

Temperature Dependent Synthesis of Tryptophan-Functionalized Gold Nanoparticles and their Application in Imaging Human Neuronal Cells

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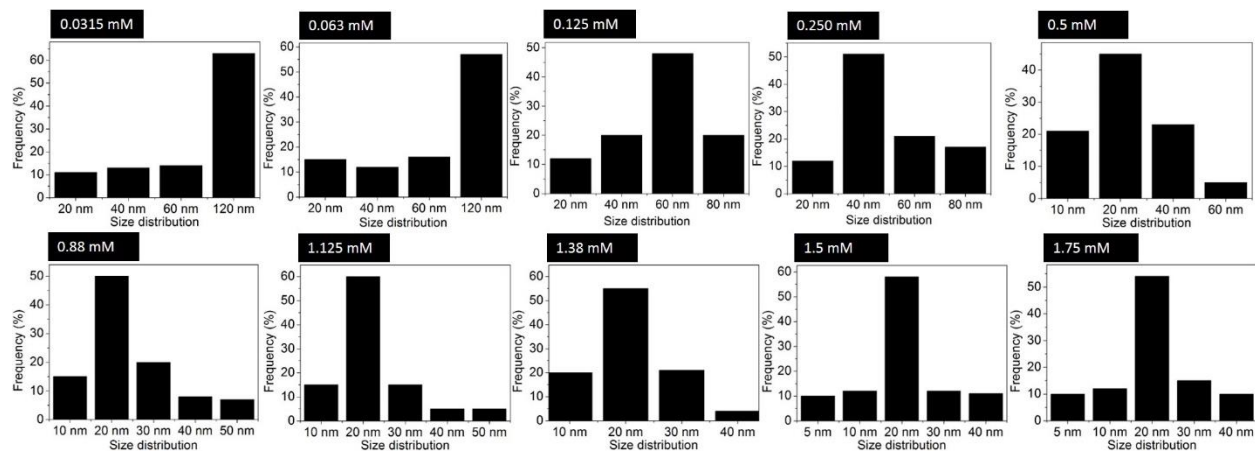


Figure. S1 Size distribution histograms of the corresponding HR-TEM images obtained with increasing concentration of tryptophan at 95 °C.

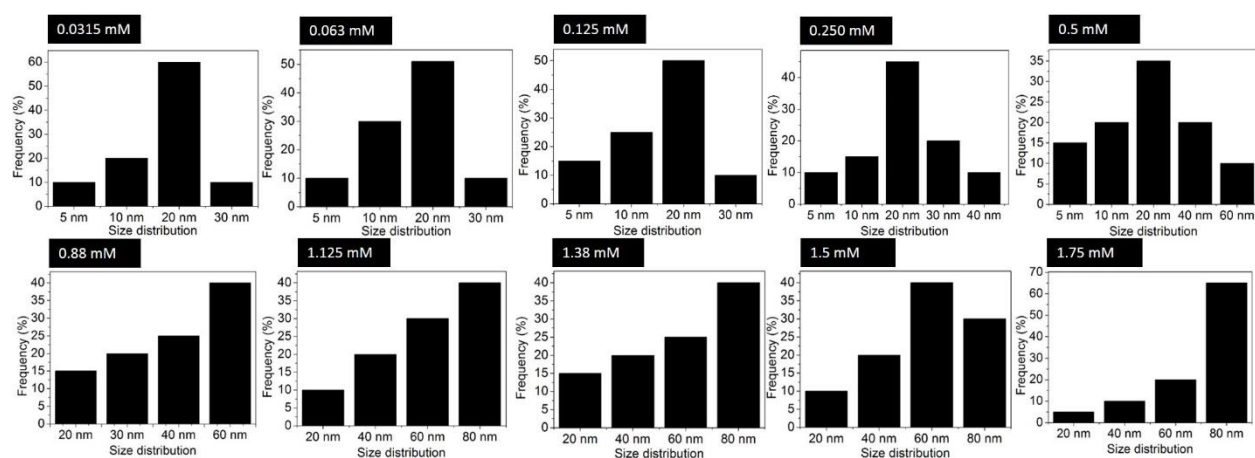


Figure. S2 Size distribution histograms of the corresponding HR-TEM images obtained with increasing concentration of tryptophan at 35 °C.

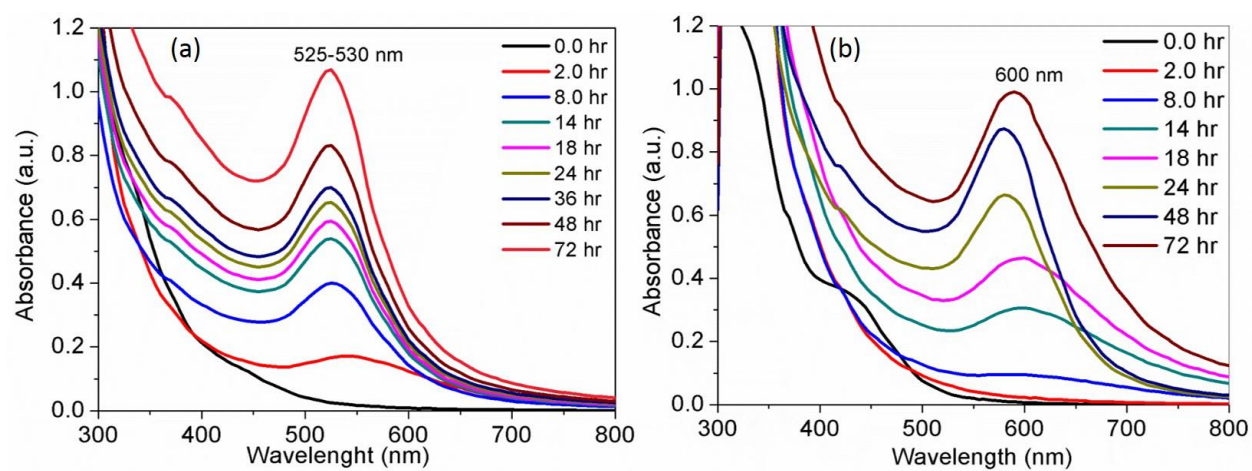


Figure. S3 (a) Temporal evolution of UV-Vis spectrum of the gold nanoparticles with 1.75 mM tryptophan at 95 °C, (b) Temporal evolution of UV-Vis spectrum of the gold nanoparticles with 1.75 mM tryptophan at 35 °C.

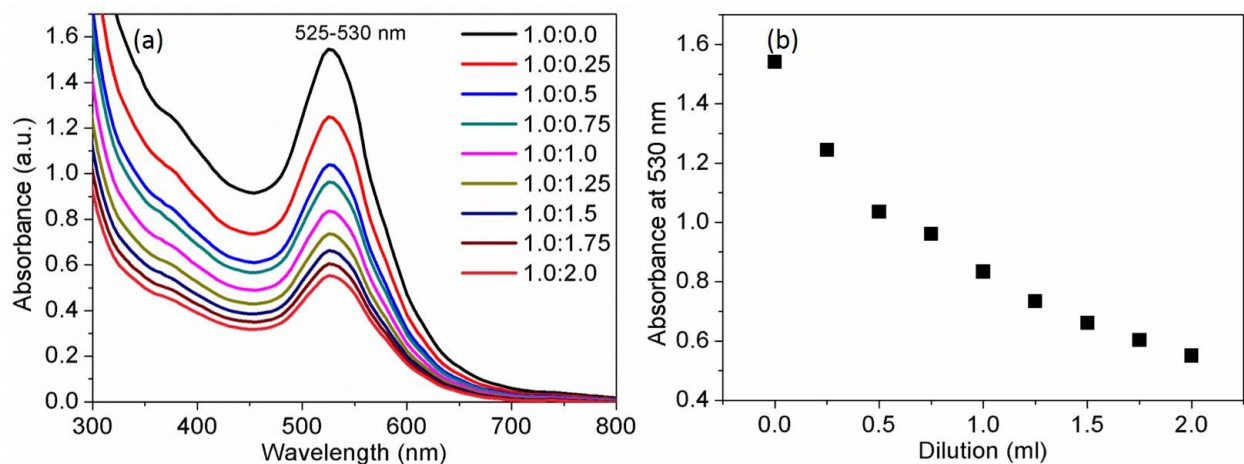


Figure. S4 (a) Changes in UV-Vis spectrum were monitored after every successive addition of 0.25 mL of distilled water to 1 mL of AuNPs solutions, (b) Changes in absorbance were monitored after every successive addition of 0.25 mL of distilled water to 1 mL. (Gold nanoparticles were obtained by using 1.75 mM tryptophan at 95 °C).

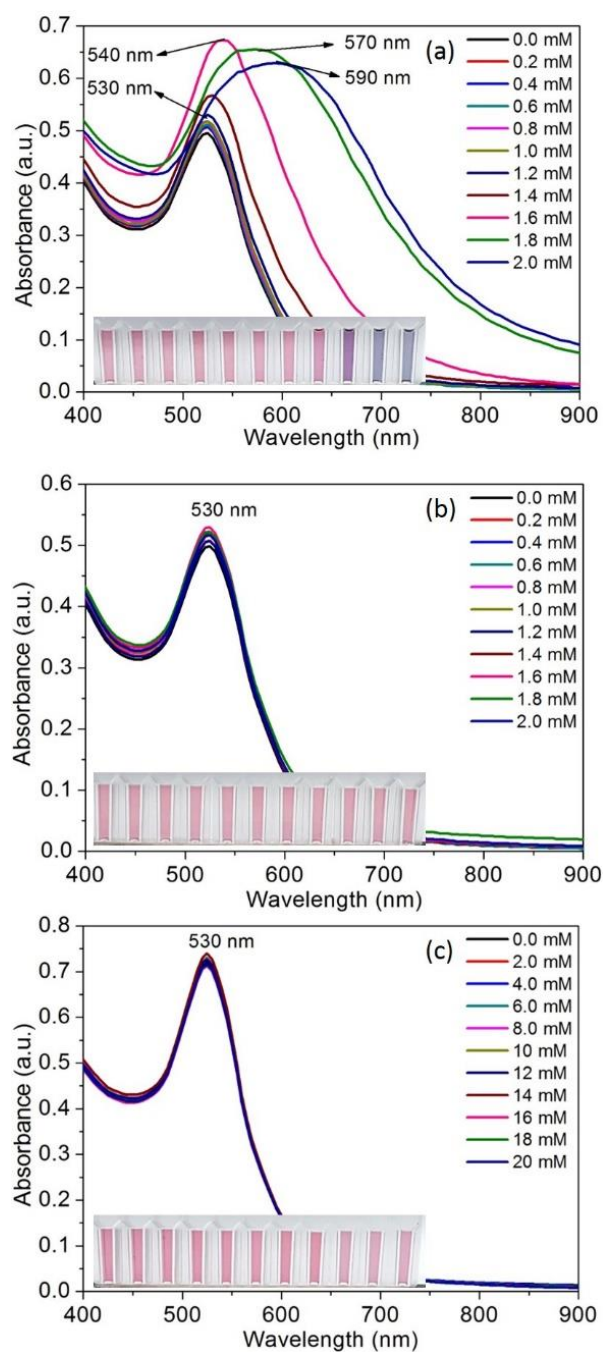


Figure. S5 (a) Effect of diluted HCl on the UV-Vis spectrum of the gold nanoparticles, (b) Effect of diluted NaOH on the UV-Vis spectrum of the gold nanoparticles, (c) Effect of diluted NaCl on the UV-Vis spectrum of the gold nanoparticles.

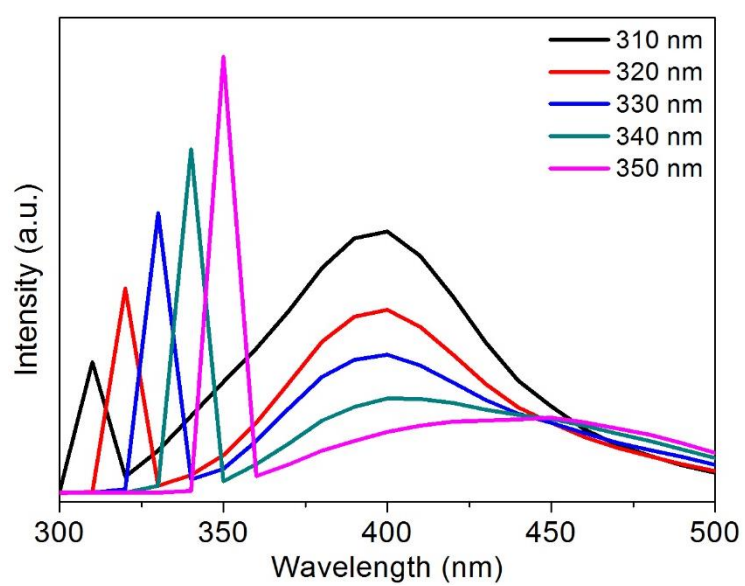


Figure. S6 Emission spectrum of tryptophan functionalized gold nanoparticles after excitation at different wavelengths.