

Supporting Information:

**The Preparation of Silica Supported, Dilute Limit
PdAu Alloys via**

Simultaneous Strong Electrostatic Adsorption

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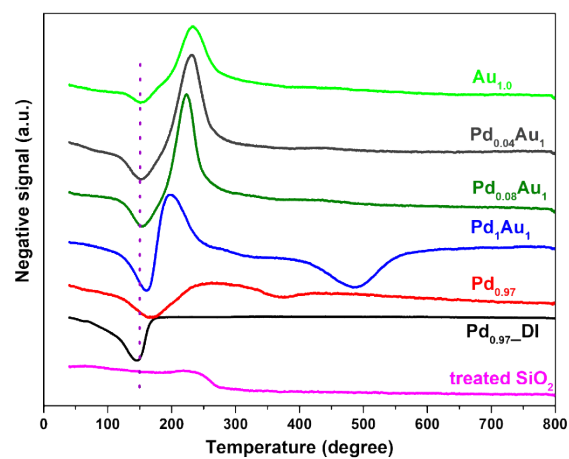


Figure S1. TPR profiles of PdAu DLA catalysts and the support.

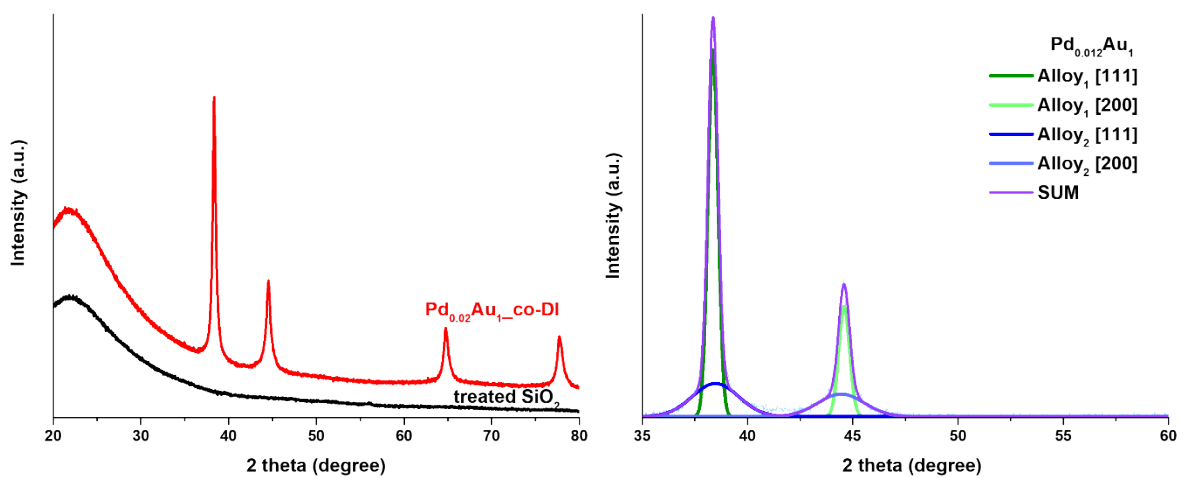


Figure S2. (a) Normalized XRD patterns for silica support and Pd_{0.02}Au₁-co-DI; (b) Deconvolution of support background subtracted X-ray patterns of Pd_{0.02}Au₁-co-DI.

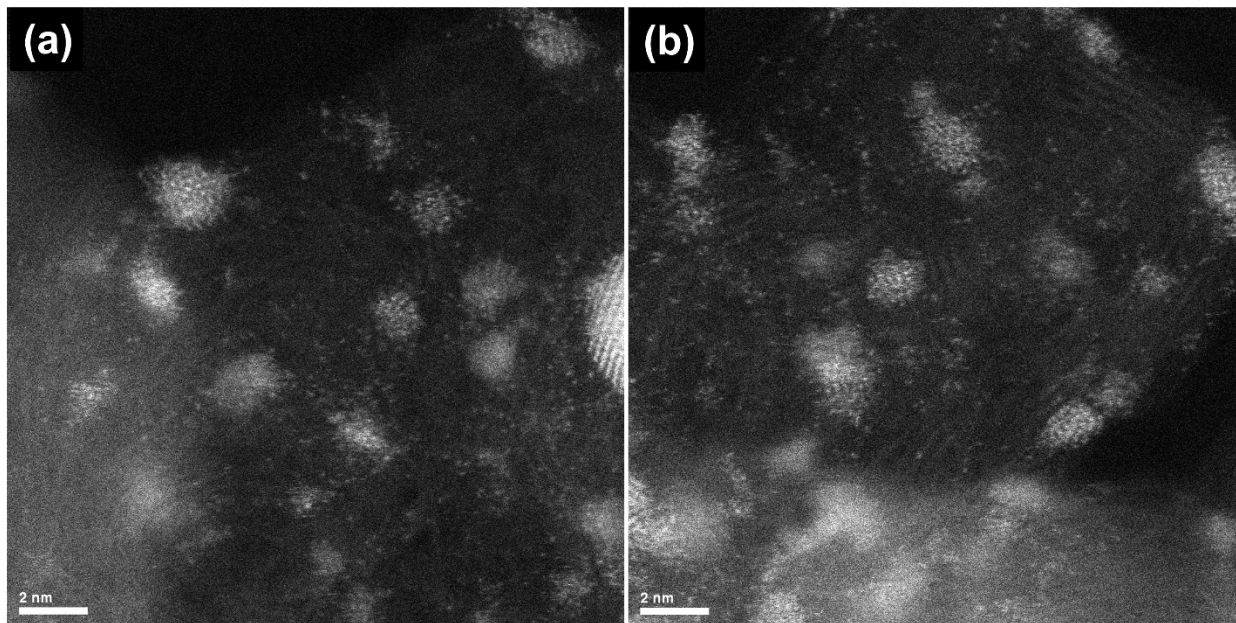


Figure 3. High magnification, high resolution STEM images of Pd₁Au_{0.04} catalyst on carbon showing the speckling of a small number of heavy Au atoms in nanoparticle matrices of Pd.

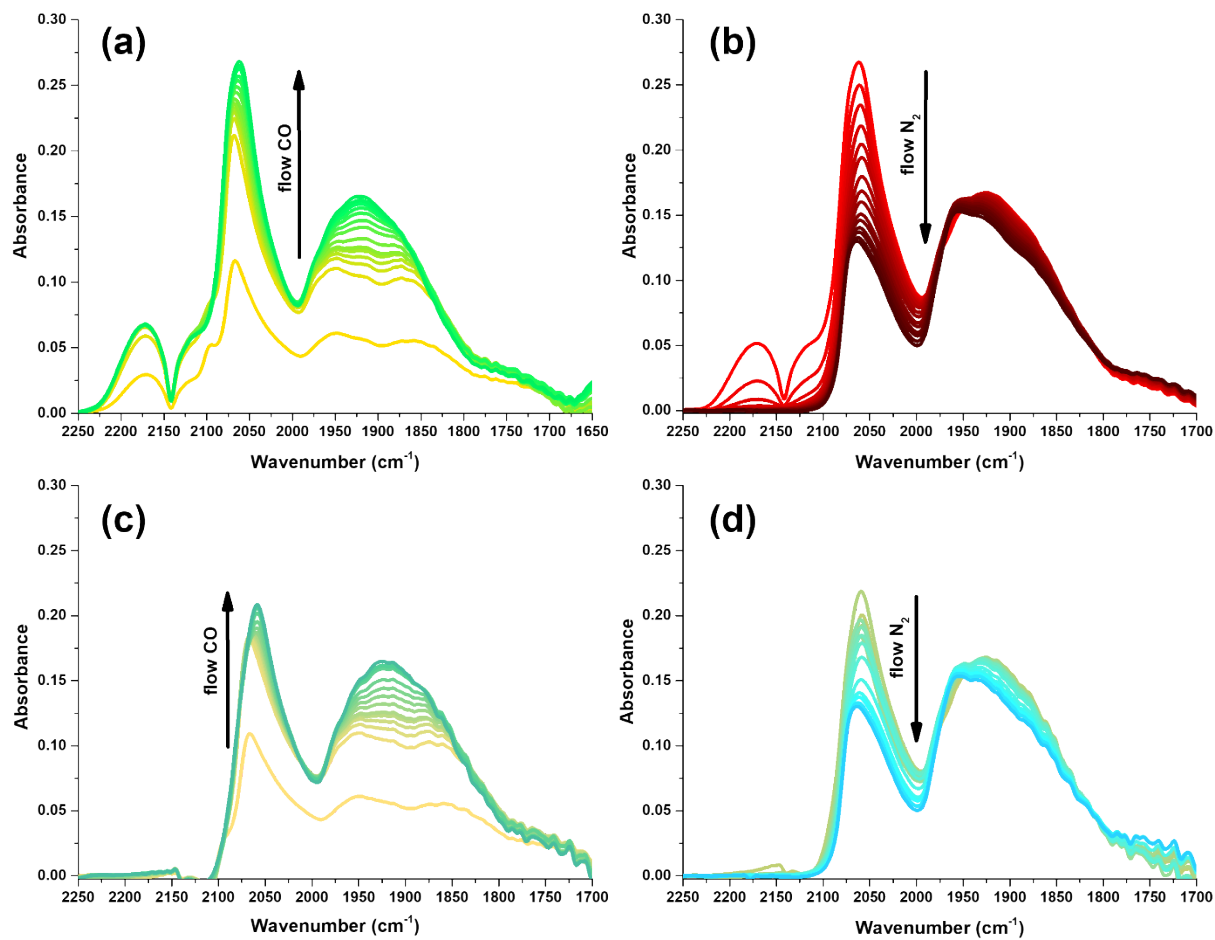


Figure 4. Time-dependent FTIR spectra over Pd_{1.27}Au₁ (a) in 1% CO/Ar and (b) in the subsequent N₂ flow; (c-d) corresponding IR spectra subtracted CO absorbance over Au_{2.2} pretreated and collected in the same condition.