

Supplementary Material

In-situ intercalation of Au nanoparticles and magnetic γ -Fe₂O₃ in the walls of MCM-41 with abundant void defects for highly efficient reduction of 4-nitrophenol and organic dyes

Shijian Zhou, Weiming Jin, Yun Ding, Bo Shao, Bangbang Wang, Xu Hu, Yan Kong*

State Key Laboratory of Materials-Oriented Chemical Engineering, College of Chemical Engineering, Nanjing Tech University, Nanjing 210009, China

*Corresponding author

E-mail: kongy36@njtech.edu.cn (Y. Kong)

Tel: (86)-25-83587860

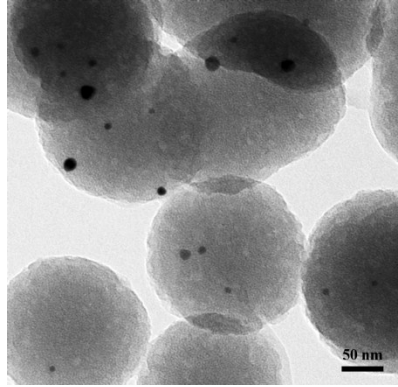


Fig. S1. TEM image of 0.4% FeAu@MCM-41 sample

Table S1. BET results of different samples

Samples	S_{BET}^a (m²/g)	V_p (cm³/g)	D_p^b (nm)
MCM-41	1733.7	0.7301	2.13
Fe@MCM-41	1641.6	0.8585	2.13
0.2% FeAu/MCM-41(p)	1566.4	0.6539	2.13
0.2% FeAu@MCM-41	1857.1	0.8823	2.13

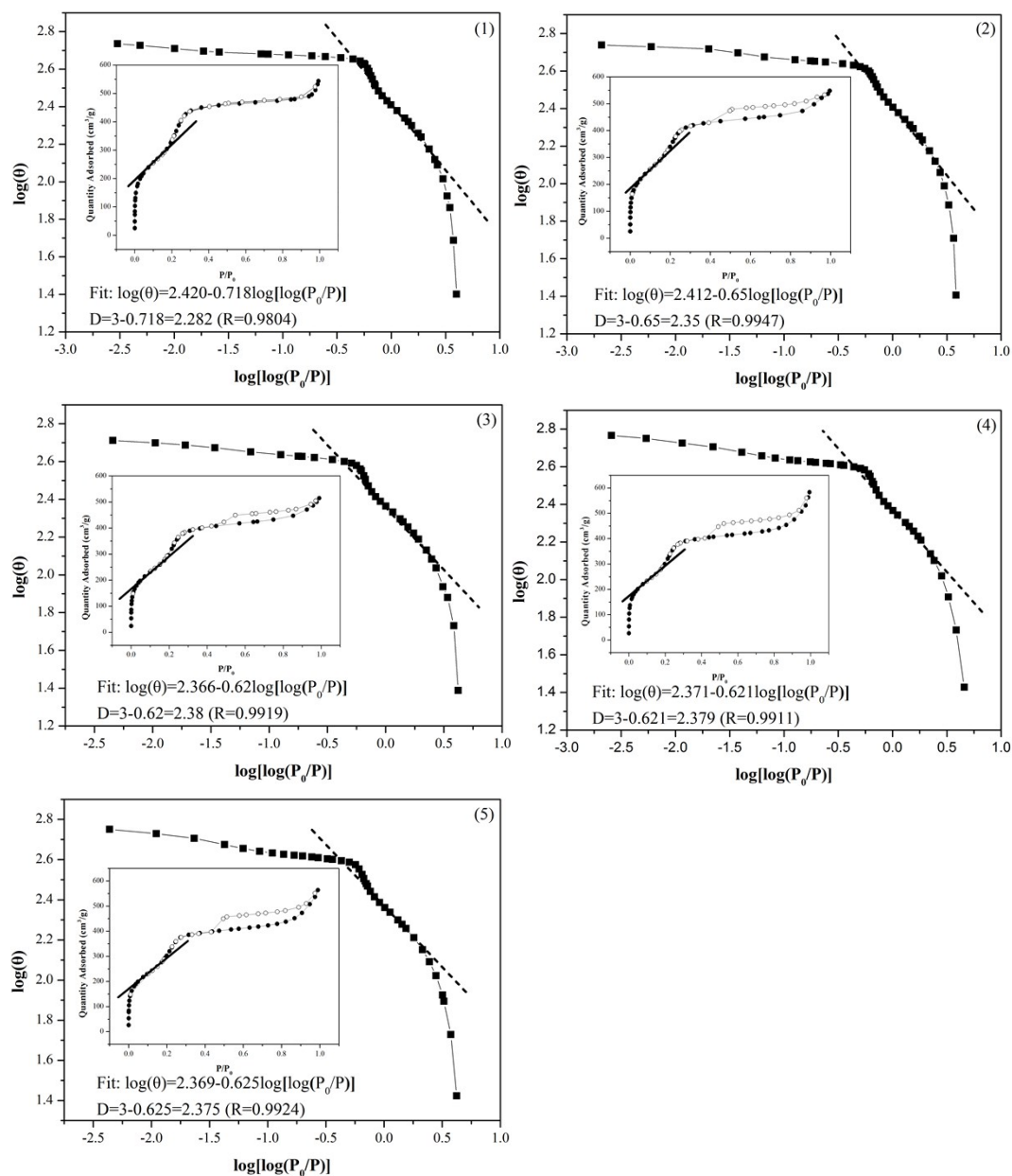


Fig. S2. Surface fractal analysis for the adsorption isotherms of different samples: (1) MCM-41, (2) 0.2% Au@MCM-41, (3) 0.1% FeAu@MCM-41, (4) 0.2% FeAu@MCM-41, (5) 0.4% FeAu@MCM-41