



## Supporting Information

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# **Enhancement of Pt utilization in electrocatalysts using gold nanoparticles**

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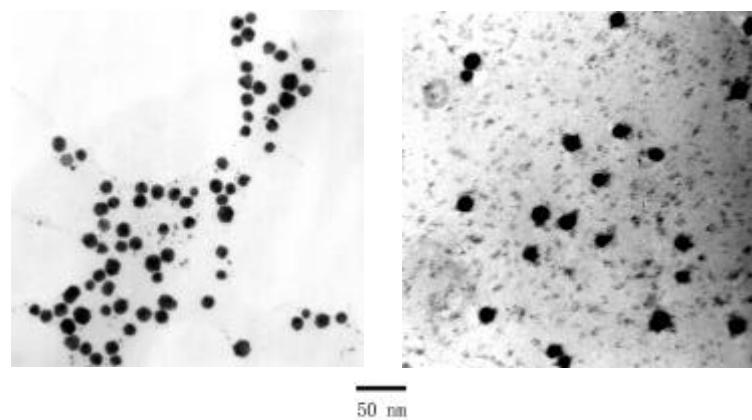
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1. **Table S1:** Surface molar Pt:Au ratios of samples determined by XPS measurements.

<b>Samples</b>	<b>Pt/Au surface ratio</b>	<b>*N<sub>Pt</sub>/nm<sup>2</sup><sub>Au</sub></b>
<b>Pt<sub>2.0</sub><sup>^</sup>Au</b>	-	-
<b>Pt<sub>1.0</sub><sup>^</sup>Au</b>	<b>4.76</b>	<b>62</b>
<b>Pt<sub>0.2</sub><sup>^</sup>Au</b>	<b>0.89</b>	<b>12</b>
<b>Pt<sub>0.05</sub><sup>^</sup>Au</b>	<b>0.22</b>	<b>3</b>

2. **Figure S1.** TEM images of **a)**  $\text{Pt}_{0.5}^{\wedge}\text{Au}$  and **b)**  $\text{Pt}_{2.0}^{\wedge}\text{Au}$ .



3. **Figure S2.** The cyclic voltammetric curves in 0.5 M  $\text{H}_2\text{SO}_4$  at a sweep rate of 20 mV/s at 298 K for **a)** Au/C, **b)**  $\text{Pt}_{0.05}^{\wedge}\text{Au}/\text{C}$ , **c)**  $\text{Pt}_{0.2}^{\wedge}\text{Au}/\text{C}$ , **d)**  $\text{Pt}_{2.0}^{\wedge}\text{Au}/\text{C}$  and **e)** Pt/C.

