

Supplementary information

Fabrication of magnetically recyclable Ag/Cu@Fe₃O₄ nanoparticles with excellent catalytic activity for p-nitrophenol reduction

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Characterization

The Ag/Cu@Fe₃O₄ solid was grinded into powder with a mortar after it was dried in vacuum, which facilitate subsequent tests.

For FTIR, lots of KBr powder and little of solid were mixed and added in a mortar. They were grinded into ultrafine powder and then fully dried under lamp to remove absorbed water. But it is noticed that the drying temperature should not be too high. Dried sample powder was then transferred to an assembly mold, followed by pressuring for one minute. After the pressure was gradually reduced to zero, the prepared sample was carefully taken out and put in the holder.

For TEM, a little of products were dispersed in ethanol and sonicated for 30 min. Then drops of the aqueous suspension were placed onto carbon coated copper grids. They were dried under ambient conditions prior to being introduced into the TEM chamber for observation.