Polyaniline:poly(sodium 4-styrenesulfonate)-stabilized gold nanoparticles as efficient, versatile catalysts

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Scheme S1. The molecular structure of PANI:PSS. PANI is in the form of emeraldine salt.
Figure S1. High-resolution TEM image showing the d-spacing of gold lattice fringes.
Figure S2. Photographs showing the stability of dispersions of PANI:PSS/Au and PANI/Au in aqueous solutions at pH 1 and 12.
Figure S3. UV-vis absorption spectra of the reduction of 4-nitrophenol into 4-aminophenol by excessive NaBH4 in the presence of (a) PANI/Au and (b) PANI:PSS/MAA-Au. Interval time between two neighboring spectra is 20 s; and (c) in the absence of Au NPs catalyst, indicated as blank.
Figure S4. UV-vis absorption spectra of TMB-H$_2$O$_2$ solution in the presence of PANI:PSS/Au. The H$_2$O$_2$ concentration increased from 3.3 μM to 10000 μM.

Figure S5. UV-vis absorption spectra of TMB-glucose solution in the presence of PANI:PSS/Au and GOD. The glucose concentration increased from 8 μM to 4000 μM.