## Supplementary information

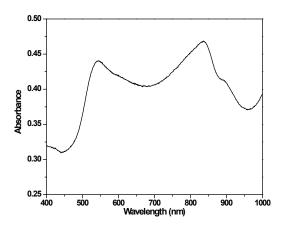
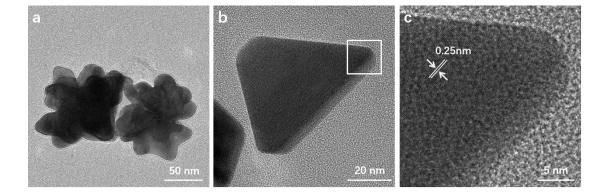


Fig. S1 UV-vis absorption spectrum of the aqueous solution of corolla-shape Au nanostructures.



**Fig. S2** TEM images of (a) Au nanoflowers and (b) nanosheets synthesized only using EDTA and PVP, respectively. (c) High-resolution TEM image of Au nanosheets taken in (b) using a boxed spot.

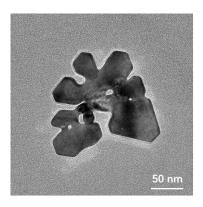


Fig. S3 Additional TEM image of a corolla-shape Au nanostructure.