

electronic supplementary information

Facile synthesis of C30-AuNPs for the effective catalytic

reduction of nitrophenols and azo dyes

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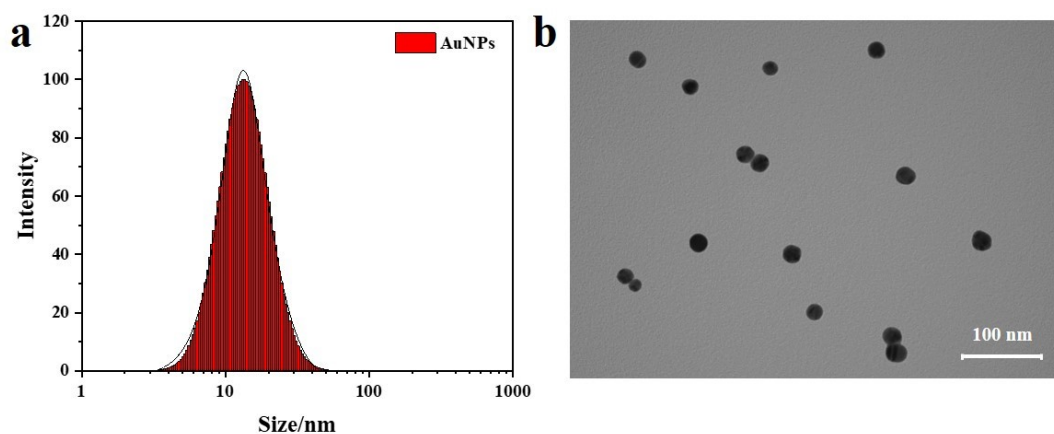


Fig. S1. DLS diagram and TEM image of AuNPs.

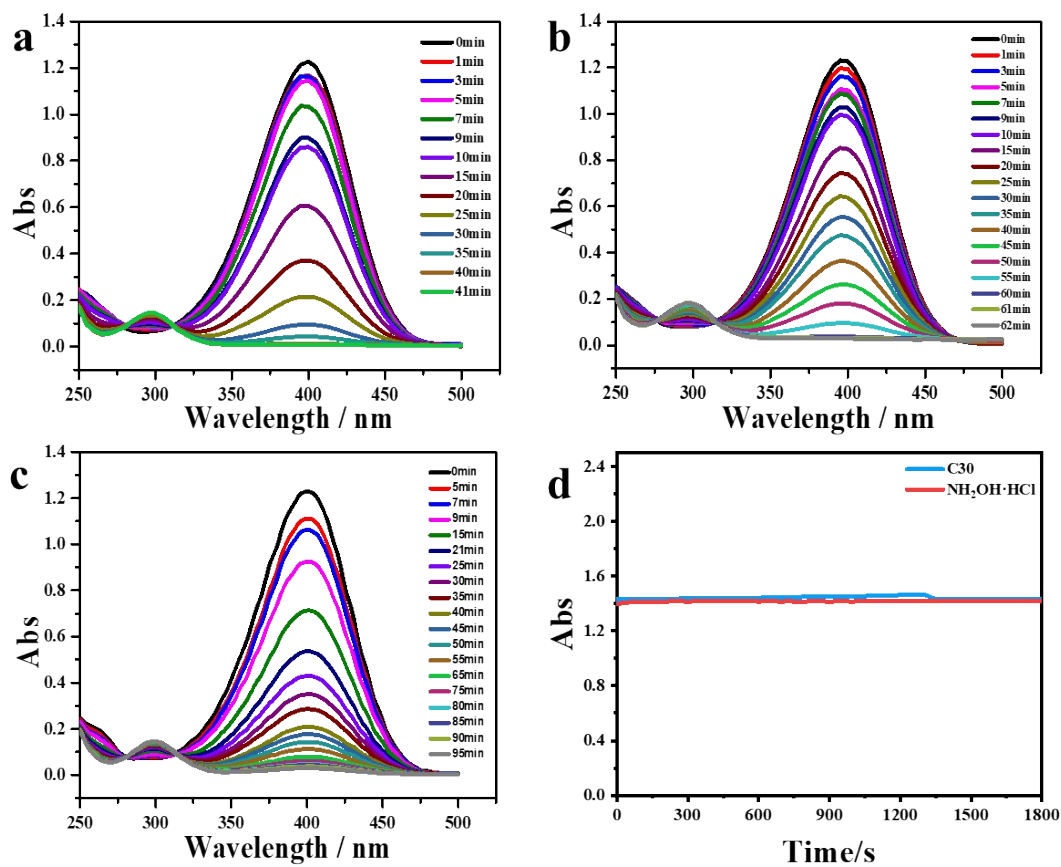


Fig. S2. UV-Vis spectra of the catalytic reduction of 4-NP by (a) AuNPs, (b) A30-AuNPs and (c) C30-AuNPs. (d) The effect of DNA and $\text{NH}_2\text{OH}\cdot\text{HCl}$ for 4-NP reduction.

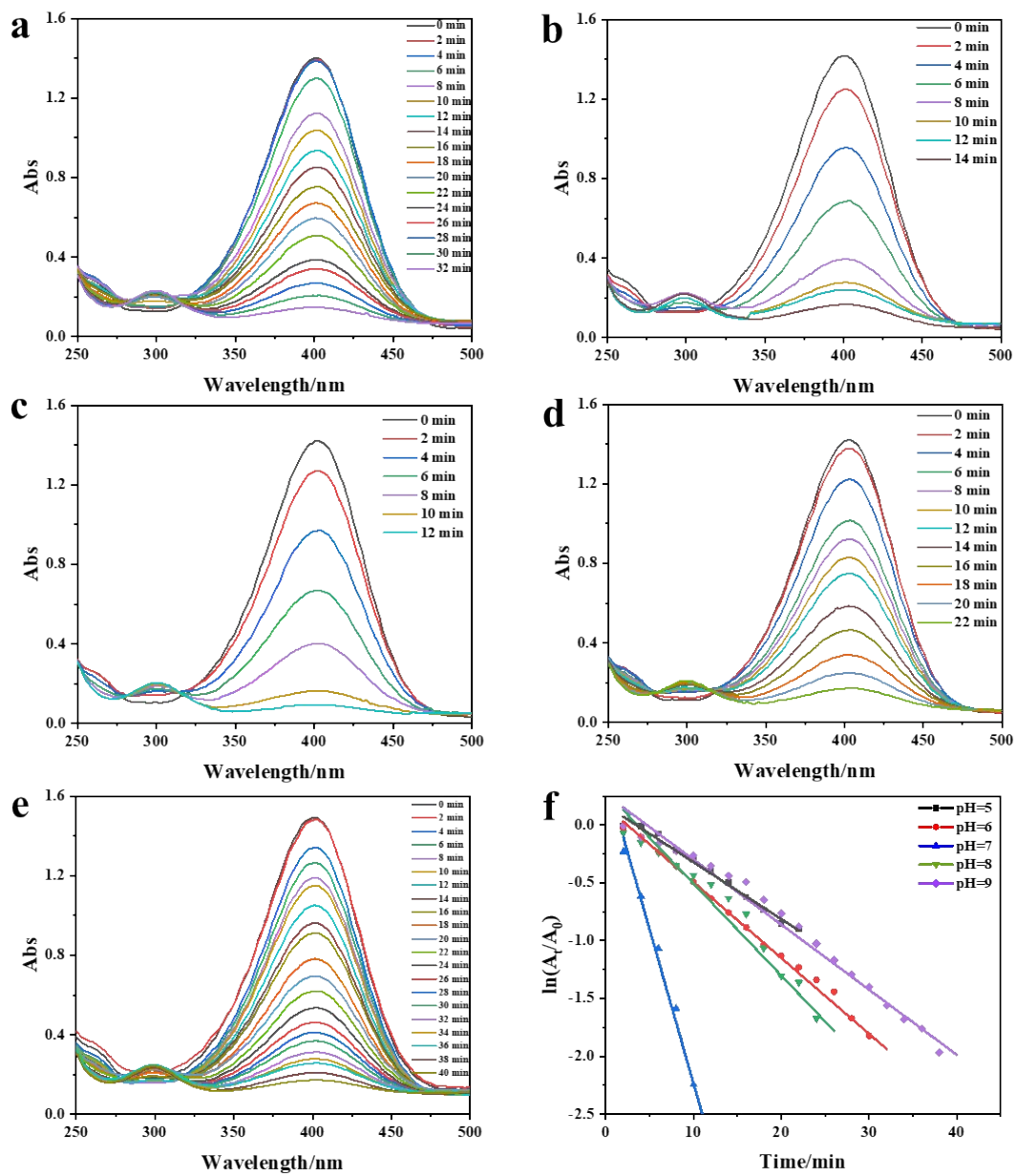


Fig. S3. UV-Vis spectra of the catalytic reduction of 4-NP by C30-AuNP at (a) pH=5, (b) pH=6, (c) pH=7, (d) pH=8, (e) pH=9. (f) $\ln(A_t/A_0)$ vs. reaction time at different pH values.

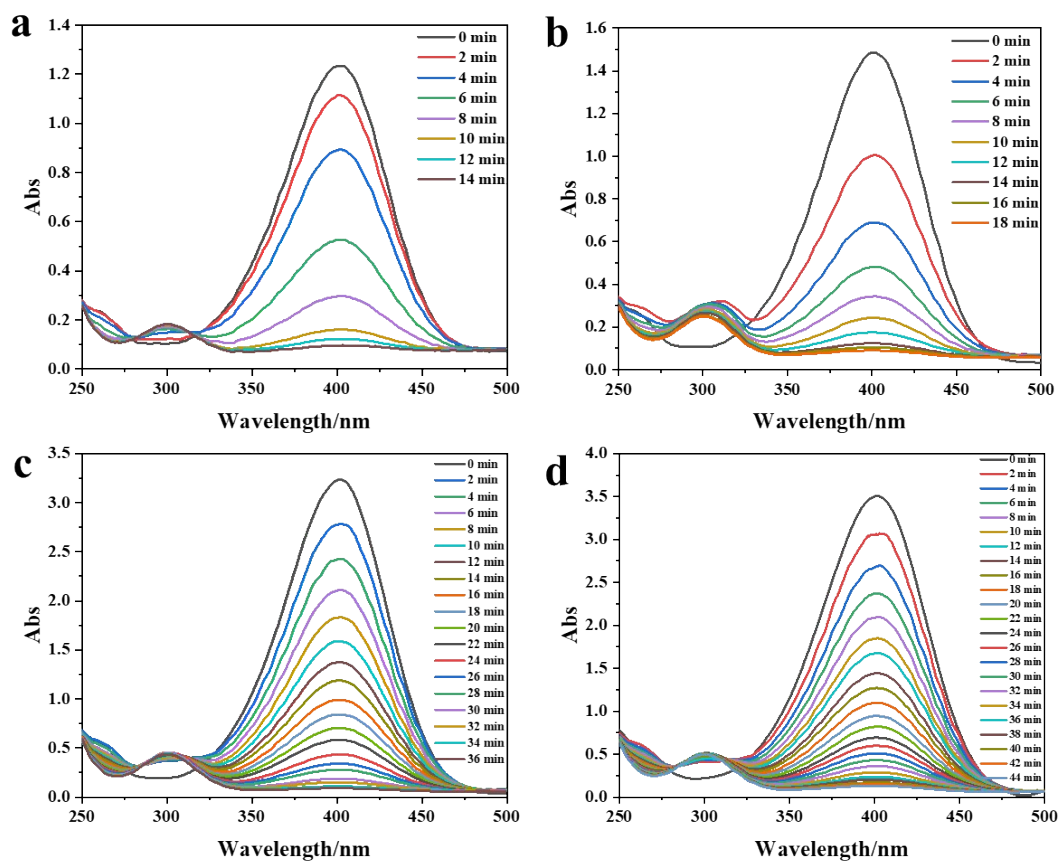


Fig. S4. Diagram of the effect of different concentrations of (a) 4-NP (0.1 mM), (b) 4-NP (0.15 mM), (c) 4-NP (0.2 mM), (d) 4-NP (0.25 mM) on the reaction.

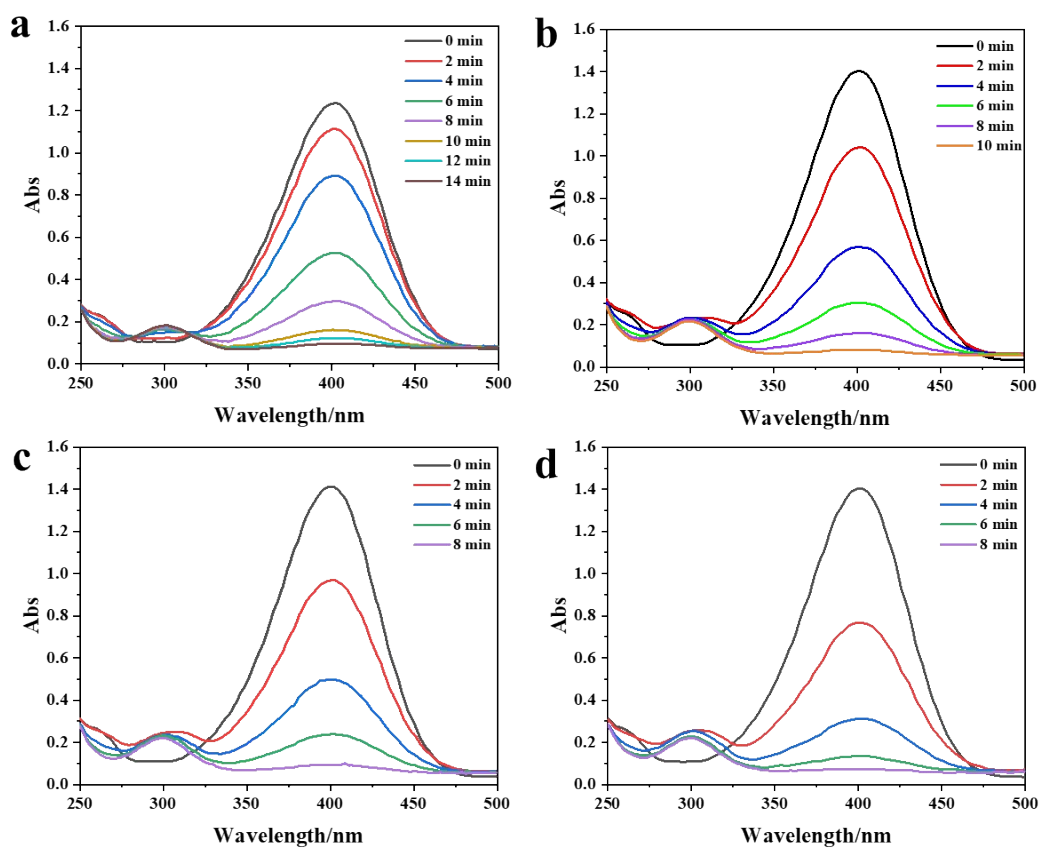


Fig. S5. Diagram of the effect of different concentrations of (a) NaBH_4 (0.1 M), (b) NaBH_4 (0.15 M), (c) NaBH_4 (0.2 M), (d) NaBH_4 (0.25 M) on the reaction.