

Supporting information

Novel Surfactant-Free Multi-branched Gold Stars Characterized by Inverse Photocurrent

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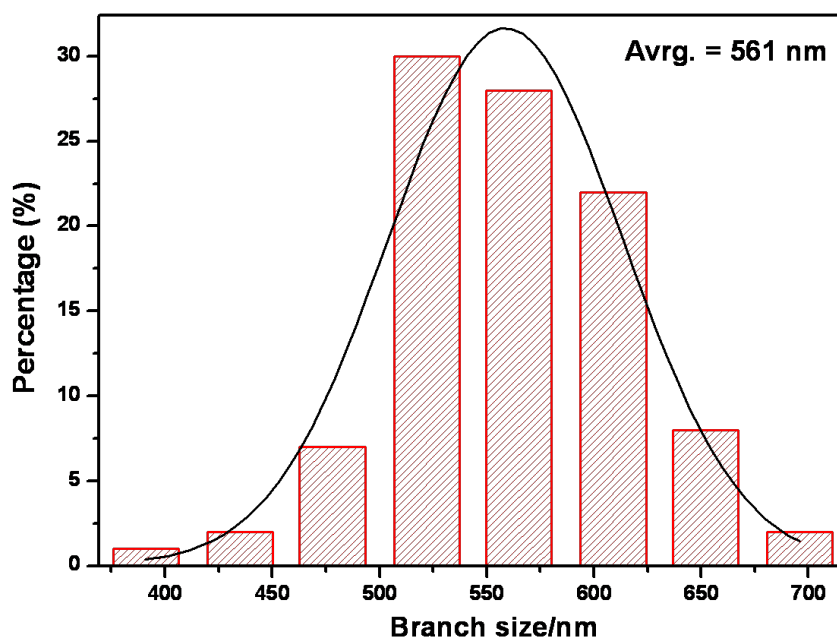


Fig. S1. A histogram showing the distribution of branch sizes observed in the star-shaped particles shown in Figure 1b.

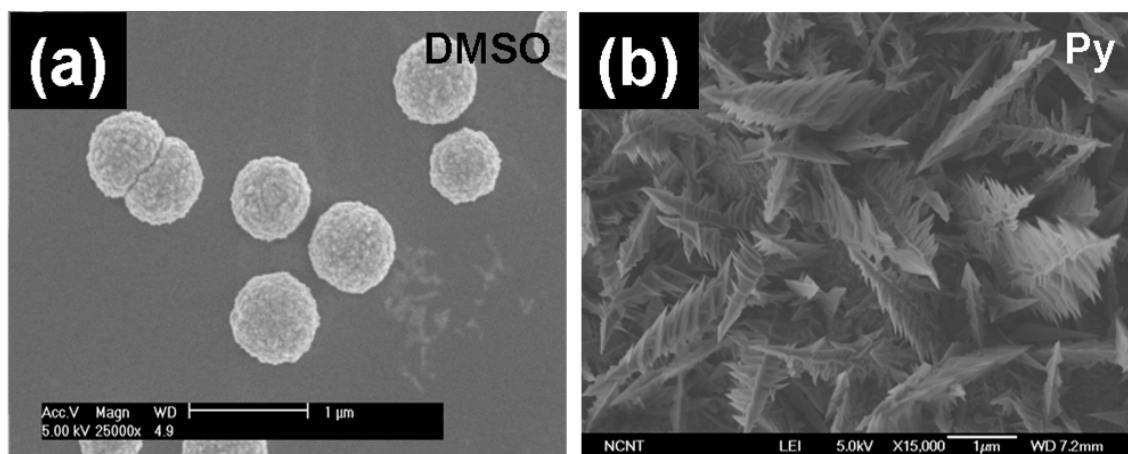


Fig. S2. SEM images of fabricated gold spheres on Ge (100) in DMSO/water (9/1, (a)), and gold trees on Ge (100) in pyridine (Py)/water (9/1, (b)).

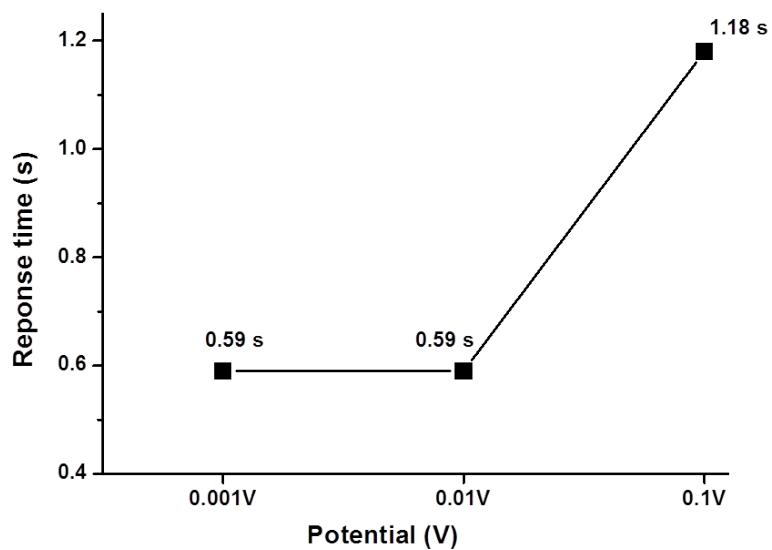


Fig. S3. The potential-dependent photoresponse time of gold star film.

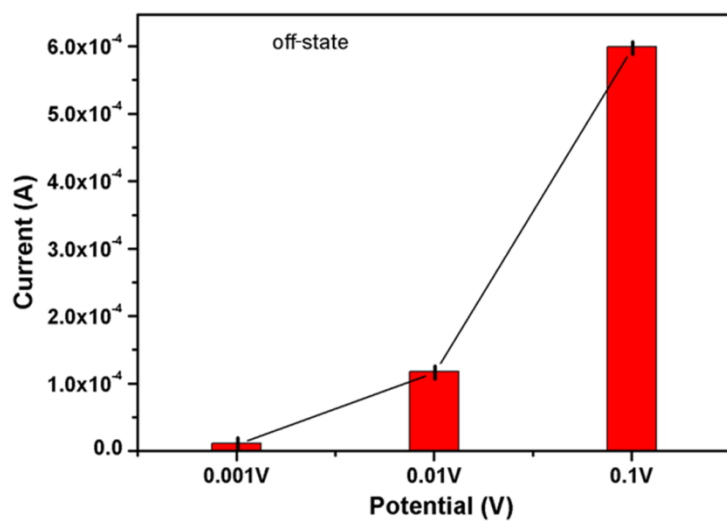


Fig. S4. The potential-dependent off-state photocurrent of gold star film.

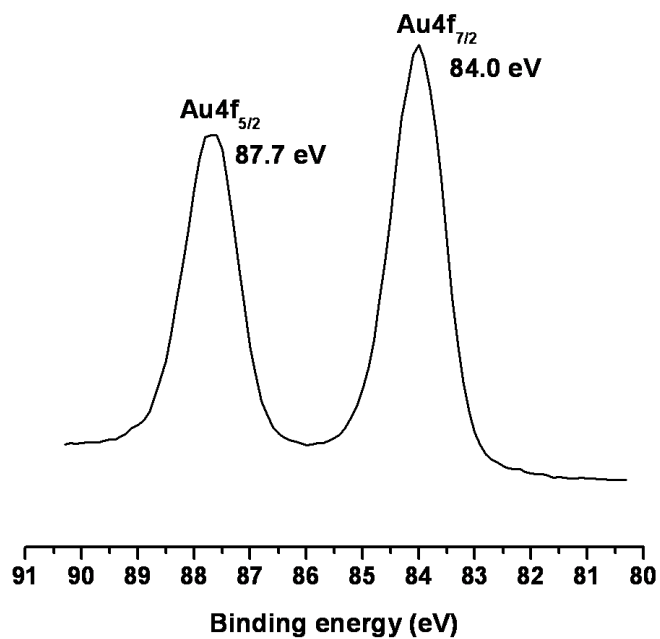


Fig. S5. High-resolution Au 4f XPS features obtained from fabricated gold particle film after 12 hr on Ge (100) surface from a 1 mM aqueous HAuCl_4 solution (see Figure 1a).