

Electronic Supplementary Information (ESI) for

**“Synthesis of Fe₃O₄/Pt nanoparticles decorated carbon nanotubes
and their use as magnetically recyclable catalysts”**

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Figure S1. SEM images of p-MWNTs (a), m-MWNTs with feed ratios of 1/1(b).

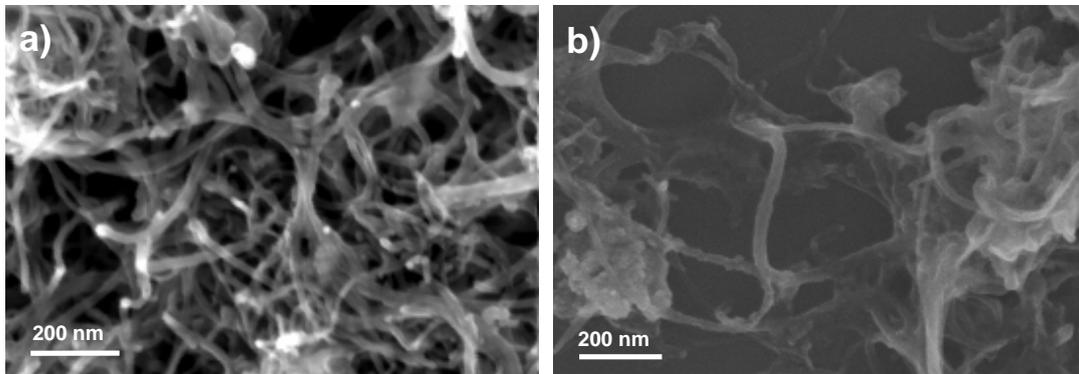
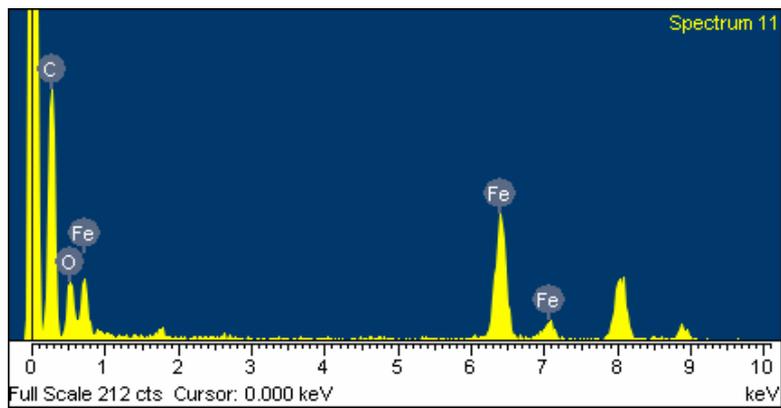


Figure S2. The EDS spectra of m-MWNTs.



Element	Weight%	Atomic%
C	57.34	79.24
O	10.91	11.32
Fe	31.76	9.44
Totals	100.00	100.00

Figure S3. TEM images of p-MWNTs (a, b), and the samples prepared in the control experiment using p-MWNTs instead of MWNTs-COOH as the templates (c-f).

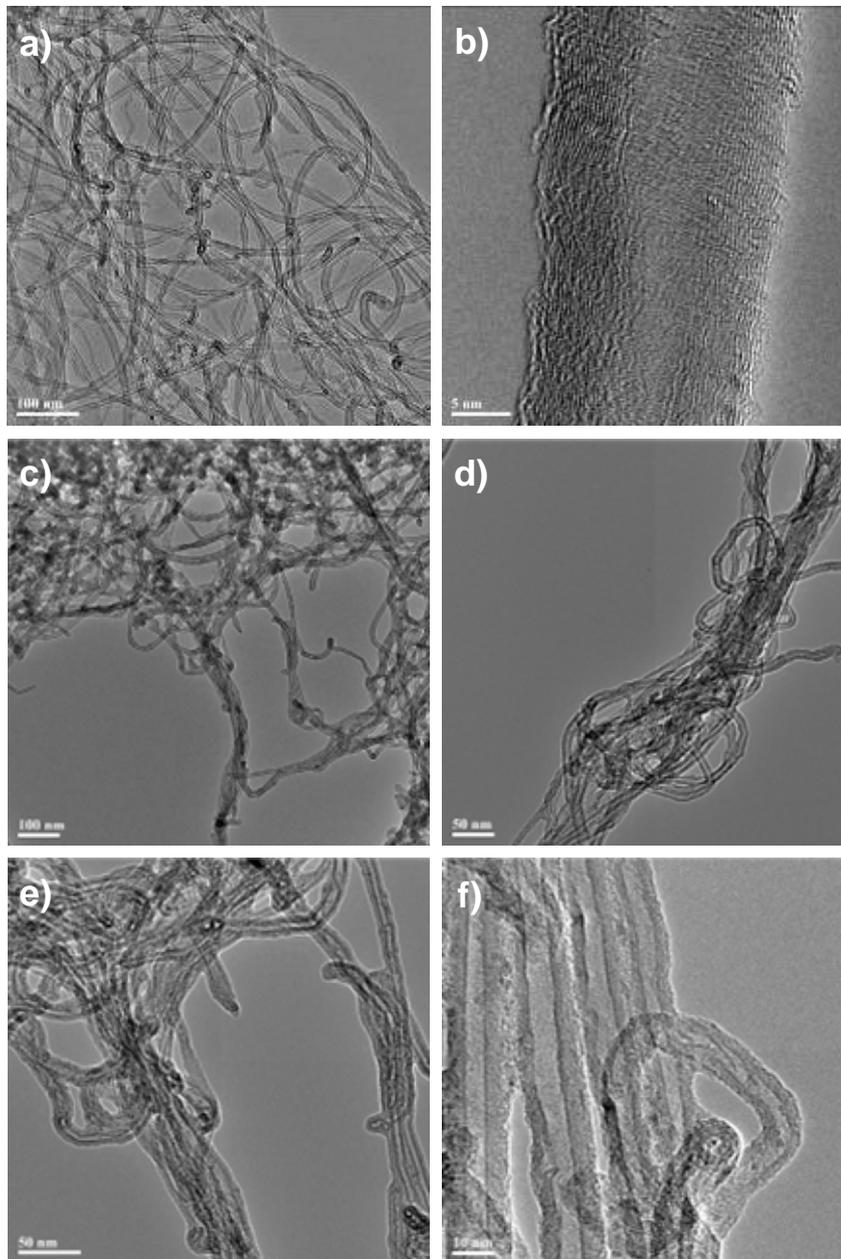


Figure S4. TEM images of the samples prepared in the control experiment using oxidized-MWNTs instead of MWNTs-COOH as the templates.

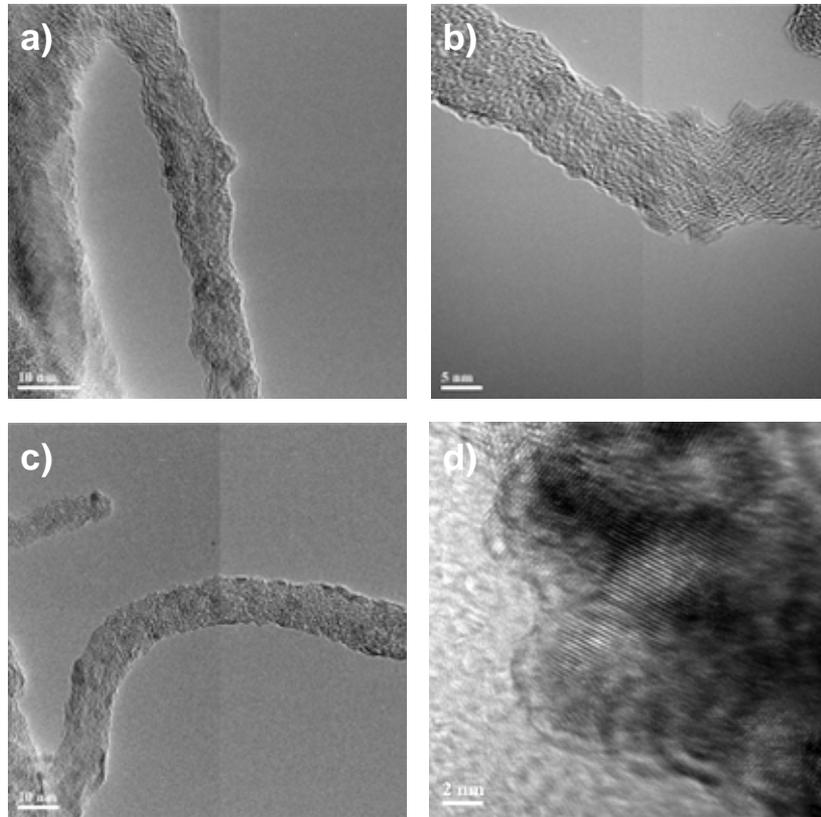


Figure S5. The photographs of m-MWNTs with feed ratios of 5/1(a), 1/1 (b), and 0.2/1 (c), and m-MWNTs@Pt (d).

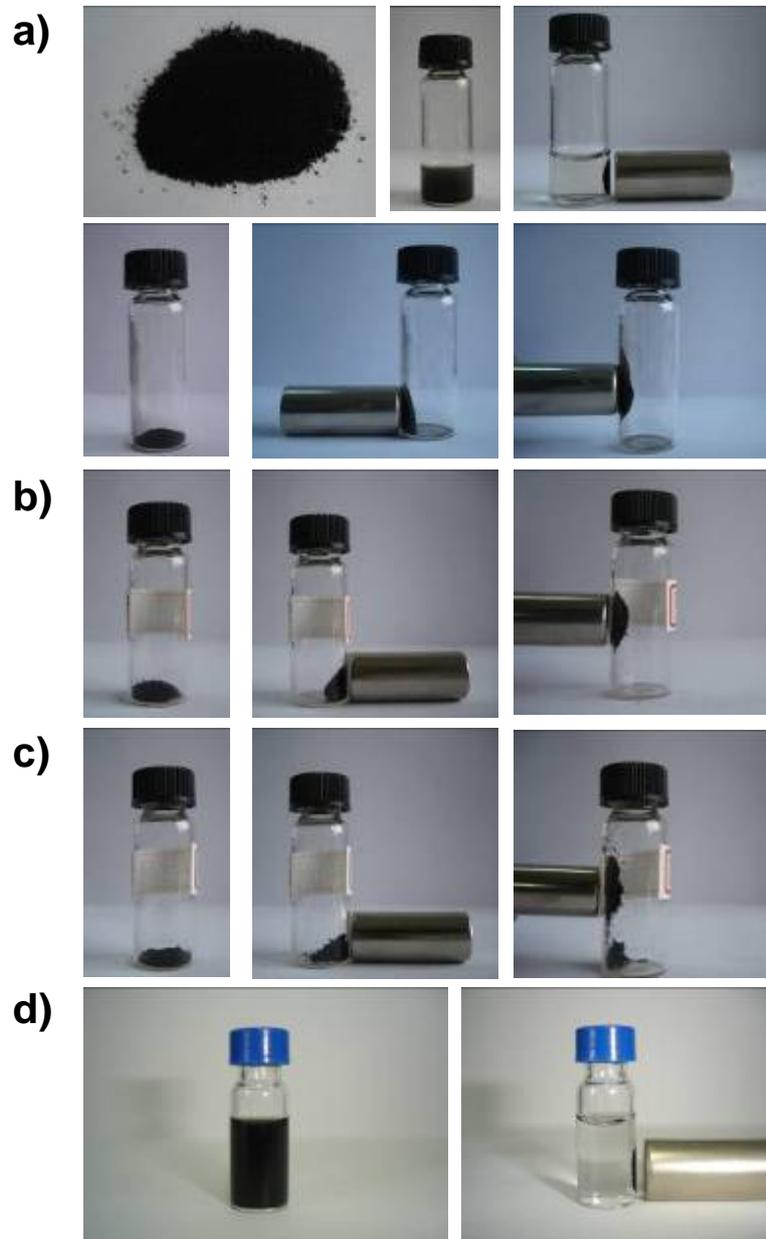


Figure S6. The element mapping of m-MWNTs@Pt: bright field, carbon, iron, and platinum maps.

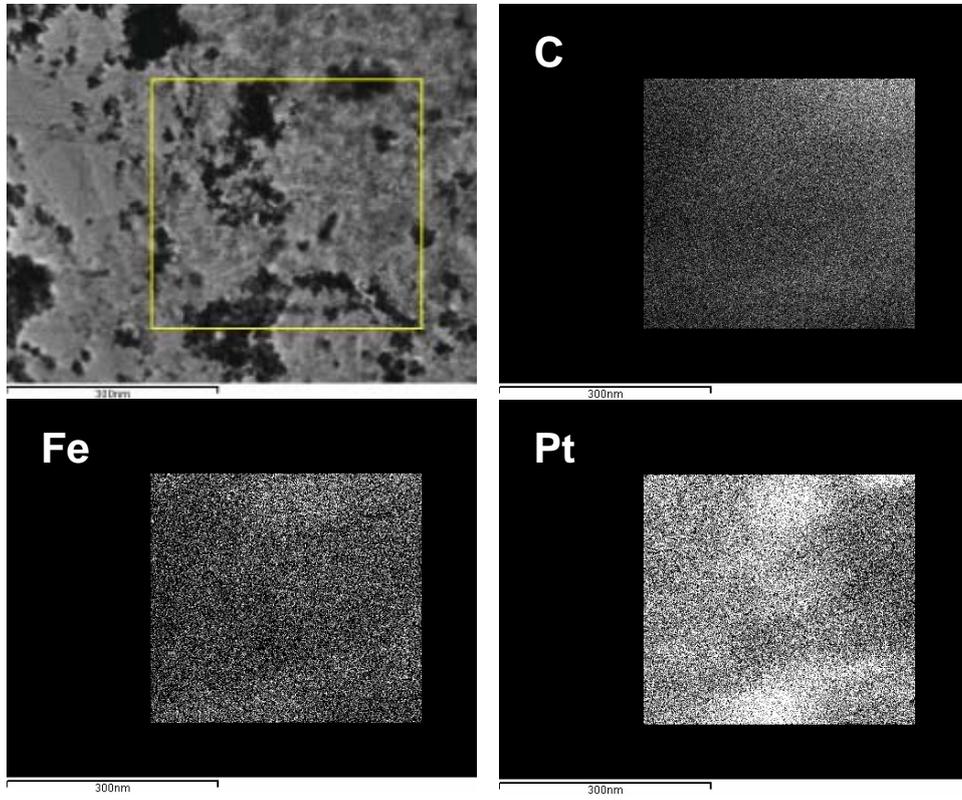
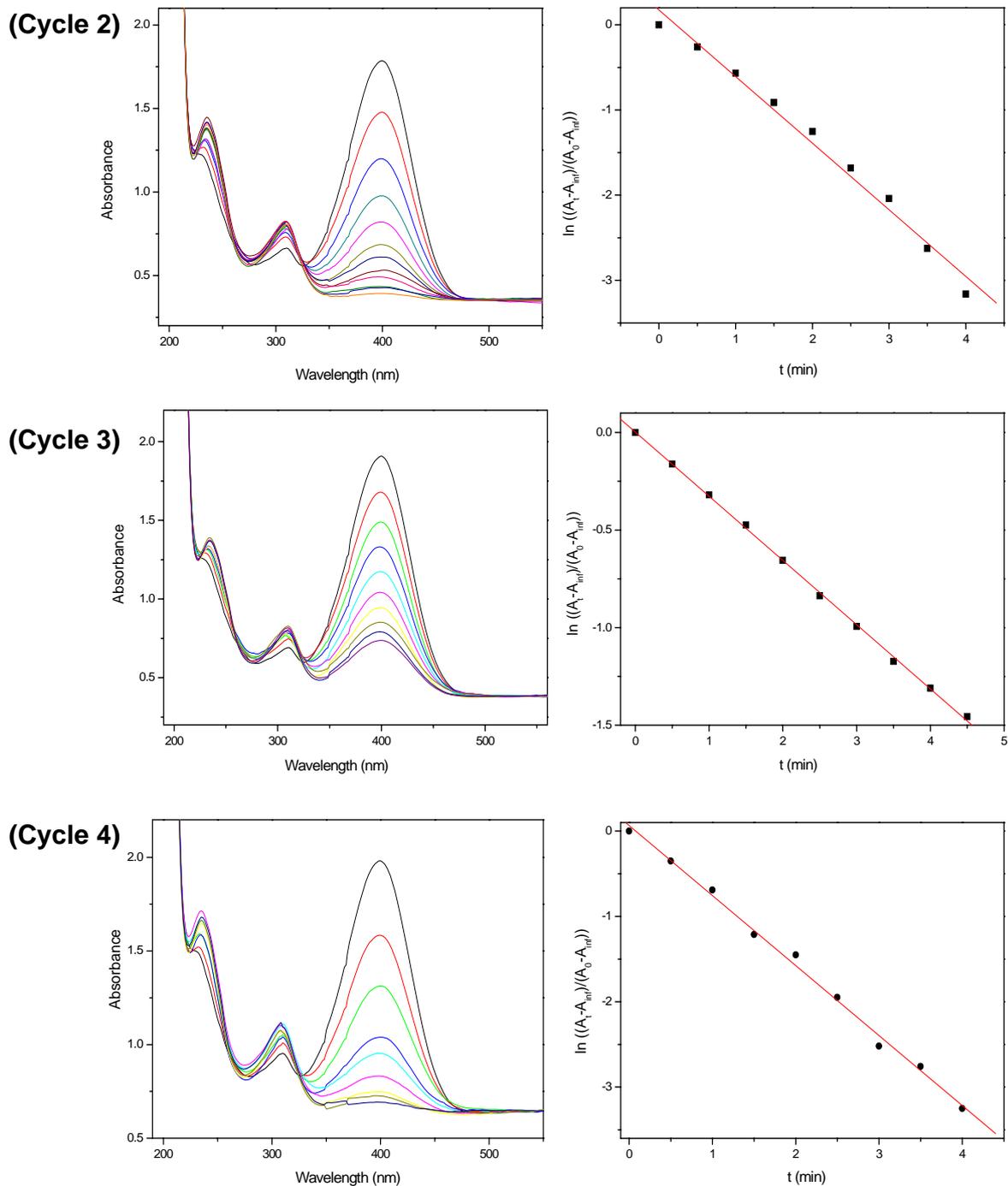
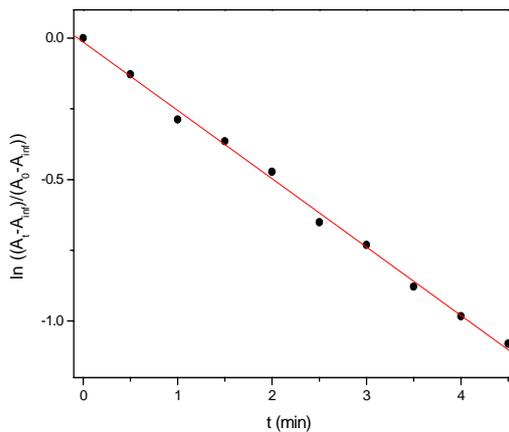
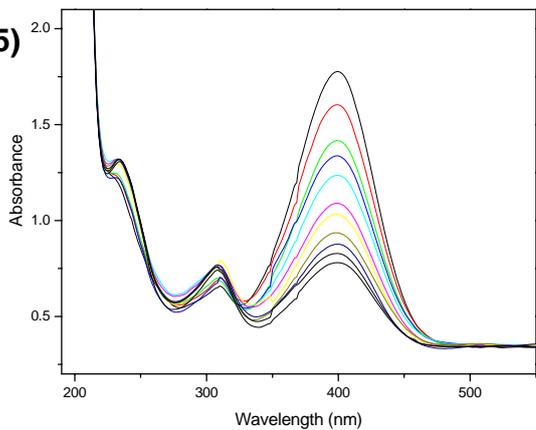


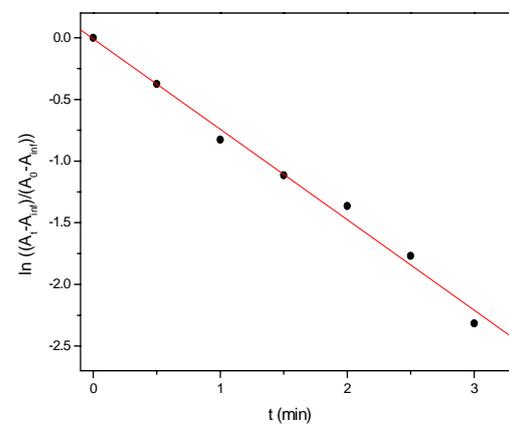
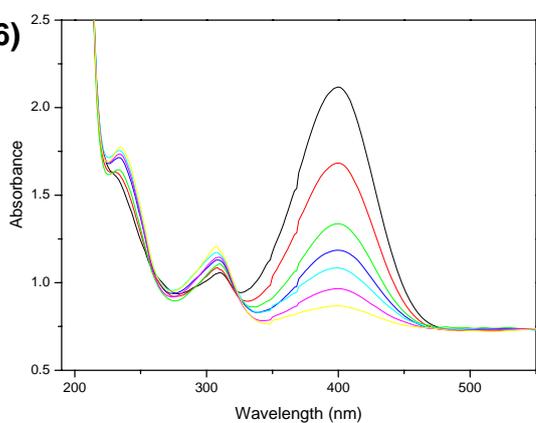
Figure S7. The results of the reduction of 4-nitrophenol into 4-aminophenol with the catalyst of m-MWNTs@Pt for cycles 2-15: (the the left column) successive UV-vis spectra; (the right column) the linearized data for first-order analysis.



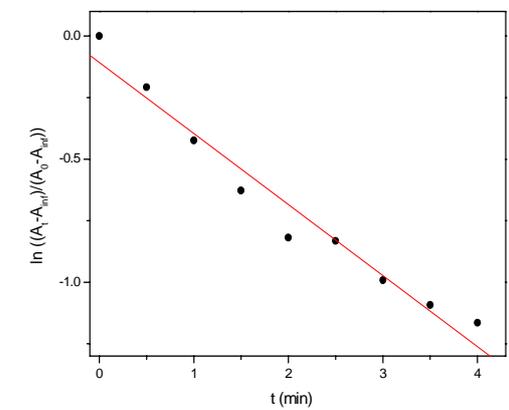
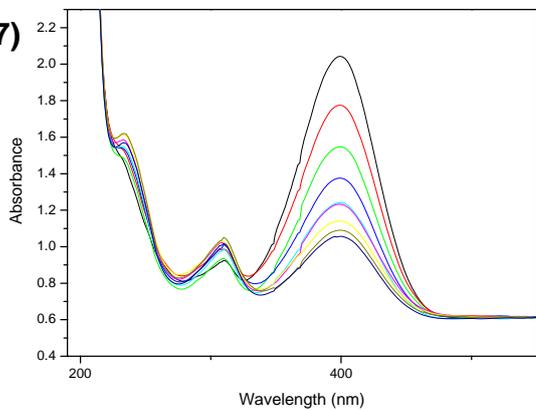
(Cycle 5)



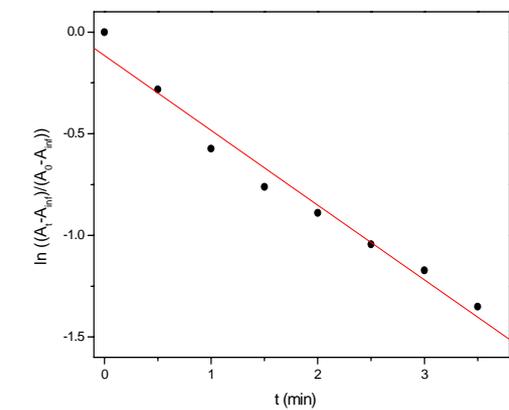
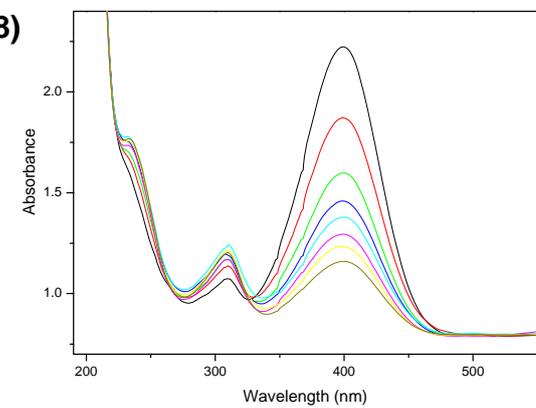
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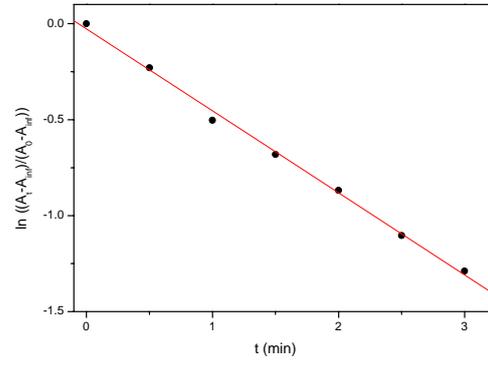
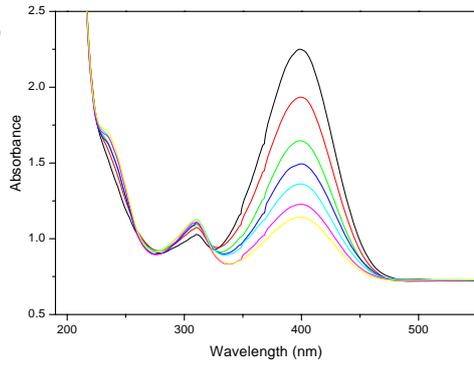
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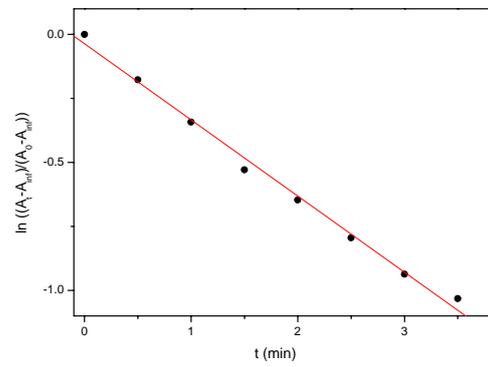
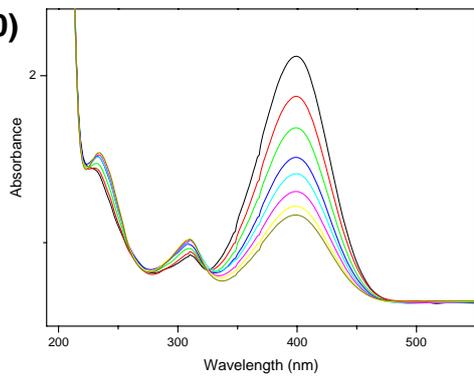
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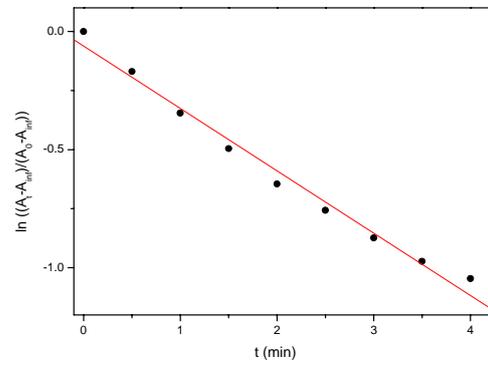
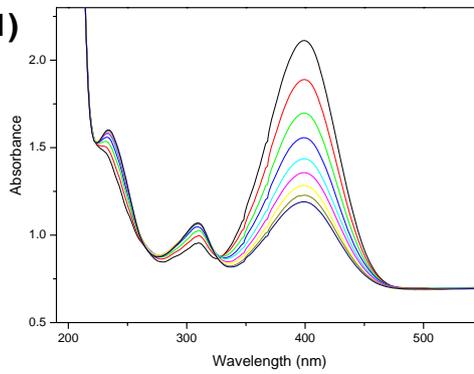
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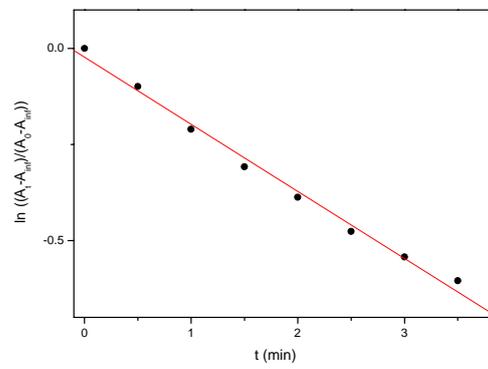
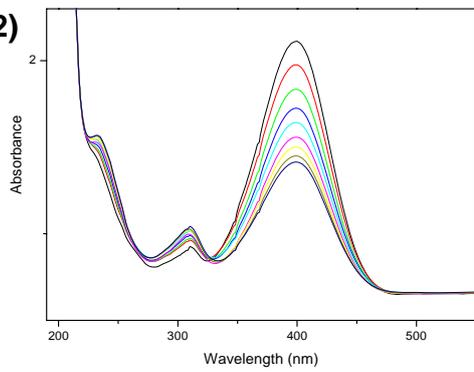
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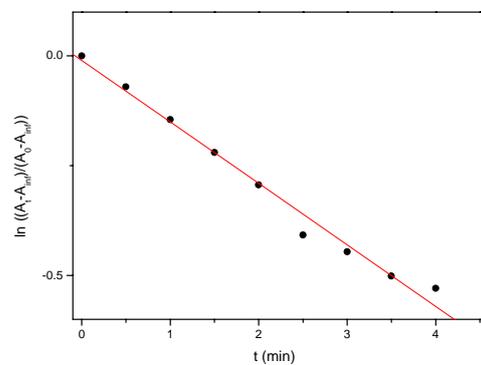
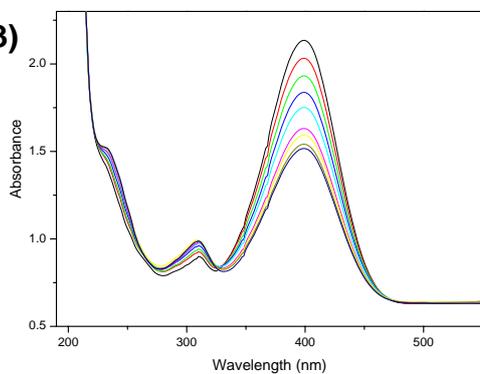
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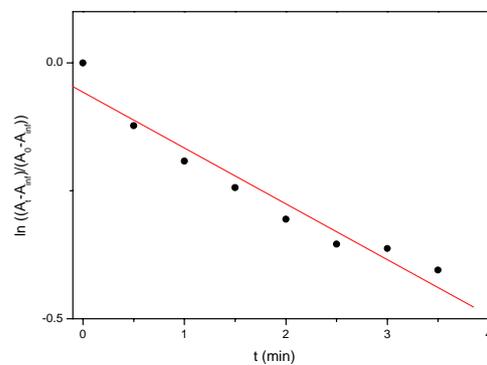
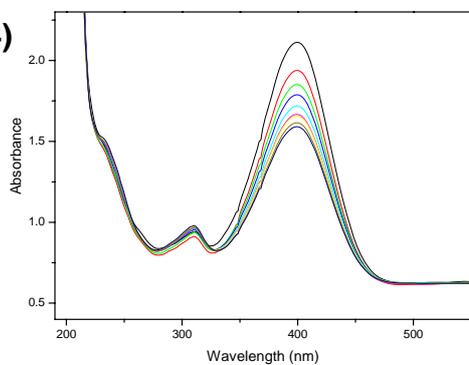
(Cycle 12)



(Cycle 13)



(Cycle 14)



(Cycle 15)

