

Supporting Information

Plasmon Enhanced Water Splitting Mediated by Hybrid Bimetallic Au-Ag Core-Shell Nanostructures

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Titanium Dioxide Nanoparticle Characterization

A particle size distribution analysis of 161 particles was conducted with transmission electron micrographs of P25 nanoparticles. Figure S1a shows a representative TEM image of P25 nanoparticles, while Figure S1b shows an SEM image of their mesoporous morphology. Figure S2 shows the size distribution of the P25 nanoparticles.

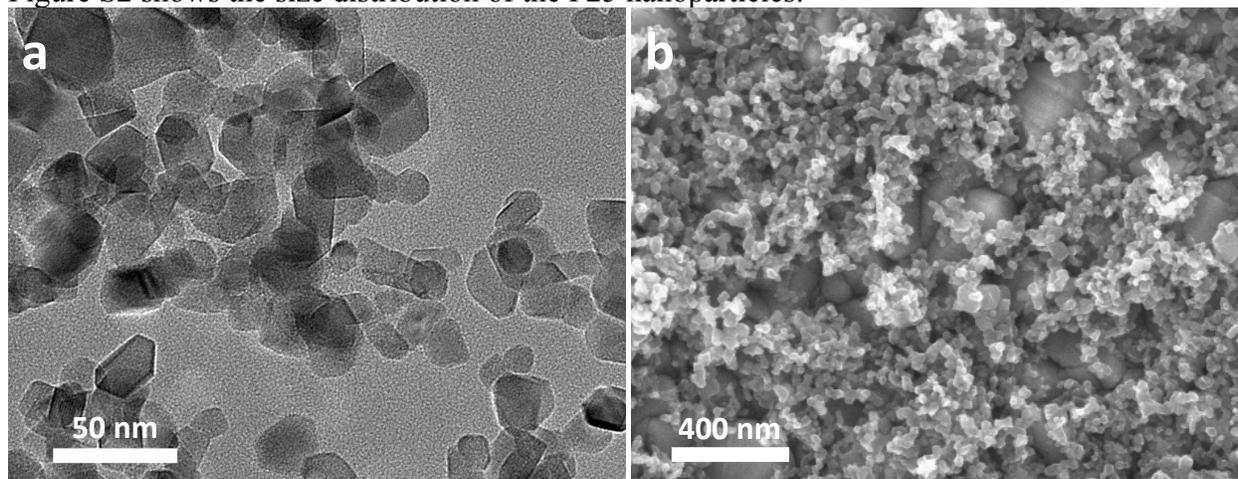


Figure S1. (a) Representative transmission electron micrograph of P25 nanoparticles (b) Scanning electron micrograph of mesoporous morphology of P25 nanoparticles on FTO glass.

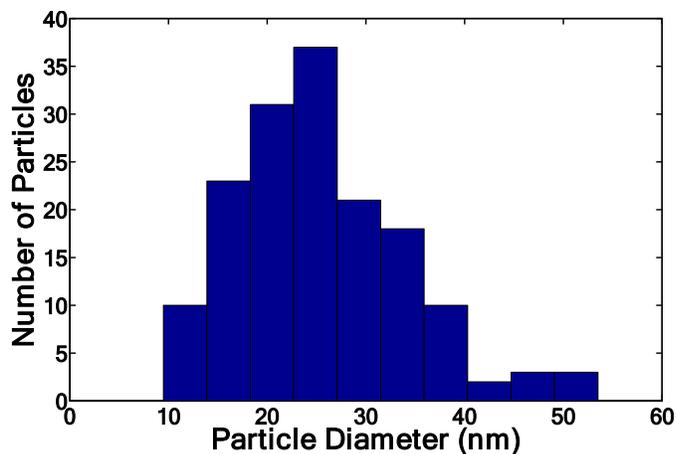


Figure S2. Size-distribution of P25 nanoparticles. The average size of the TiO_2 nanoparticles is ~ 23 nm.

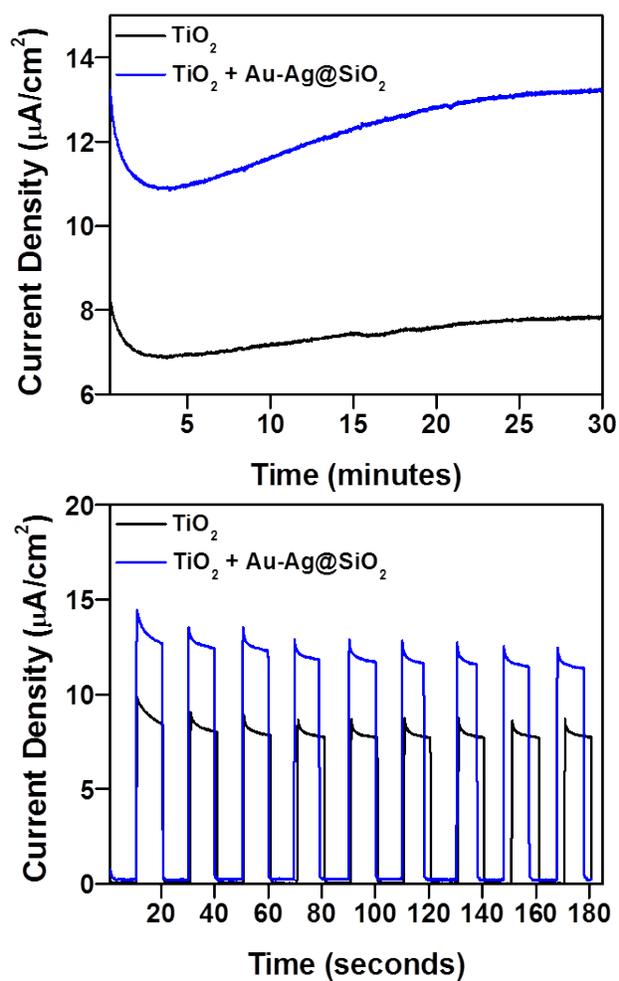


Figure S3. (a) Chronoamperometry measurement of reference photoanode (TiO_2) and plasmon enhanced photoanode ($\text{TiO}_2 + \text{Au-Ag@SiO}_2$), and (b) Light-chopping measurement of the two photoanodes shown in (a).