Supporting Information

**Cu$^{2+}$ Under-Potential-Deposition Assisted Synthesis of Au and Au-Pd Alloy Nanocrystals with Systematic Shape Evolution**

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**Figure S1** (a) XRD patterns of the as-prepared three types Au NCs, (b-d) EDS of trisoctahedral Au NCs, cubic Au NCs and octahedral/triangular plate-like Au NCs, respectively.

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Figure S2 SEM and TEM images of the product from the reaction with the same condition used in the synthesis of HOH Au-Pd alloy but in the absence of Cu(CH$_3$COO)$_2$.
Figure S3 The cross-sectional compositional line-scanning profile of the HOH and cubic Au-Pd alloy NCs, respectively.