

Electronic Supplemental Information

Interfacial synthesis of lollipop-like Au-polyaniline nanocomposites for catalytic applications

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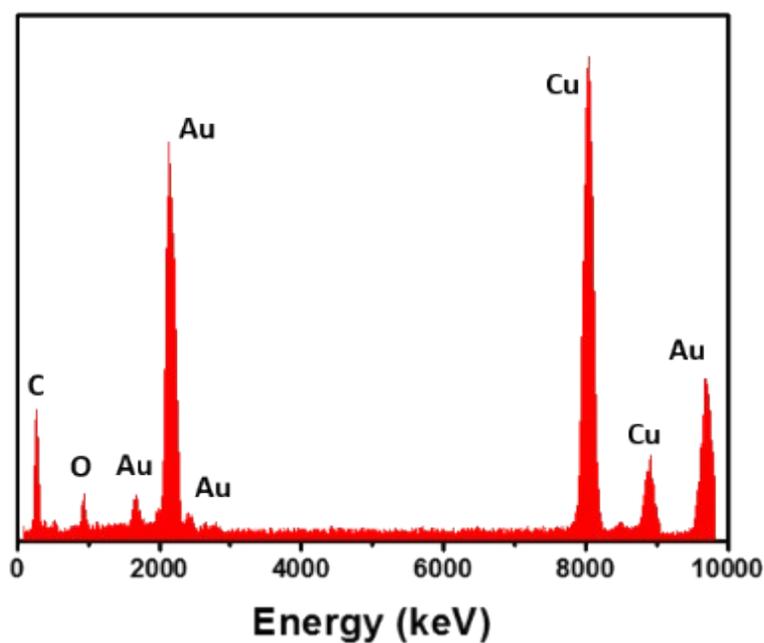


Fig. S1. EDX spectrum of lollipop-like Au-PANI nanoparticles at a reaction time of 1h.

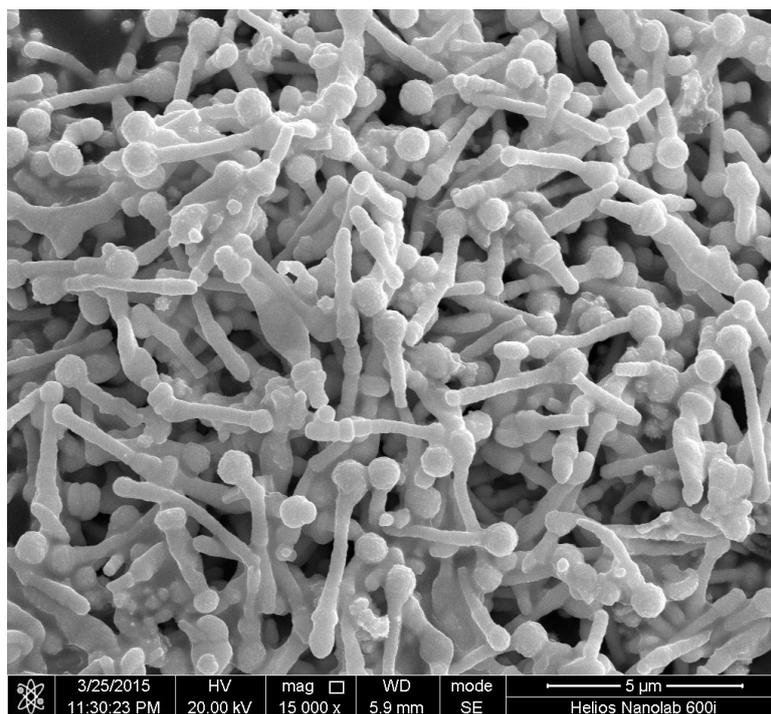


Fig. S2. SEM image of lollipop-like Au-PANI nanocomposites when 0.1 ml of 10 mM HAuCl₄ was added into the water phase for a reaction time of 1 h.

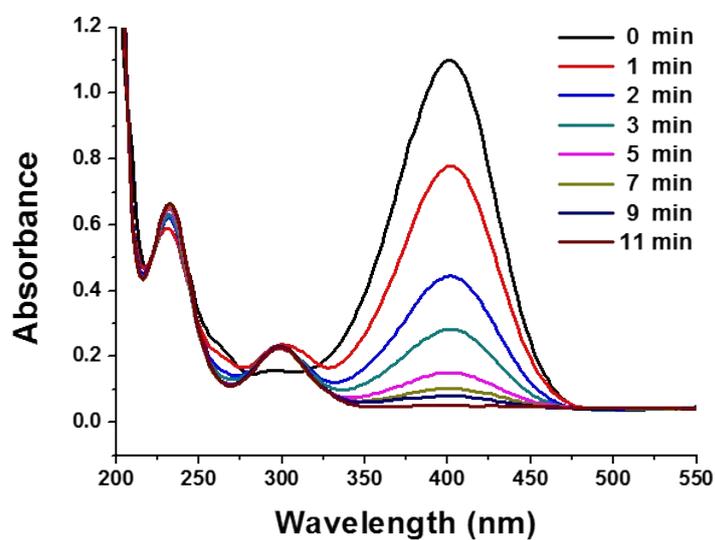


Fig. S3. UV-Vis absorption spectra showing the reduction of 4-NP by NaBH₄ in the presence of lollipop-like Au-PANI nanocomposites obtained at a reaction time of 1h.

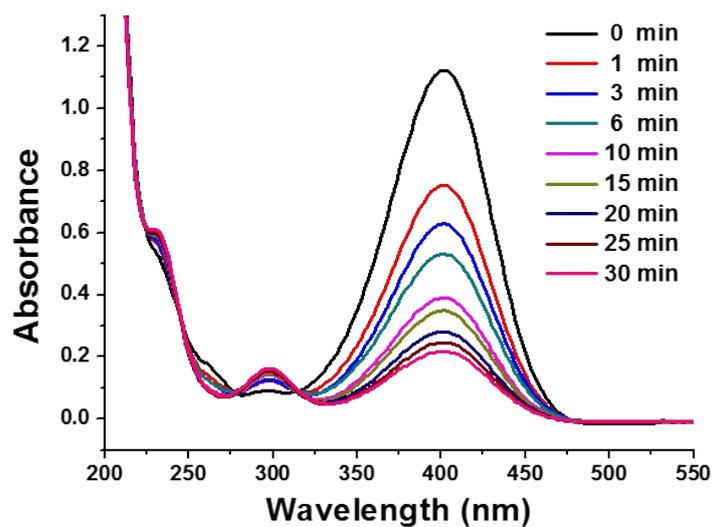


Fig. S4. UV-Vis absorption spectra showing the reduction of 4-NP by NaBH_4 in the presence of Au-PANI nanocomposites obtained at a reaction time of 1h with 5ml of 10mM HAuCl_4 added into the water phase.

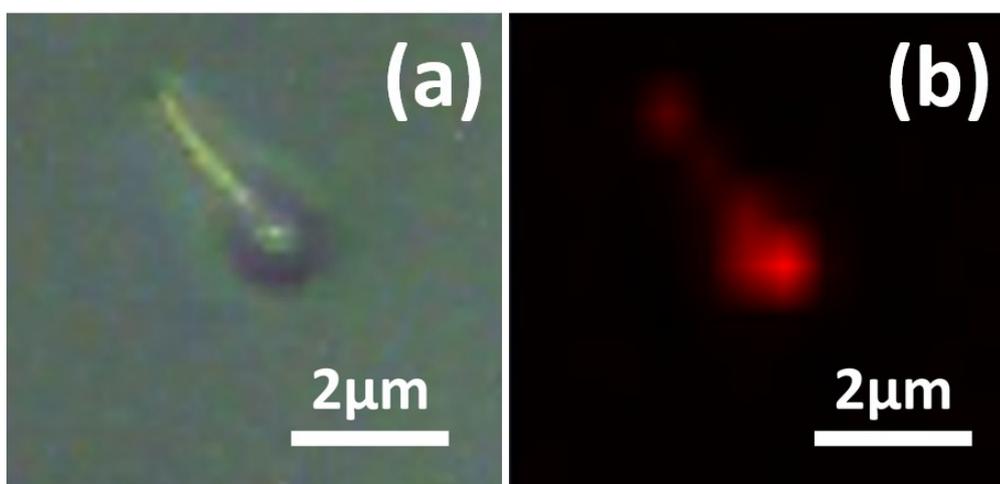


Fig. S5. (a) Optical photograph of Au-PANI nanostructure under the microscopy with a 100× objective and (b) SERS mapping of Au-PANI at peak 1435 cm^{-1} of the N=N band.

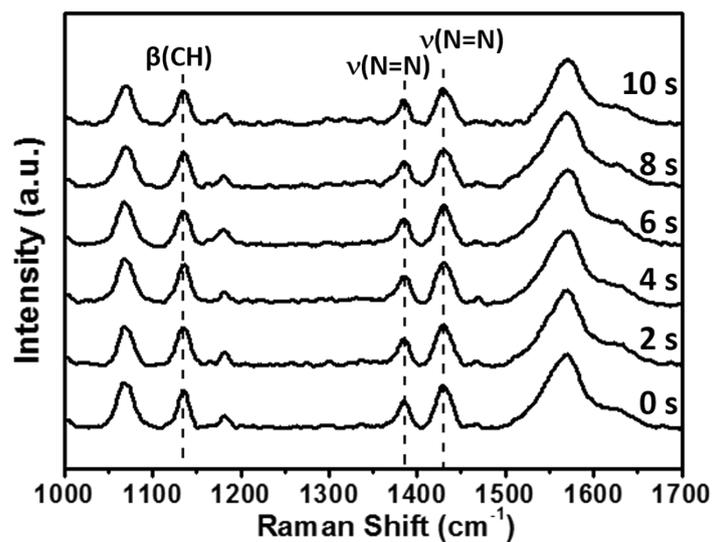


Fig. S6. Time-dependent SERS spectra of 4-ATP dimerizing to DMAB on Au-PANI nanospheres obtained at a reaction time of 1h with 5ml of 10mM HAuCl₄ added into the water phase, under continuous 633 nm laser excitation with a laser power of 1.5 mW.

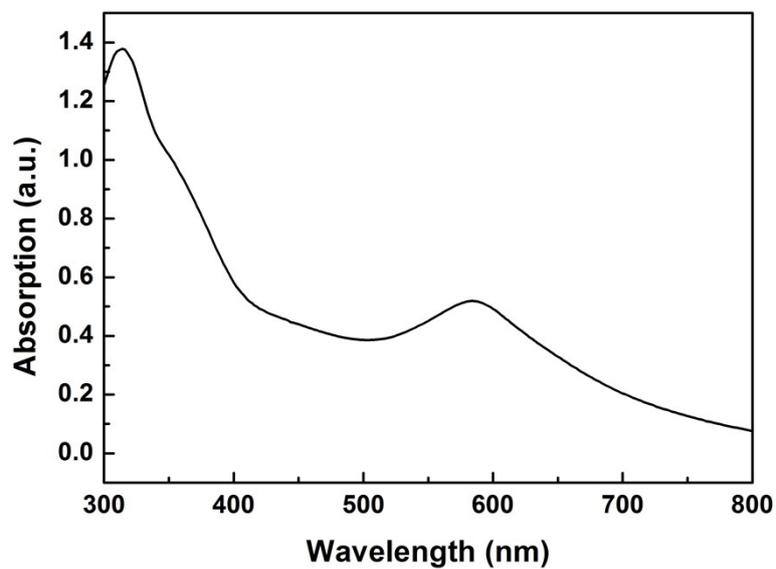


Fig. S7. UV-Vis absorption spectrum of the spherical Au-PANI nanocomposites.