

Supplementary Data

**ONE-TO-ONE LACCASE-GOLD NANOPARTICLE CONJUGATES:
MOLECULAR RECOGNITION AND ACTIVITY ENHANCEMENT**

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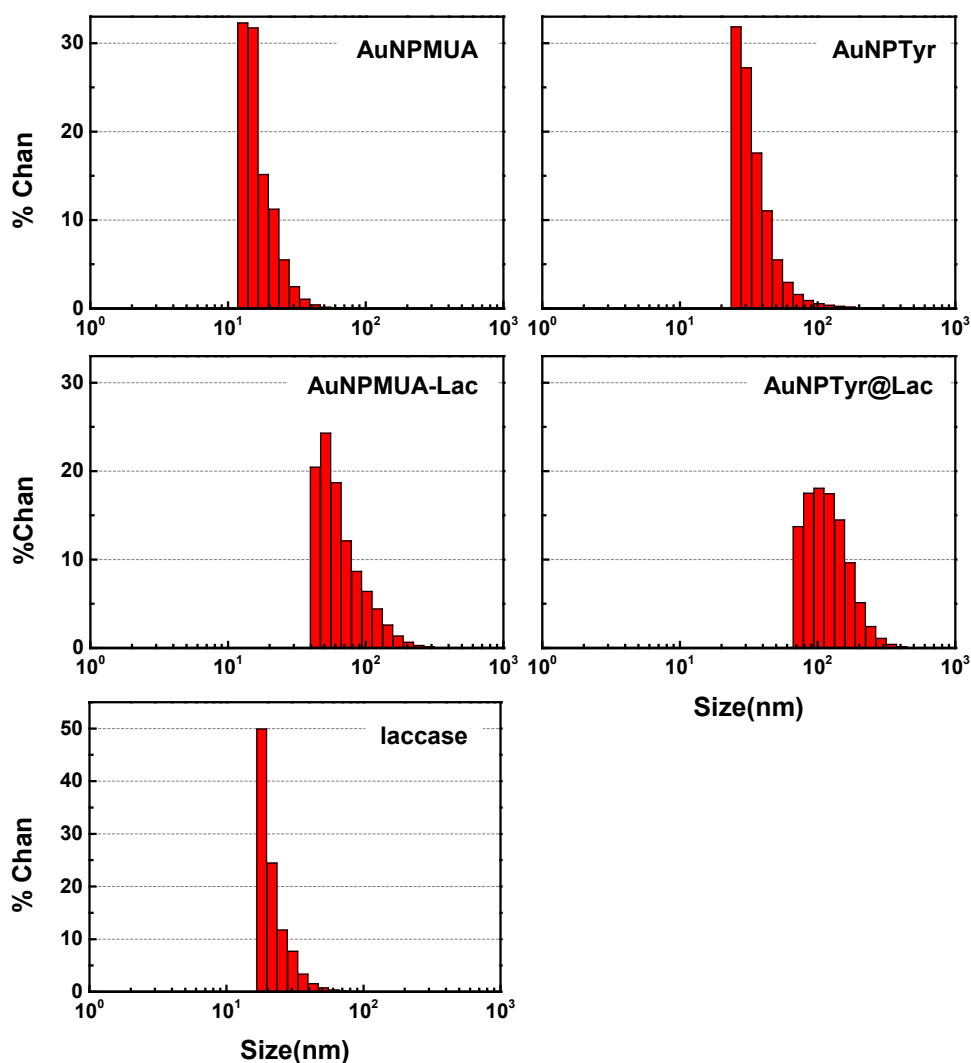


Figure S1. DLS profiles of the different colloids: AuNPMUA (15 (\pm 3) nm); AuNPTyr (18 (\pm 3) nm); AuNPMUA-Lac(60 (\pm 18) nm); AuNPTyr@Lac (110 (\pm 40) nm); laccase (20 (\pm 4) nm).

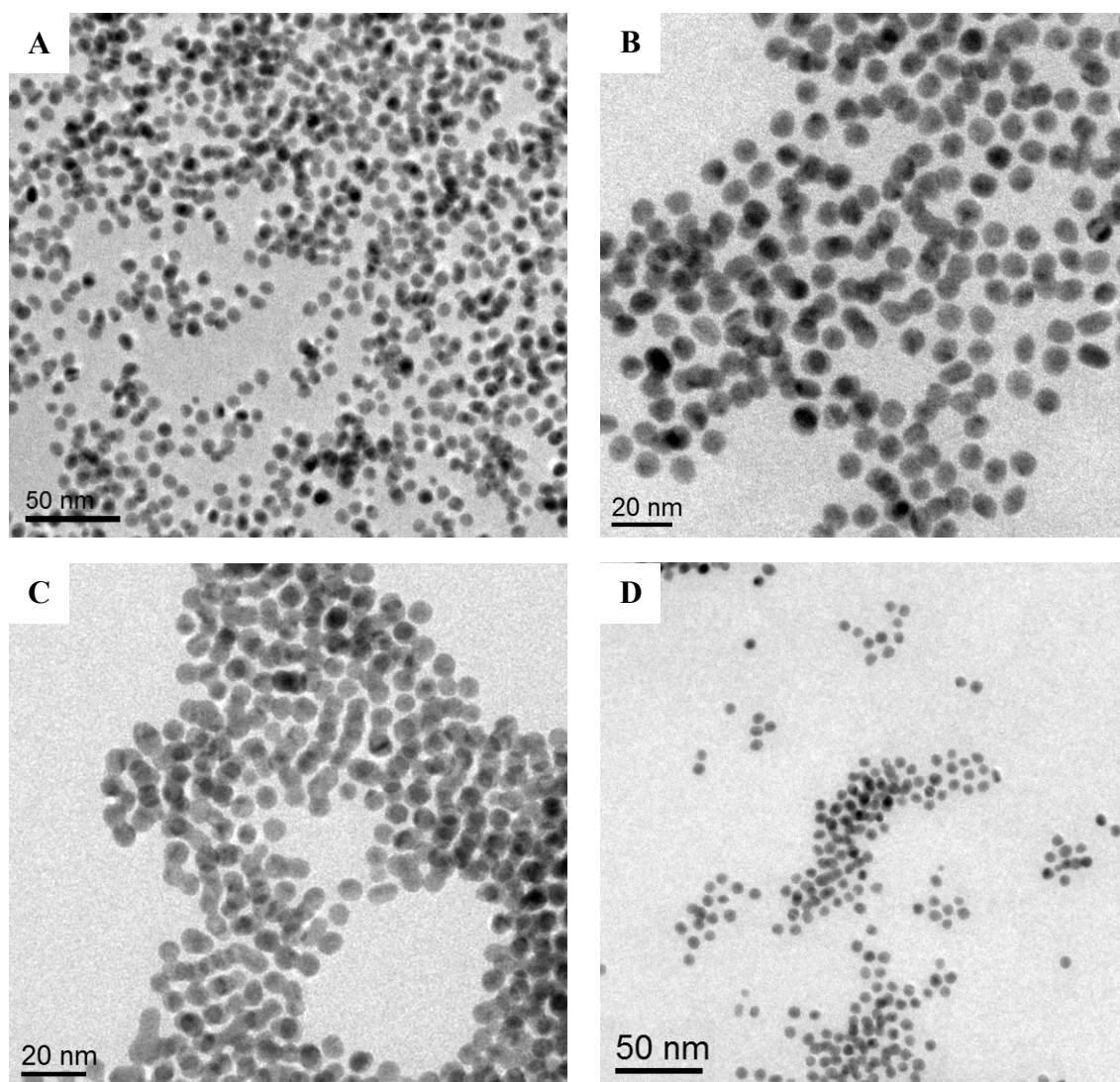


Figure S2. TEM images of the nanoparticles. A) AuNPMUA. B) AuNPTyr. C) AuNPMUA-Lac. D) AuNPTyr@Lac.

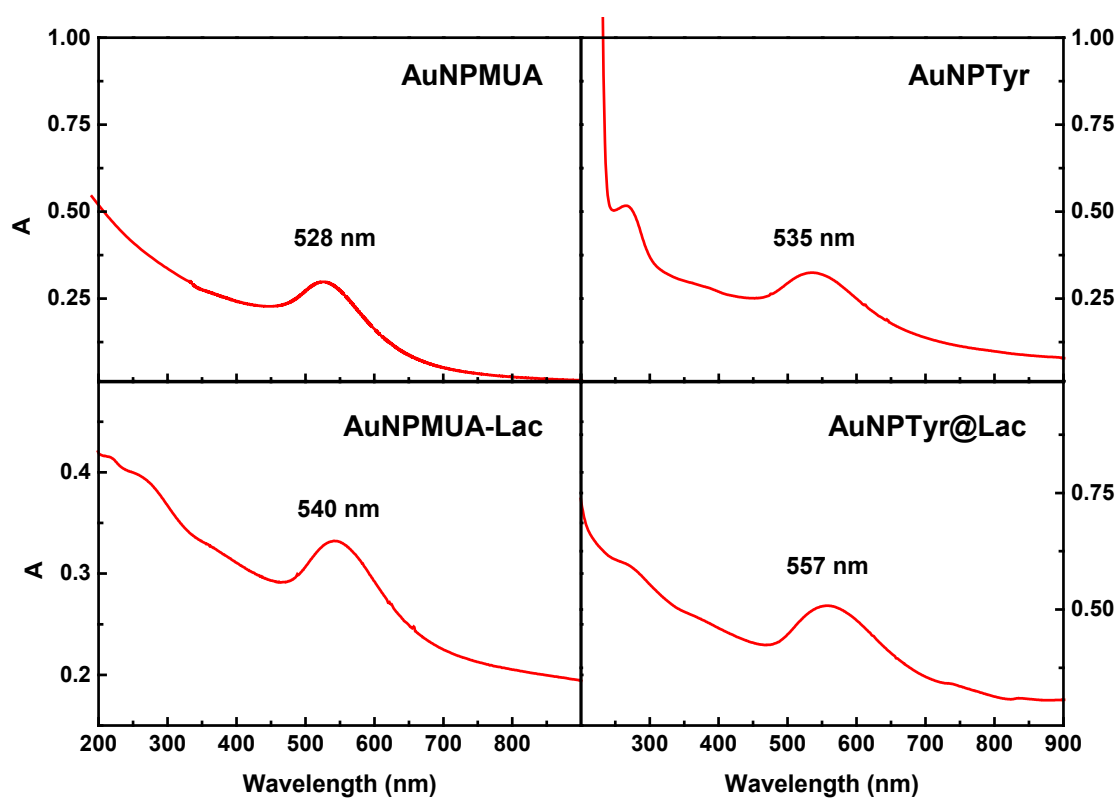


Figure S3. UV-vis spectra of the corresponding nanoparticles.

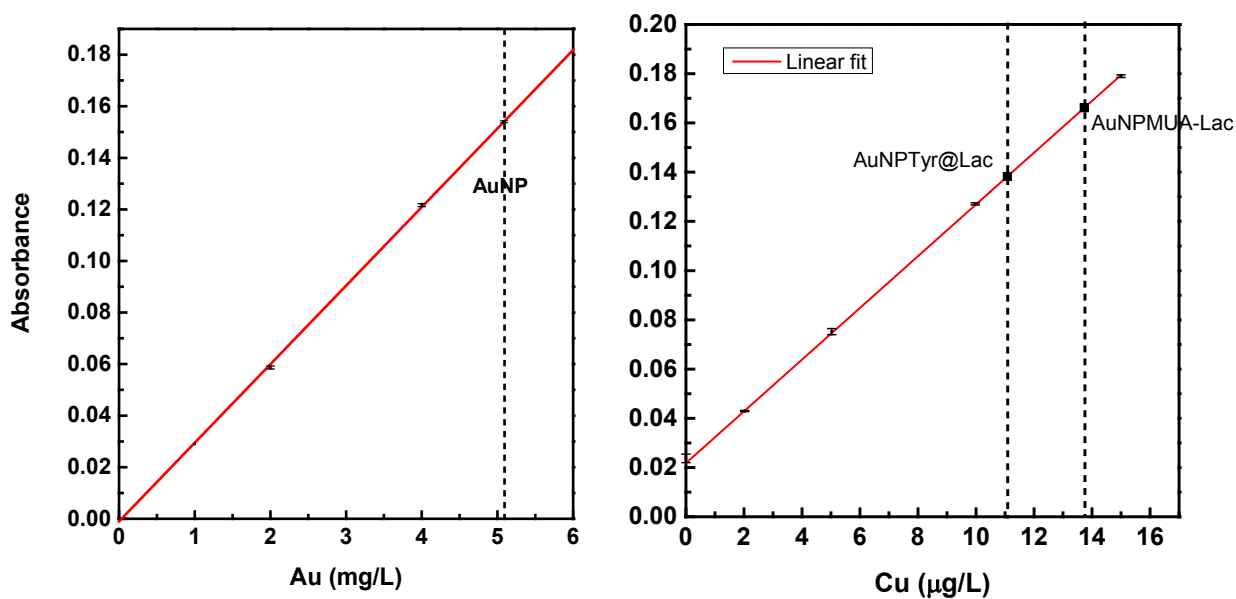


Figure S4. Atomic absorption spectroscopy (AAS) calibration curves. Determination of Au and Cu in 0.01 mg/mL and 0.5 mg/mL dispersions of the colloids, respectively. The sample concentrations were obtained by automatic dilutions of the initial 1 mg/mL solution with the automated sampling system attached to the AAS instrument. All runs were repeated three times.