SUPPORTING INFORMATION

Hierarchical Carbon Nanotube Membrane Supported Gold Nanoparticles for Rapid Catalytic Reduction of *p*-Nitrophenol

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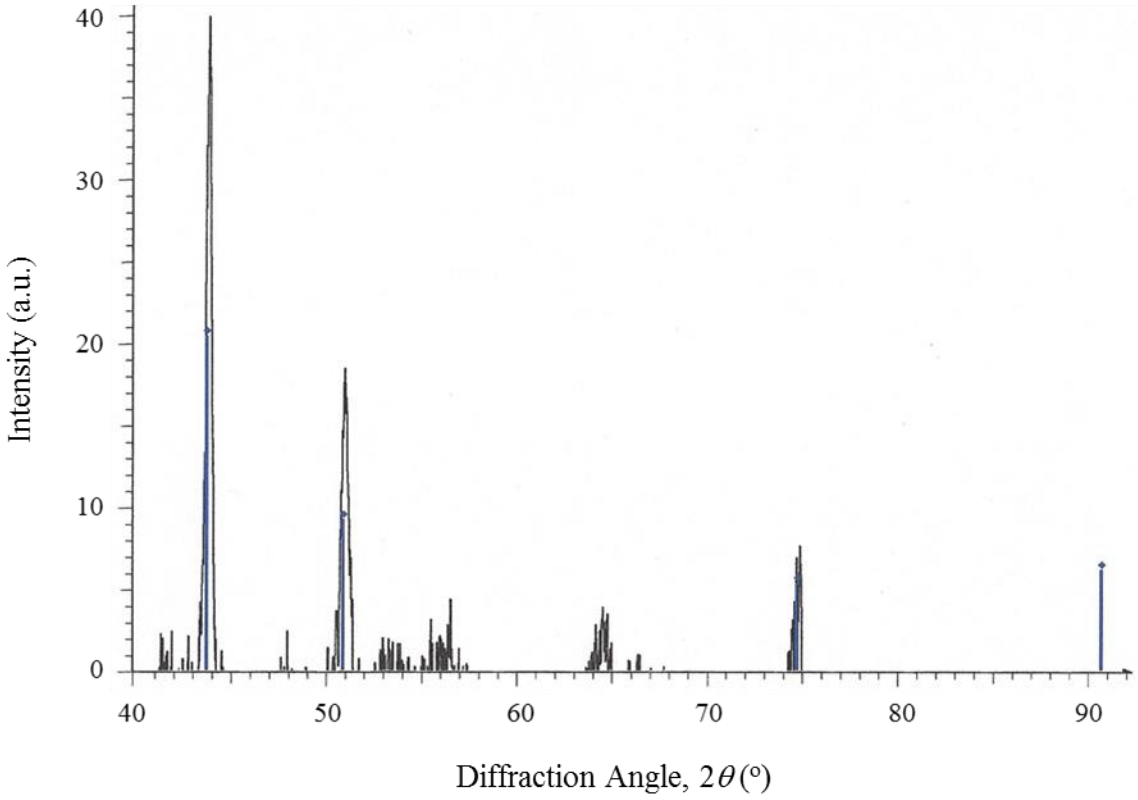

Figure S1. XRD pattern of stainless steel mesh. The black curves are experimental data. The blue lines marked by stars are the patterns of standard stainless steel.

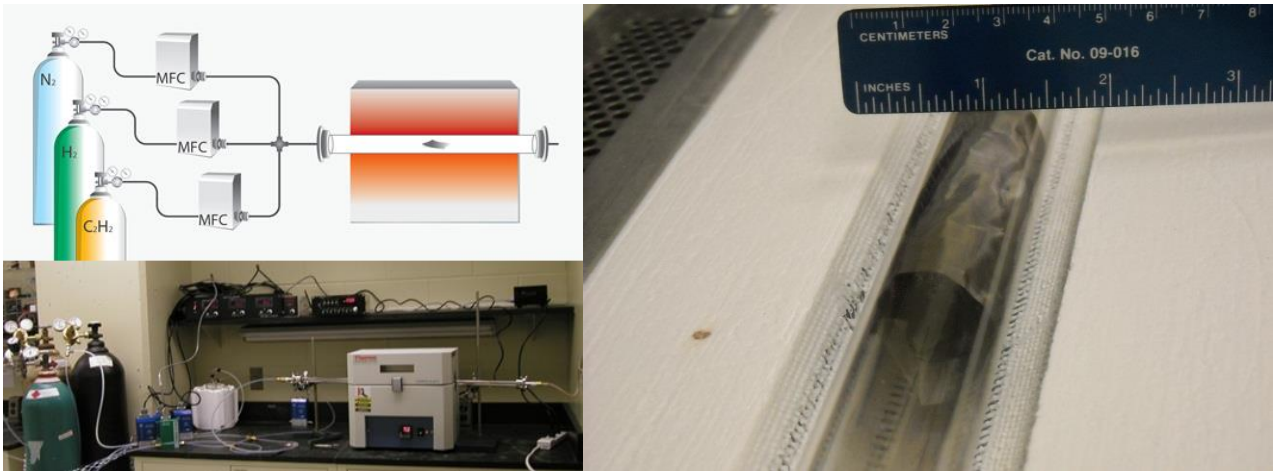

Figure S2. Schematic diagram and laboratory setup of the chemical vapor deposition system used to fabricate hierarchical carbon nanotube membrane.

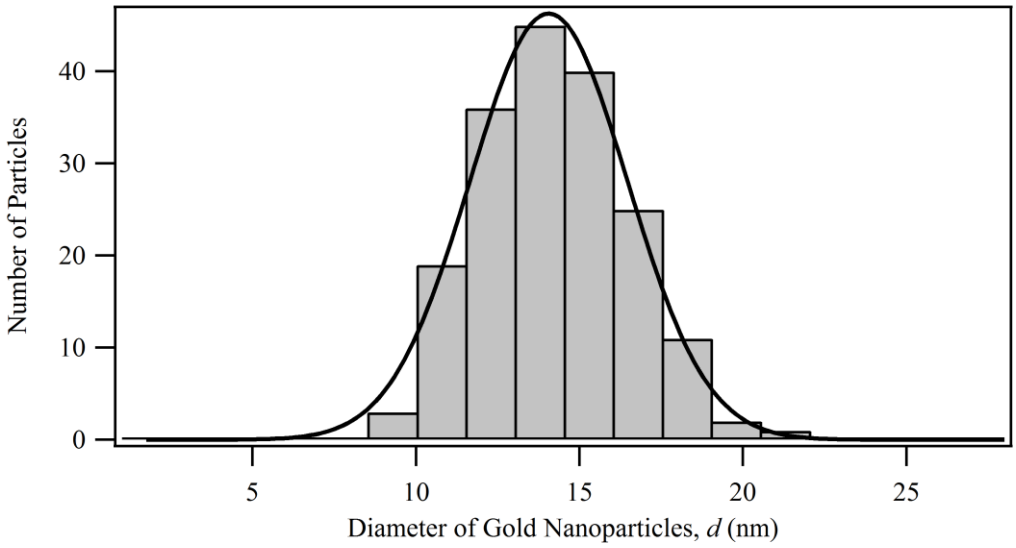

Figure S3. Size distribution of gold nanoparticles. The histogram was made by measuring the diameters of 182 AuNPs that were imaged using transmission electron microscopy. The solid curve is a Gaussian fit to the histogram, which gives an average diameter of 13.3 nm and a standard deviation of 2.4 nm.

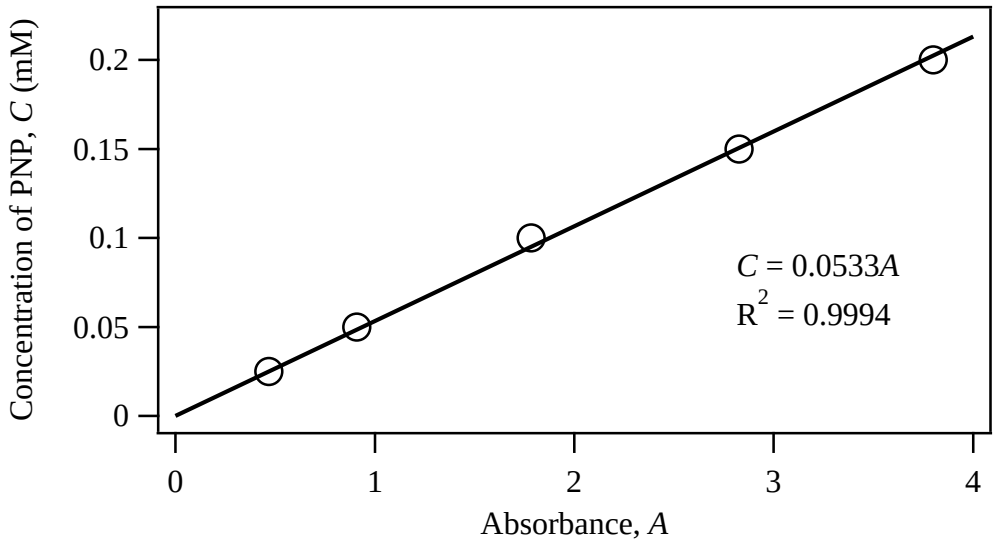

Figure S4. Linear relationship between *p*-nitrophenol (PNP) concentration and absorbance at 400 nm. The calibration was performed with PNP standard in the presence of 50 mM $NaBH_4$.