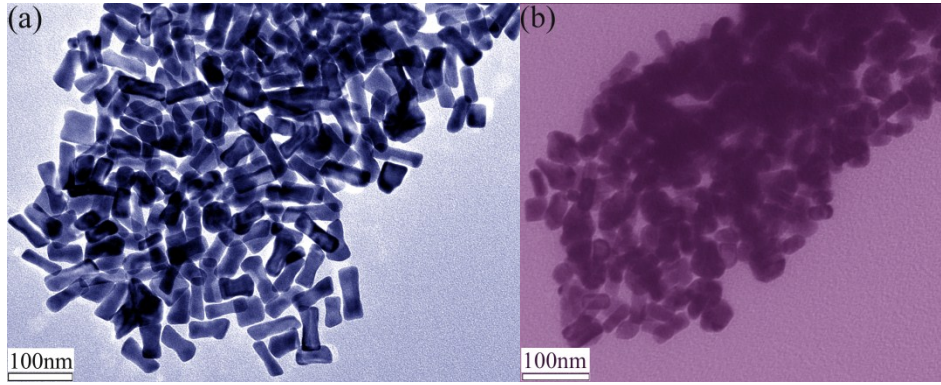


Fig. S2 (a) The typical low-magnification TEM image of pristine irregular Au NRs with high concentration(10mg/L, 10mL) in solution prepared by standard seed-mediated growth approach. (b) The TEM image of the Au NRs obtained by non-focused 1064nm laser ( $\sim 5\text{W}/\text{cm}^2$ ) irradiation of dog-bone-like Au NRs, irradiation time: 100s.

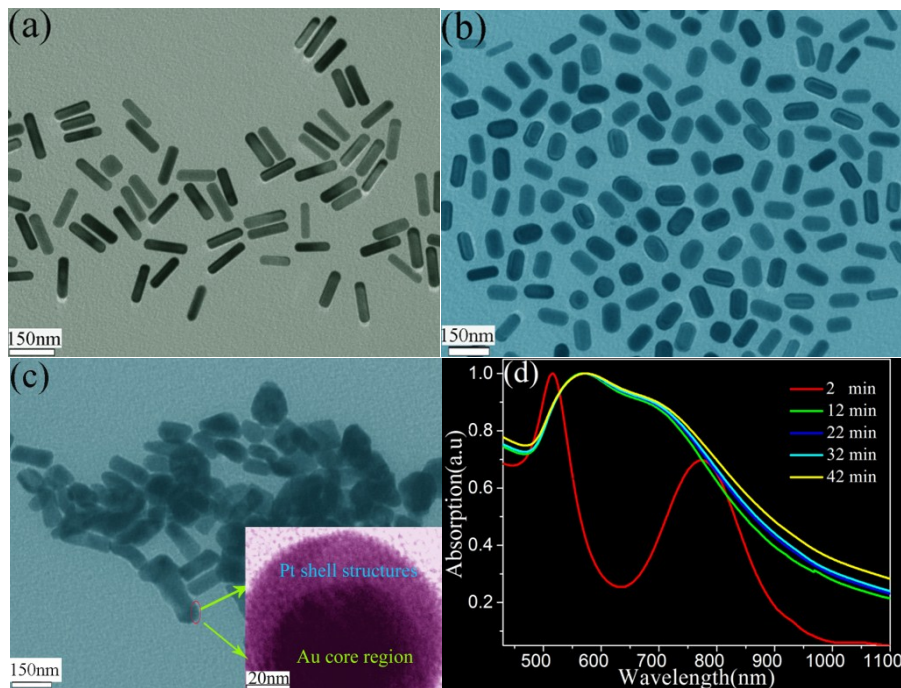


Fig. S3 The TEM images of the irregular shaped hybrid Pt-Ag@Au NRs core-shell structures. After adding Pt ions in solution, reaction time: 2min (a), 22 min (b) and 42 min(c). The inset in (c) shows the typical HRTEM

image of the Pt/Au core-shell structure. (d) UV-visible absorption spectra of core-shell-shaped Pt-Ag@Au NRs at different reaction time.