

## Electronic Supplementary Information (ESI†)

# Constructing Magnetic Si-C-Fe Hybrid Microspheres for Room Temperature Nitroarenes Reduction

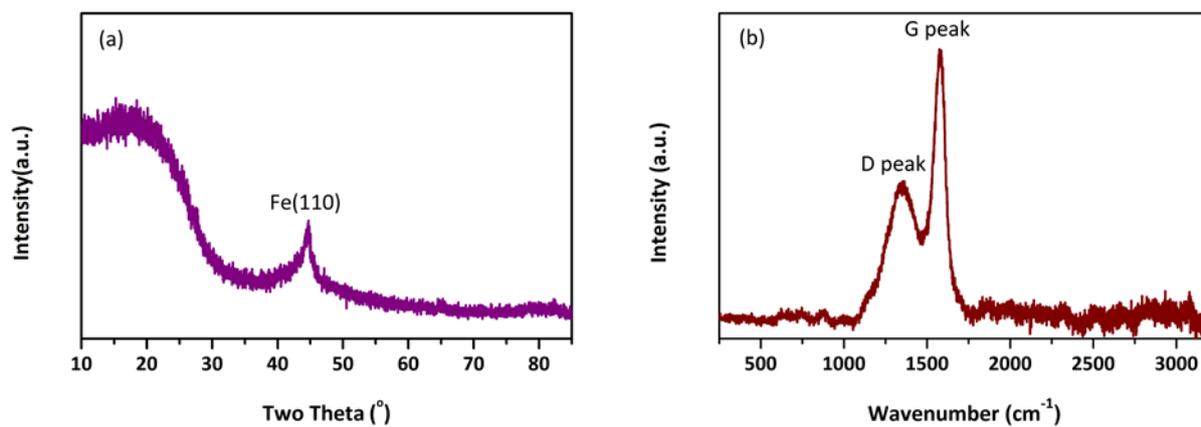
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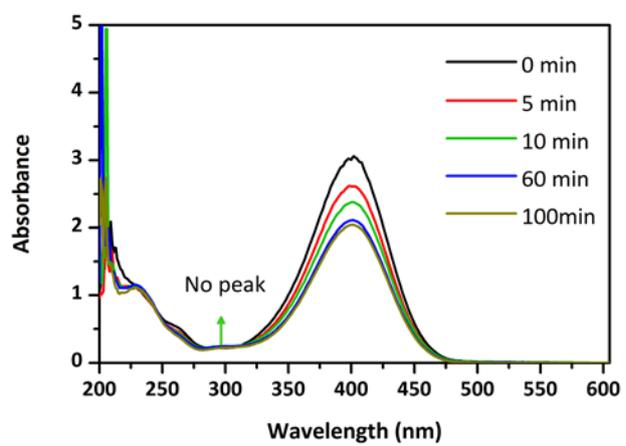
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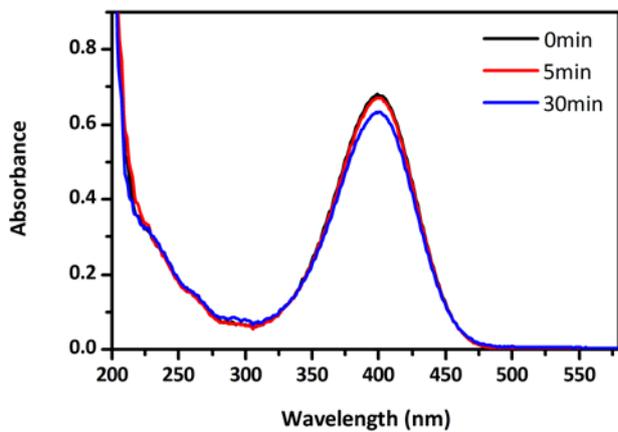
kongjie@nwpu.edu.cn (J.K.) and x.wang@abdn.ac.uk (X.W.)



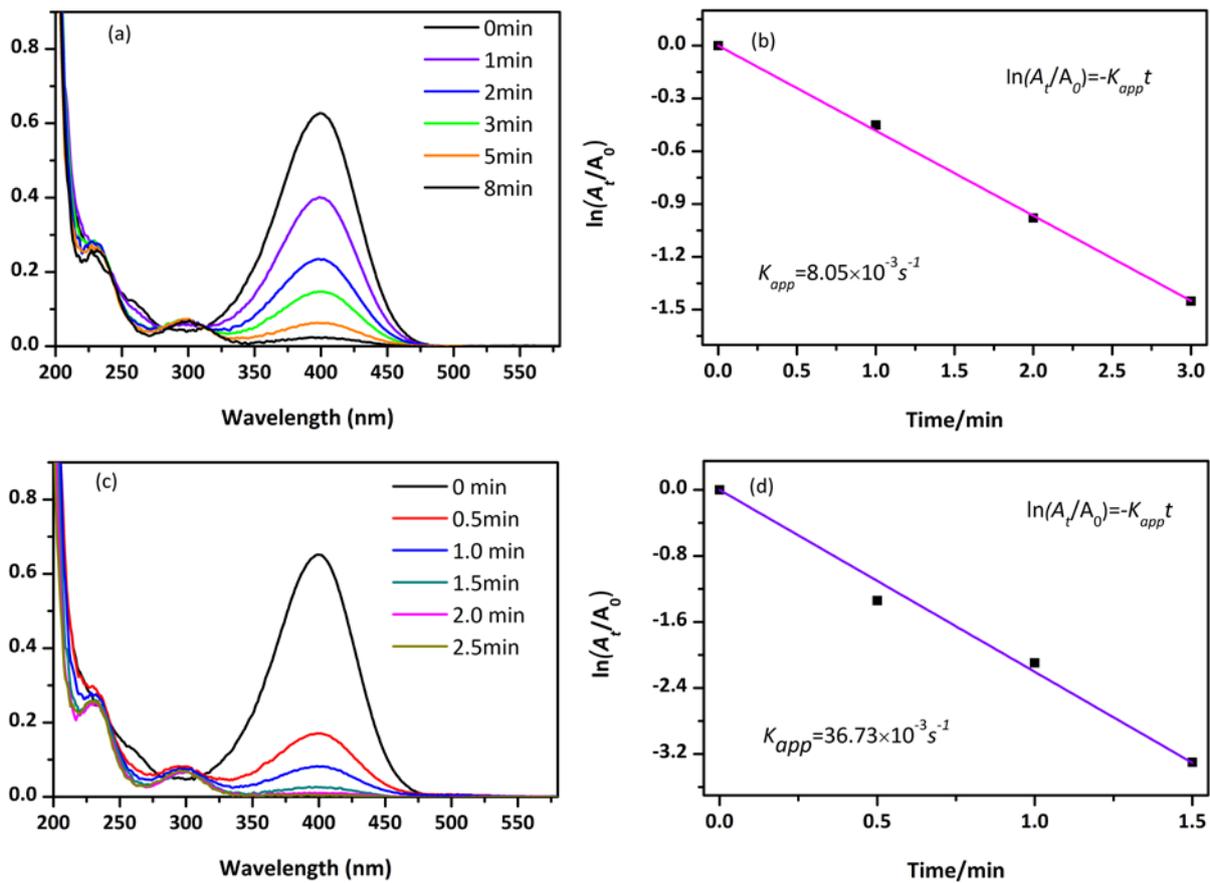
**Fig. S1** (a) Powder XRD pattern and (b) Raman spectrum of the synthesized Si-C-Fe hybrid microspheres.



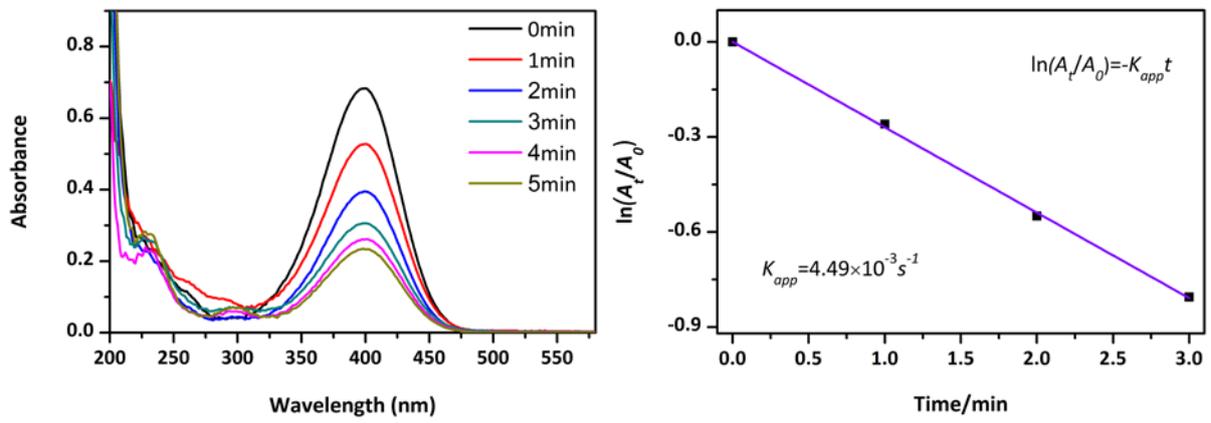
**Fig. S2** UV-vis absorption spectra during reduction of 4-NP without catalysts.



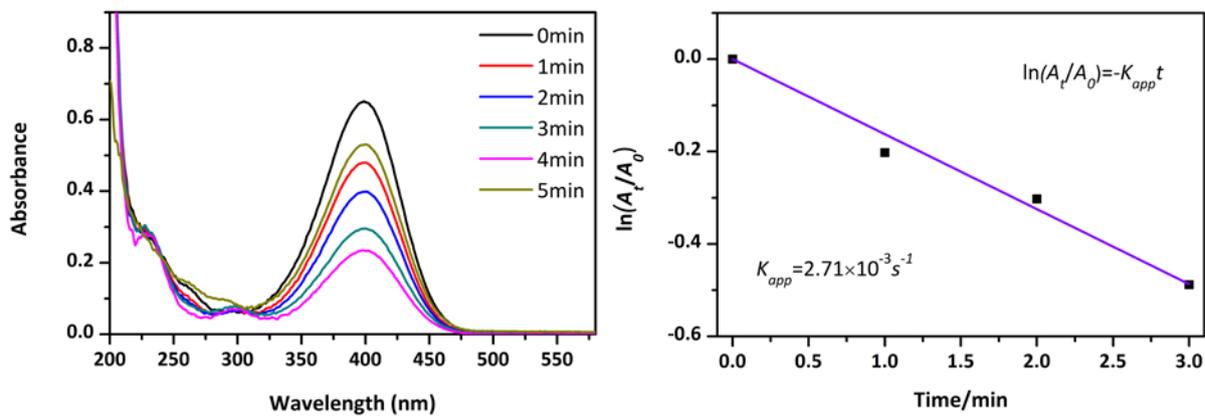
**Fig. S3** UV-vis absorption spectra during reduction of 4-NP with the pyrolyzed PDVB microspheres.



**Fig. S4** UV-vis absorption spectra and linear relationship of  $\ln(A_t/A_0)$  as a function of time during reduction of 4-NP using different amounts of Si-C-Fe hybrid microspheres. (a) and (b): 2 mg and (c) and (d): 8 mg, respectively.



**Fig. S5** UV-vis absorption spectra during Si-C-Fe hybrid microspheres promoted reduction of 4-NP at 0 °C.



**Fig. S6** UV-vis absorption spectra during the commercial metallic Fe powder promoted reduction of 4-NP.