Supporting information

High power abiotic direct glucose fuel cell using gold-platinum bimetallic anode catalyst

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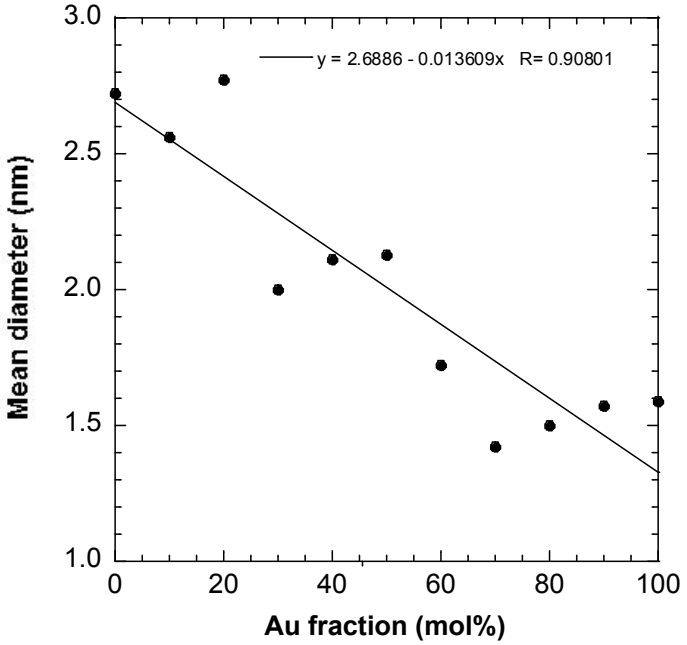


Figure S1. Variation of mean diameter of Au-Pt bimetallic nanoparticles as a function of the composition.

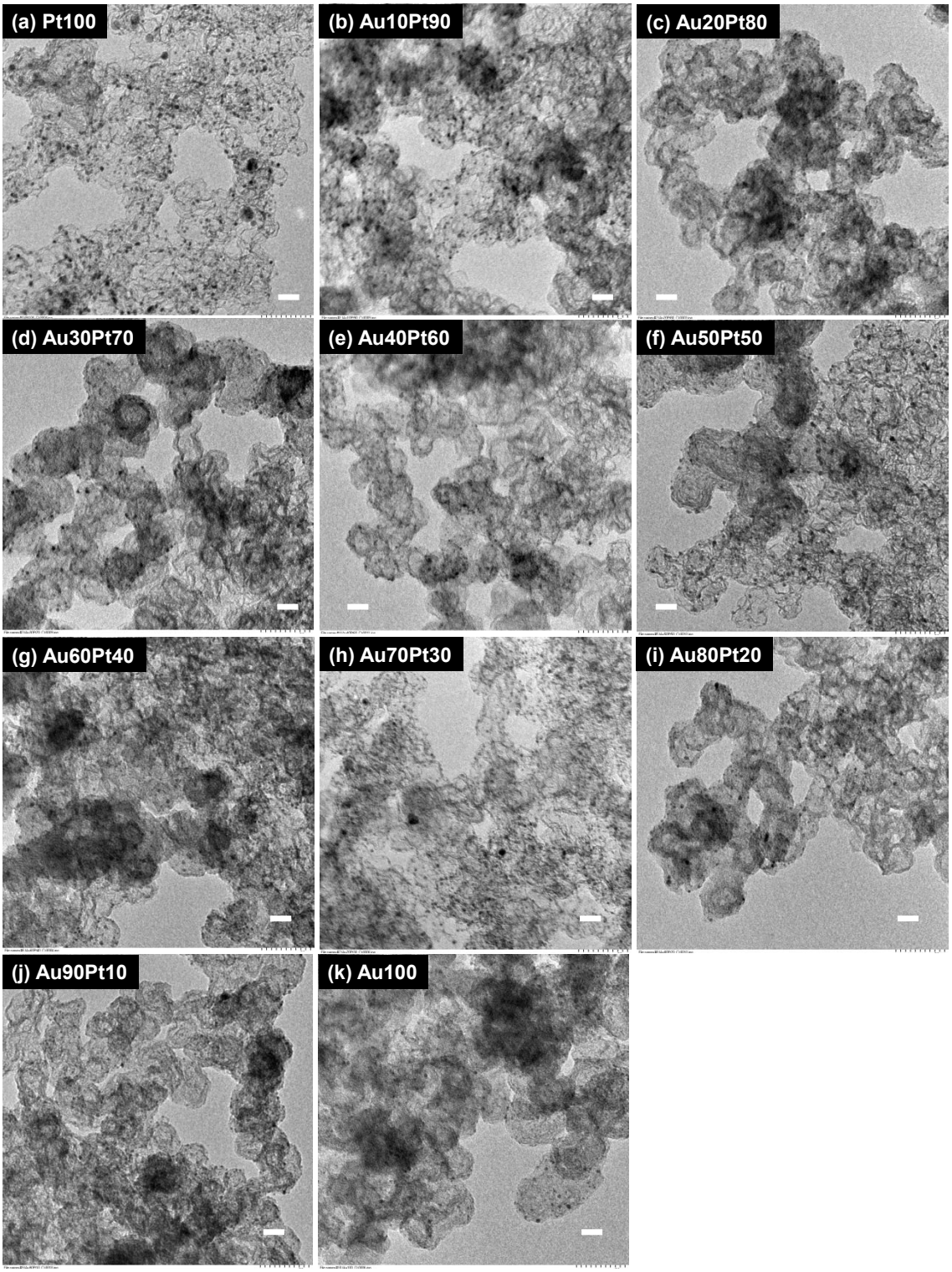
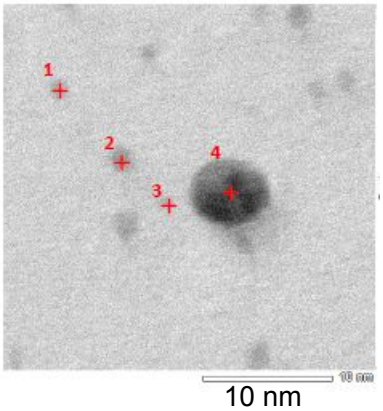


Figure S2. TEM images of Au-Pt bimetallic nanoparticle catalysts on carbon (KB600) support. (a) Pt_{100}, (b) $Au_{10}Pt_{90}$, (c) $Au_{20}Pt_{80}$, (d) $Au_{30}Pt_{70}$, (e) $Au_{40}Pt_{60}$, (f) $Au_{50}Pt_{50}$, (g) $Au_{60}Pt_{40}$, (h) $Au_{70}Pt_{30}$, (i) $Au_{80}Pt_{20}$, (j) $Au_{90}Pt_{10}$, (k) Au_{100} (in molar ratio). Metal loading = 5 wt%. Scale bar = 20 nm.



Particle No.	Diameter (nm)	Au (atomic %)	Pt (atomic %)
1	1.45	78.9	21.1
2	1.61	62.8	37.2
3	1.13	84.4	15.7
4	6.13	79.4	20.6

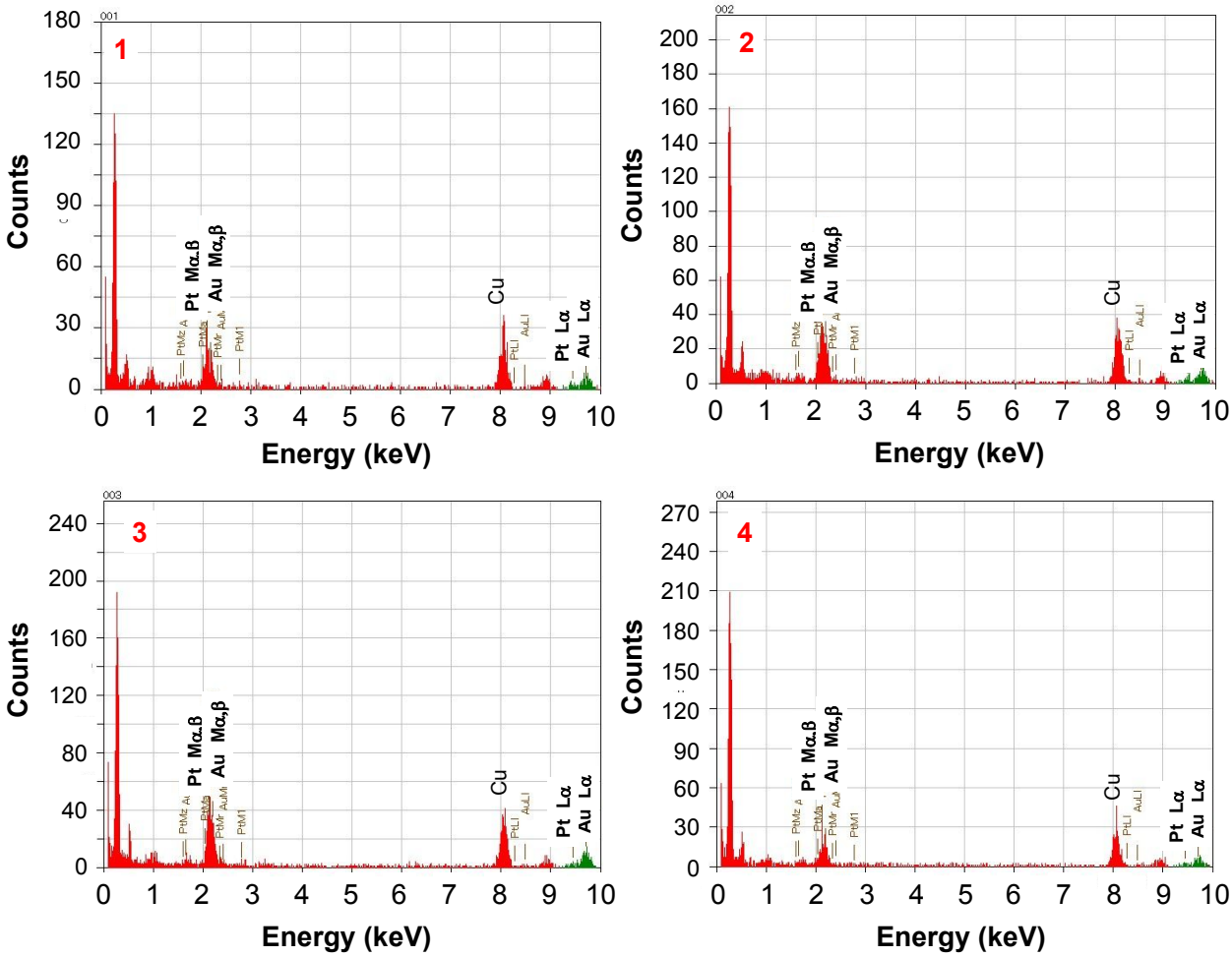


Figure S3. EDS point analysis data for four Au-Pt bimetallic nanoparticles with different sizes.

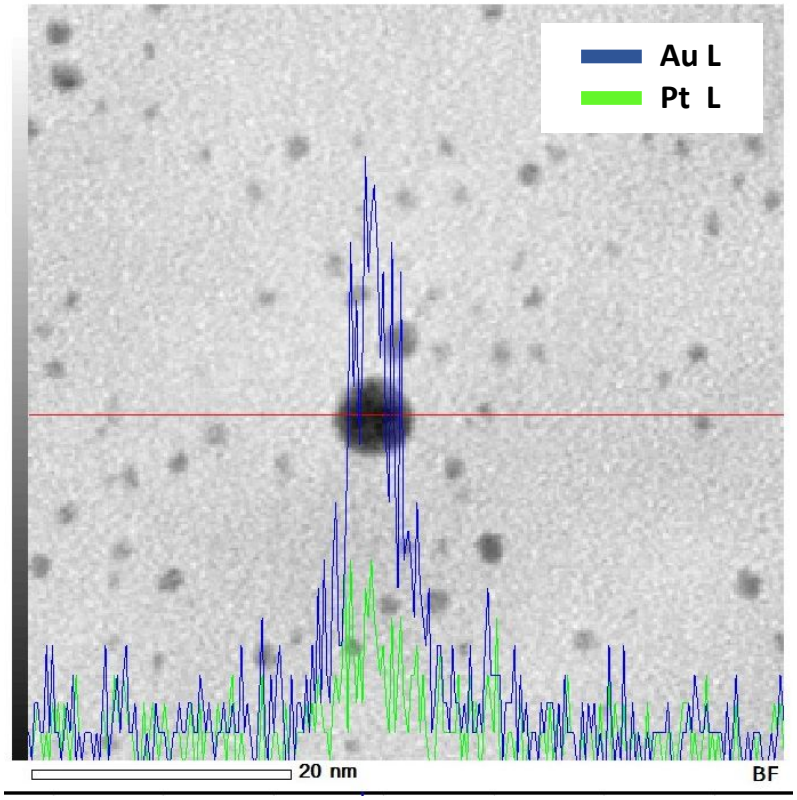


Figure S4. EDS line analysis data of a $Au_{80}Pt_{20}$ nanoparticle.