

## Supporting Information

### Facile synthesis of hybrid $\text{Cu}_2\text{O}/\text{Pd-Fe}_3\text{O}_4$ nanocatalysts for C-H arylation of 4-nitroimidazoles

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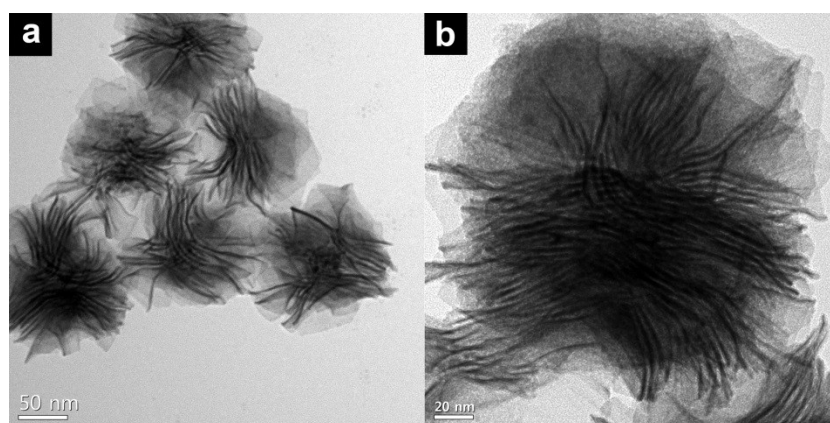
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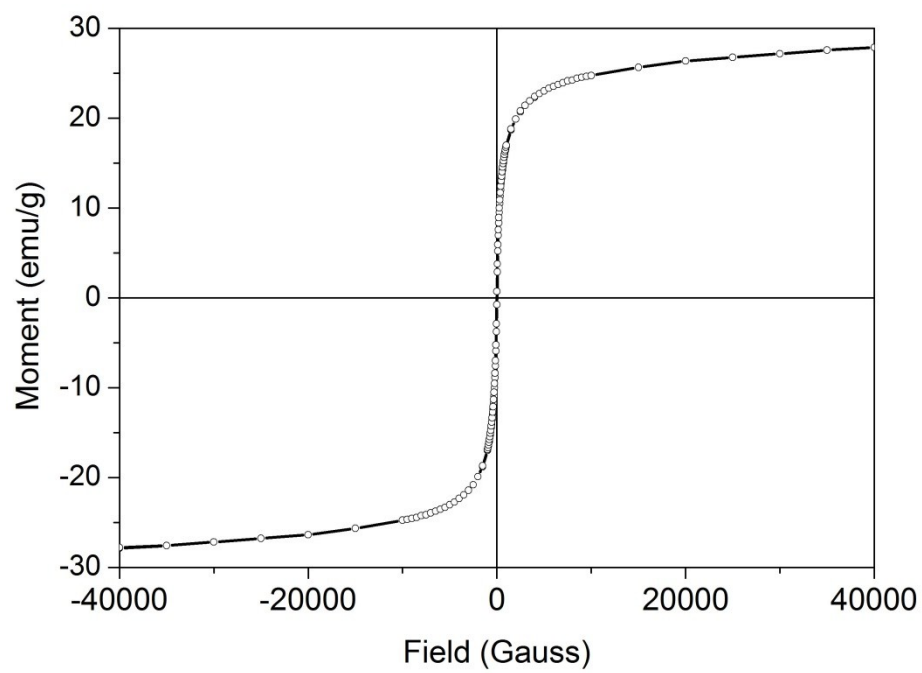
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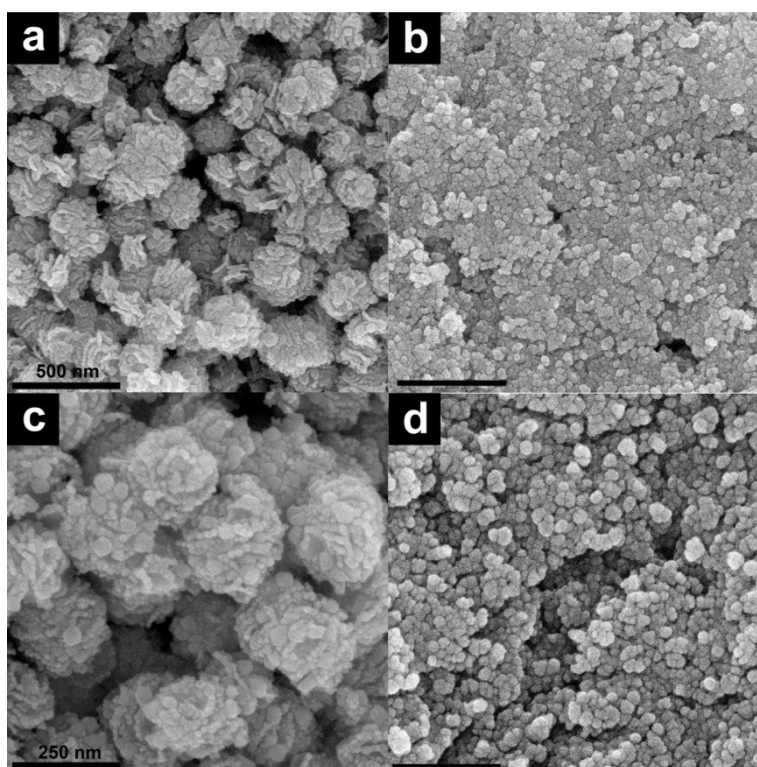
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**Fig. S1** TEM images of the Pd-Fe<sub>3</sub>O<sub>4</sub> nanocomposites.



**Fig. S2** SQUID graph of Cu<sub>2</sub>O/Pd-Fe<sub>3</sub>O<sub>4</sub>.



**Fig. S3** TEM images of the  $\text{Cu}_2\text{O}/\text{Pd}-\text{Fe}_3\text{O}_4$  nanocomposites synthesized at different amount of solvent. (OAm: 20 ml) (a,c) and (ODE: 20 ml) (b,d).