

Synthesis of CuO and Cu₂O nano/microparticles from single precursor: Effect of temperature on CuO/Cu₂O formation and morphology dependent nitroarenes reduction

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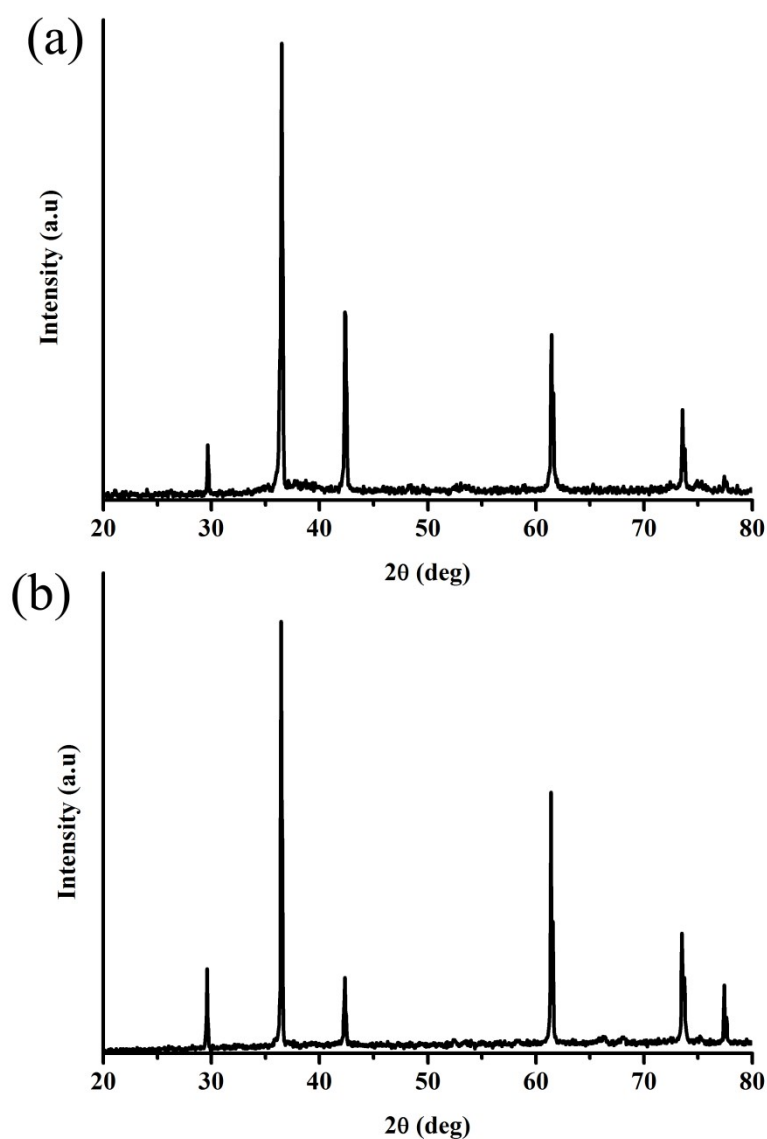


Fig. S1. PXRD pattern of Cu₂O nano/microparticles obtained by hydrothermal heating of Cu(NO₃)₂ with (a) acetic acid and (b) formic acid at 175 °C.

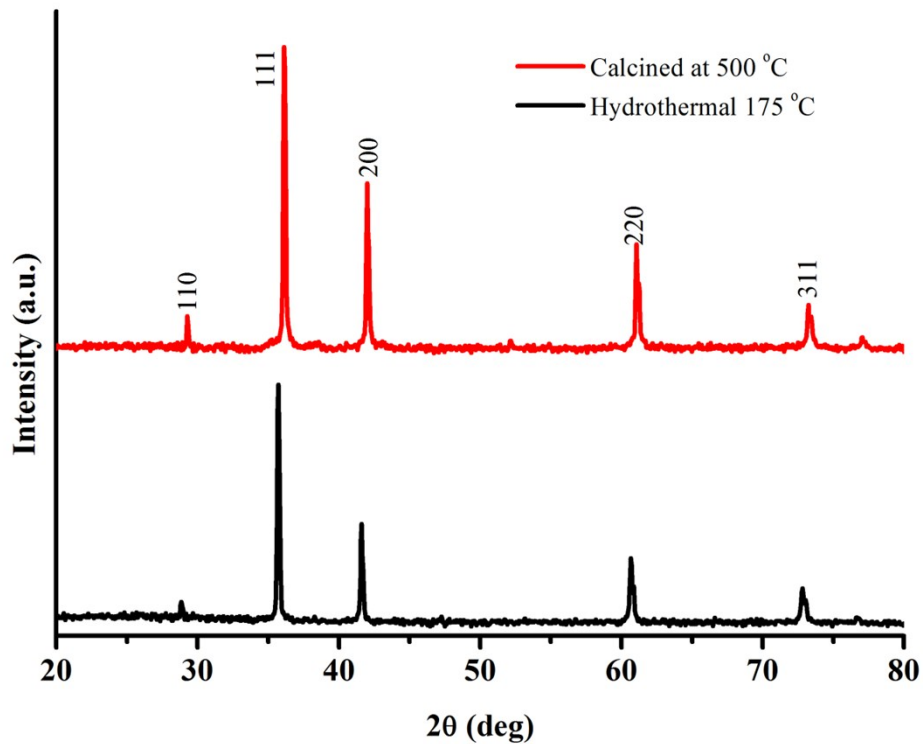


Fig. S2. PXRD pattern of hydrothermally synthesized Cu₂O nano/microparticles and same materials calcined at 500 °C.

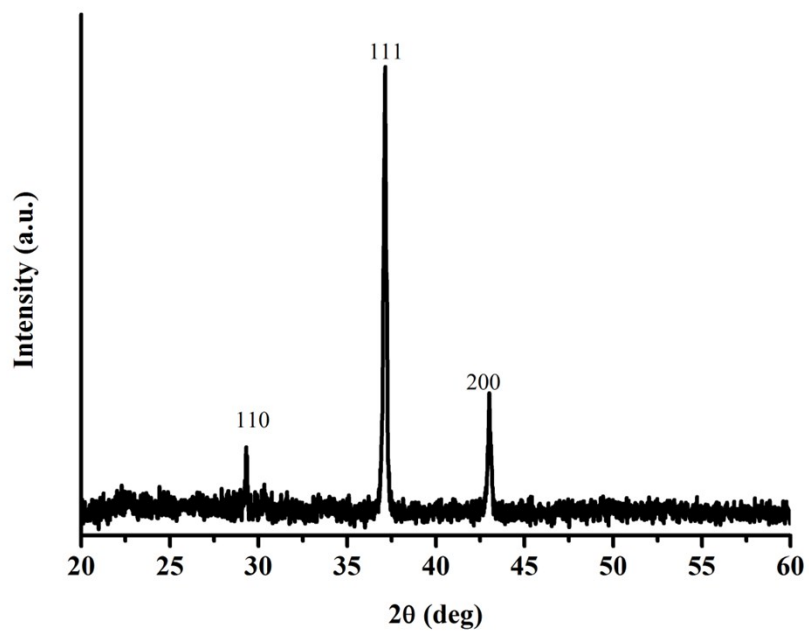


Fig. S3. PXRD pattern of hydrothermally treated CuO-1 nano/microparticles in presence of acetic acid at 175 °C.

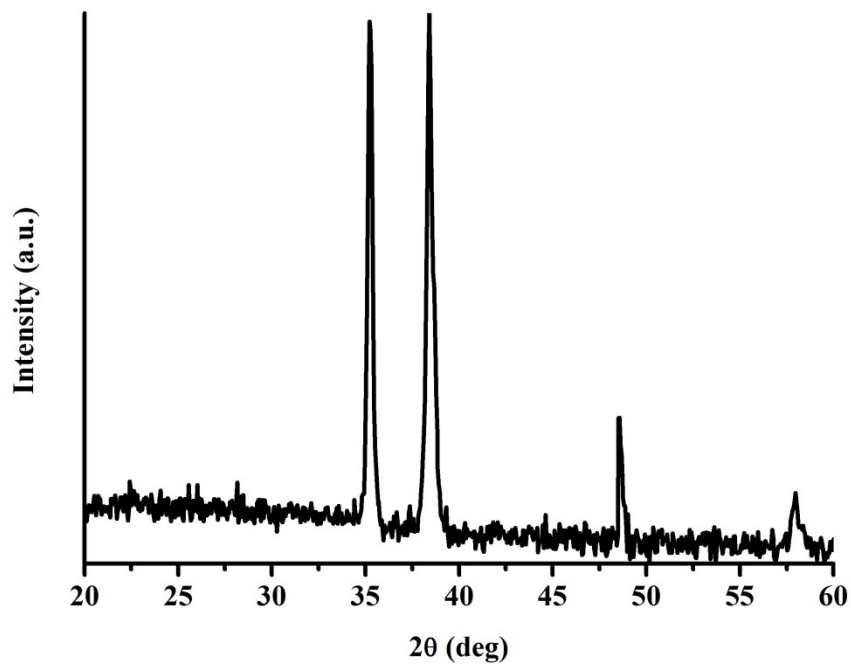


Fig. S4. PXRD pattern of hydrothermally synthesized CuO nano/microparticles from $\text{Cu}(\text{OAc})_2$ precursor at 125 °C and same materials calcined at 500 °C.

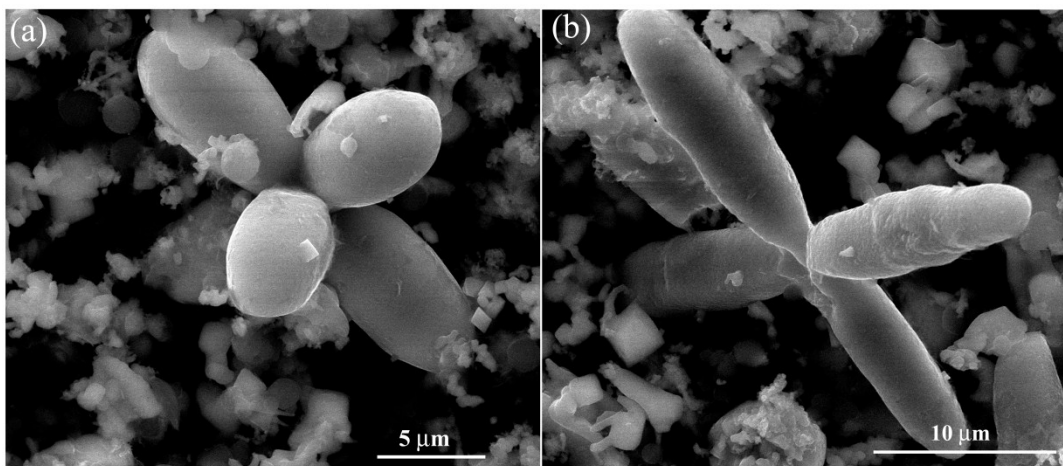


Fig. S5. FE-SEM images of Cu_2O nano/microparticles synthesized from $\text{Cu}(\text{acac})_2$ precursor in hydrothermal method.

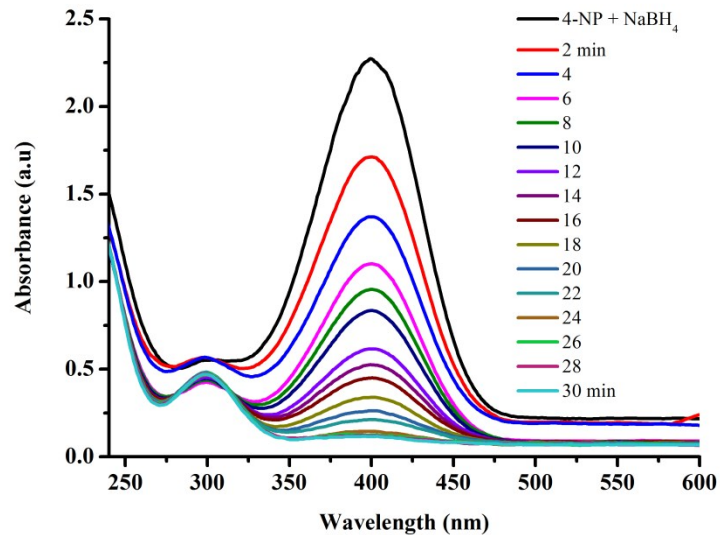


Fig. S6. Monitoring the conversion of 4-NP to 4-AP by CuO nano/microparticles synthesized hydrothermally at 125 °C from Cu(OAc)₂ precursor.

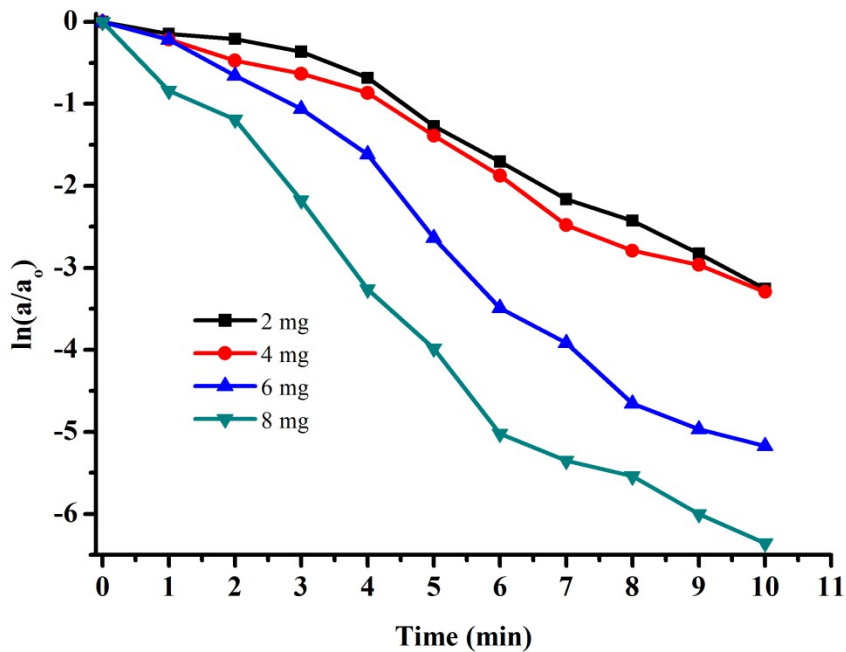


Fig. S7. Effect of CuO nano/microparticles concentration on the nitro group reduction rate of 4-NP.

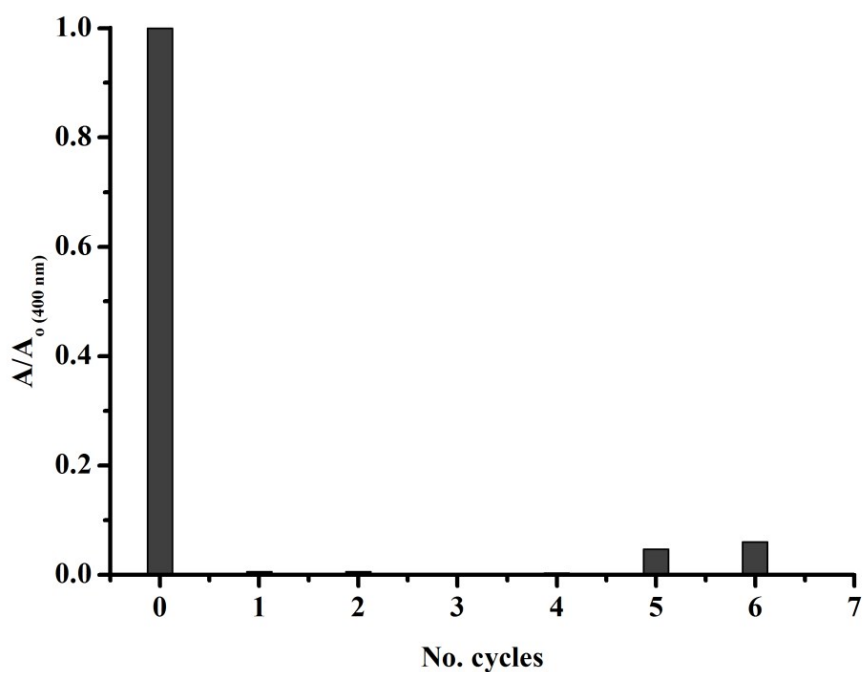


Fig. S8. Reusability of CuO nano/microparticles for nitro group reduction of 4-NP.

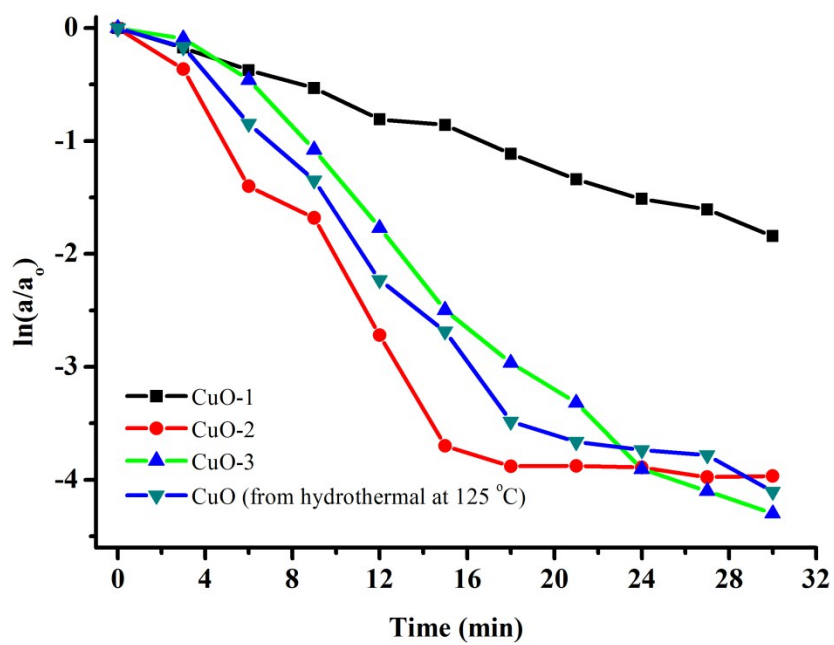


Fig. S9. Comparing the reduction of 2-NA by different CuO nano/microparticles.

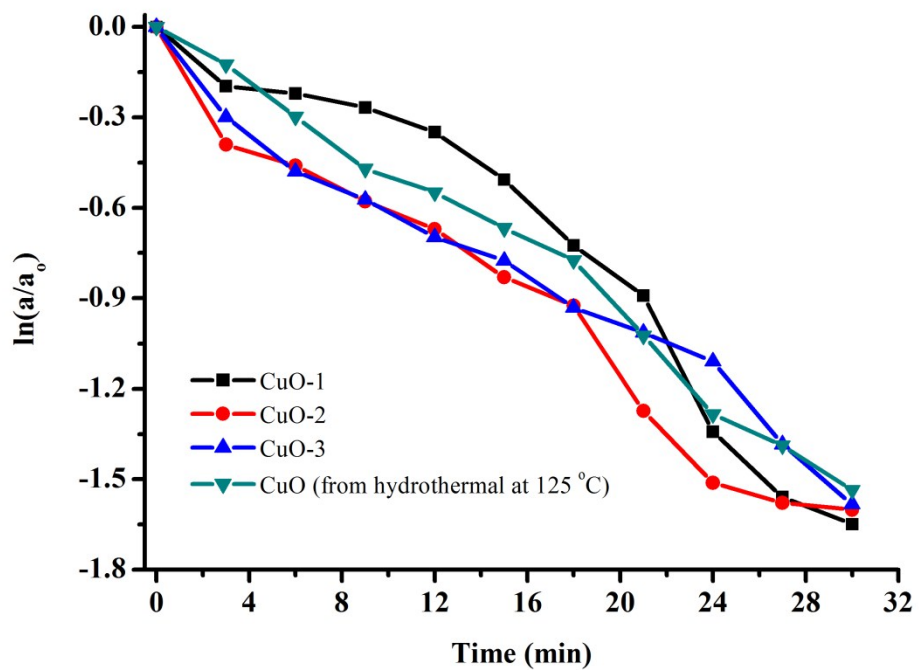


Fig. S10. Comparing the reduction of 3-NA by different CuO nano/microparticles.