

Special Magnetic Catalyst with Lignin-Reduced Au-Pd Nanoalloy

Supporting Information

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Supporting information

Figure S1 FT-IR spectra of (a) original lignin, (b) lignin-Au_{2.0}Pd_{1.0} composites, (c) lignin-Au_{1.0}Pd_{1.0} composites, and (d) lignin-Au_{0.5}Pd_{1.0} composites. The results reveal that O–H and C=O units within the lignin structure may contribute to the reduction of metal salt to nanoalloy.

Figure S2 Time-dependent UV-vis spectra of the reduction of 4-NP by NaBH₄ in the presence of single-component (a) AuNPs and (b) PdNPs.

Figure S3 Size distribution of (a) Au_{0.5}Pd_{1.0}, (b) Au_{1.0}Pd_{1.0} and (c) Au_{2.0}Pd_{1.0}.

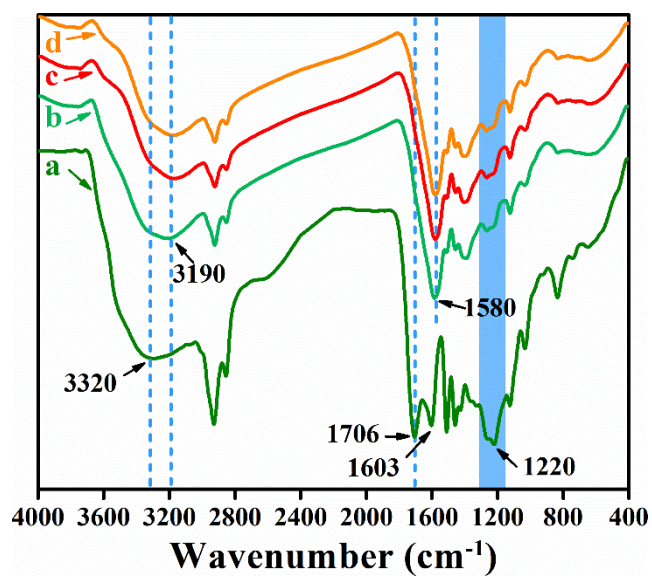


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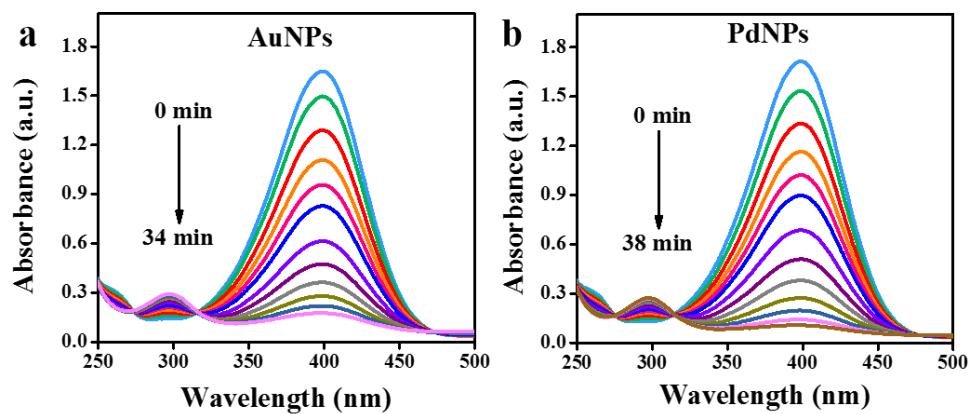


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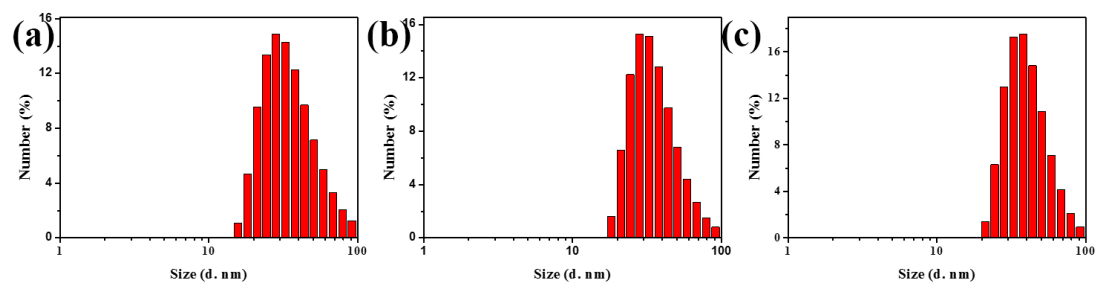


Figure S3 Size distribution of (a) $\text{Au}_{0.5}\text{Pd}_{1.0}$, (b) $\text{Au}_{1.0}\text{Pd}_{1.0}$ and (c) $\text{Au}_{2.0}\text{Pd}_{1.0}$.