

[Supporting Information]

Measuring Conductance of Phenylenediamine as A Molecular Sensor

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Linker and electrode dependence of molecular conductance.

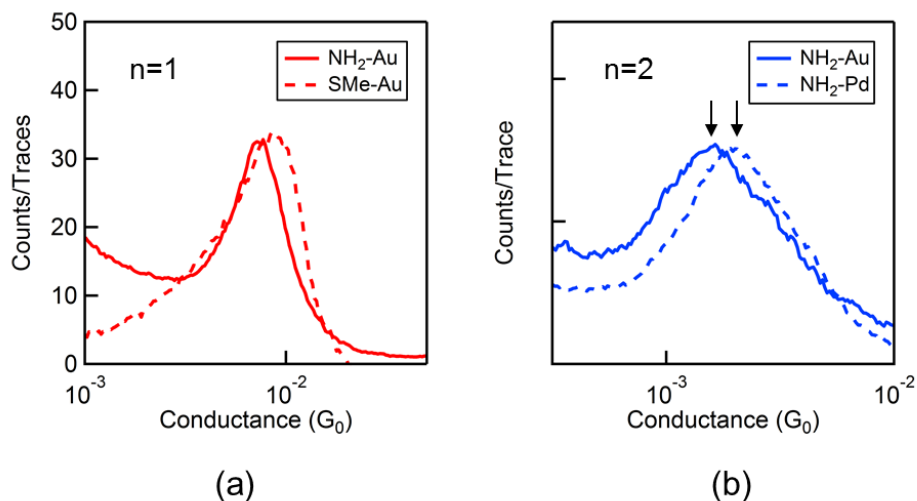


Figure S1. (a) Conductance histograms of amine (NH_2 , red solid curve) and methyl sulfide (SMe, red dashed curve) terminated-benzene ($n=1$) molecular junctions. (b) Conductance histograms of benzidine ($n=2$) molecular junctions formed with Au (blue solid curve) and Pd (blue dashed curve) electrodes. The Pd has higher work function than that of Au, which means that the HOMO level of Pd-molecule junction is closer to the metal Fermi energy level compared to that of Au-molecule junction, resulting in the higher conductance for Pd-molecular junctions as indicated by the arrows.