Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Nitrogen-doped Fe3C@C particles as efficient heterogeneous photo-assisted Fenton catalyst

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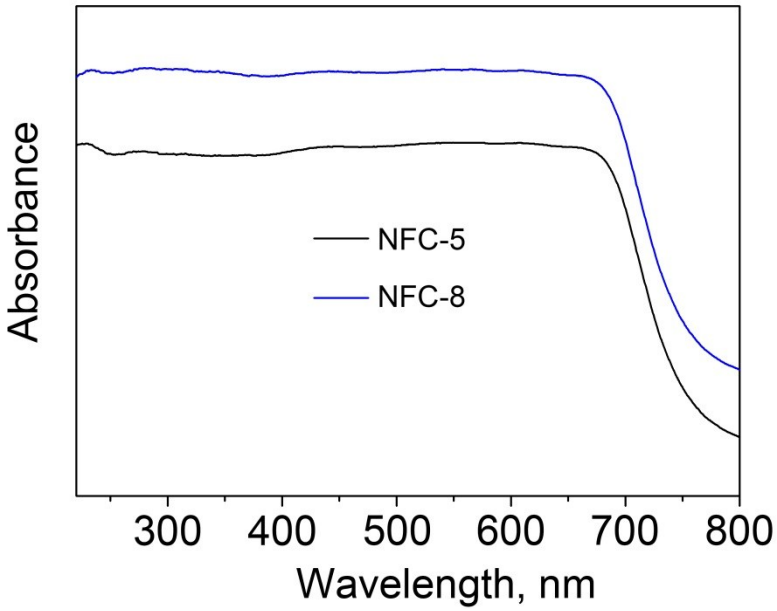

Fig. S1. UV-visible spectra of NFC-5 and NFC-8.

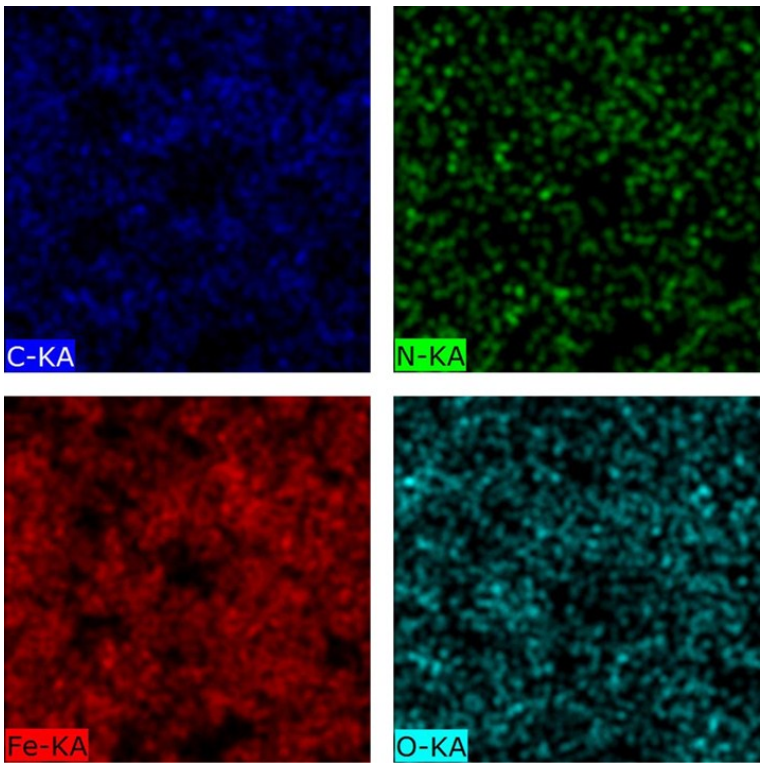

Fig. S2. Element mapping of NFC-8 particles.

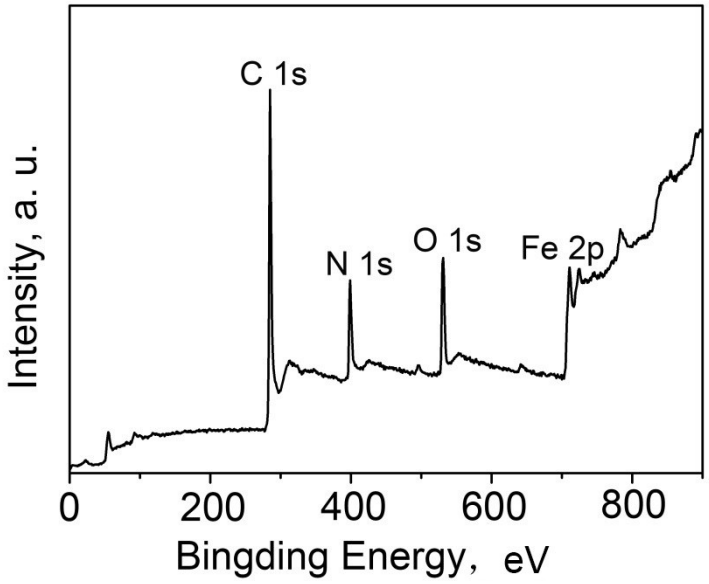

Fig. S3. The XPS survey scan of the NFC-8.

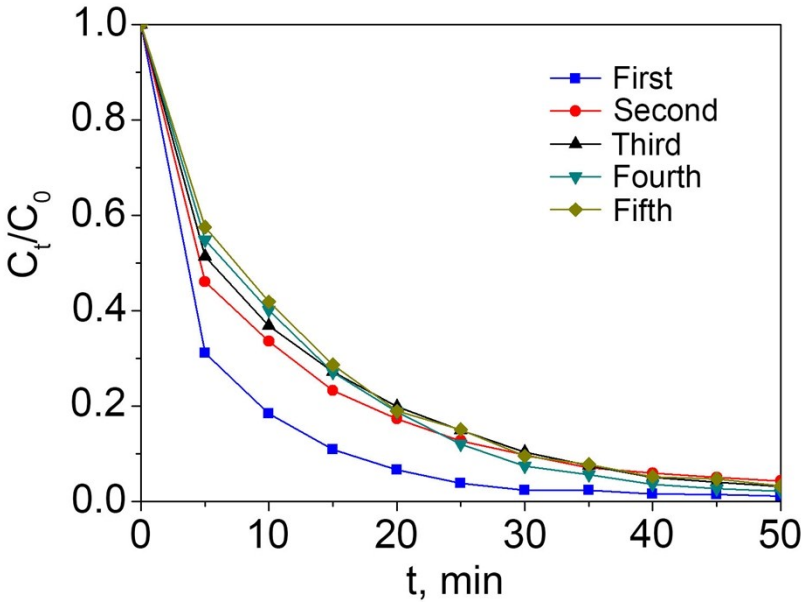

Fig. S4. Recycling performance of NFC-8.

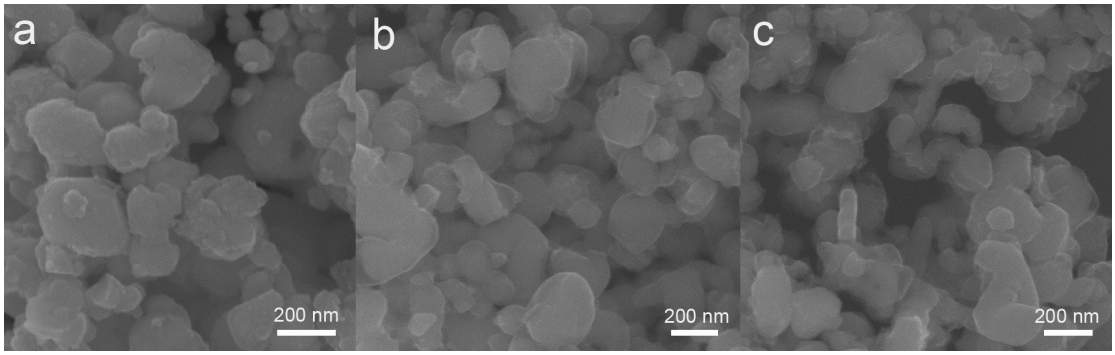

Fig. S5. SEM images of (a) NFC-2, (b) NFC-5, (d) NFC-12.

There are no obvious difference in morphology and structure among various NFC samples as showed in Fig. 2c and Fig. S5.

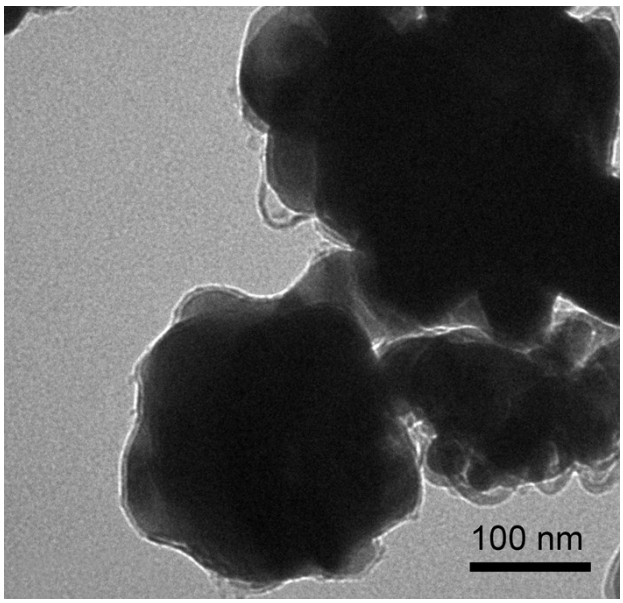

Fig. S6. SEM and TEM images of NFC-8 after recycling performance testing.

There are no obvious changes in morphology and structure after recycling performance testing.

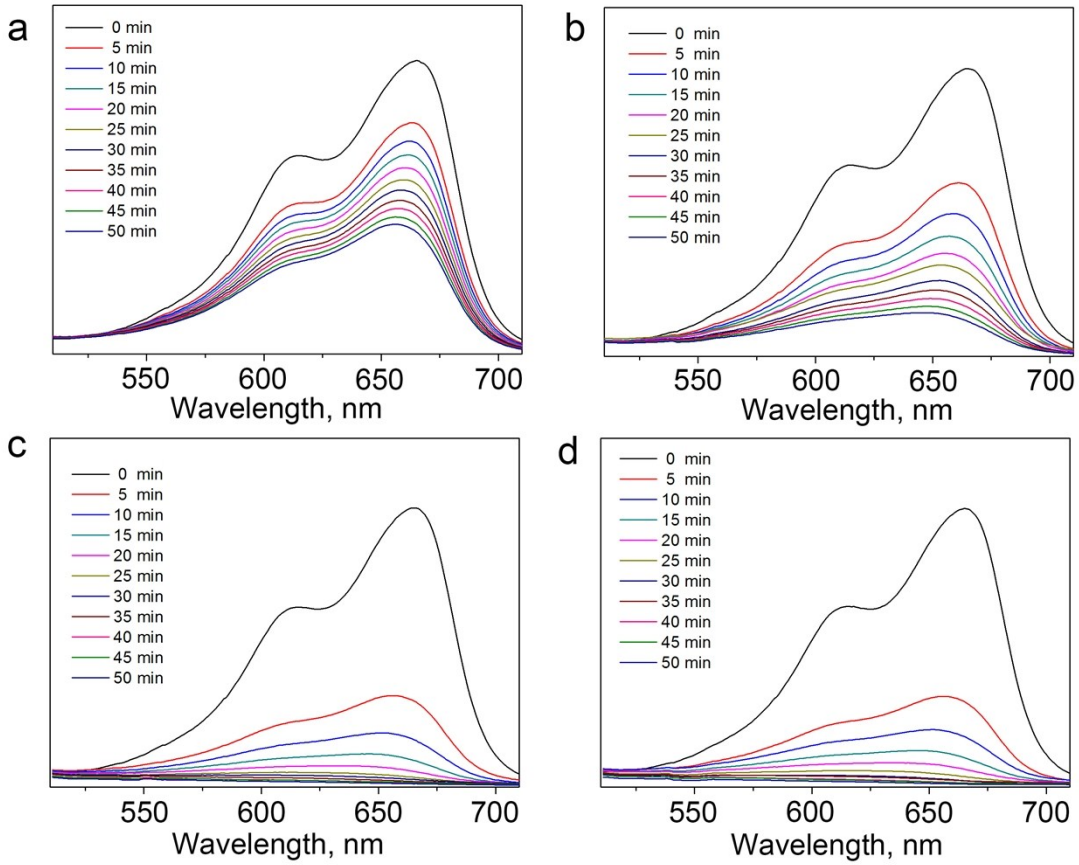

Fig. S7. UV-Vis adsorption changes of methylene blue solutions during photo-assisted Fenton process. 0.15 M H_2O_2 with NFC-8 (a) 0.25 g/L, (b) 0.5 g/L, (c) 0.75 g/L, (d) 1.0 g/L.

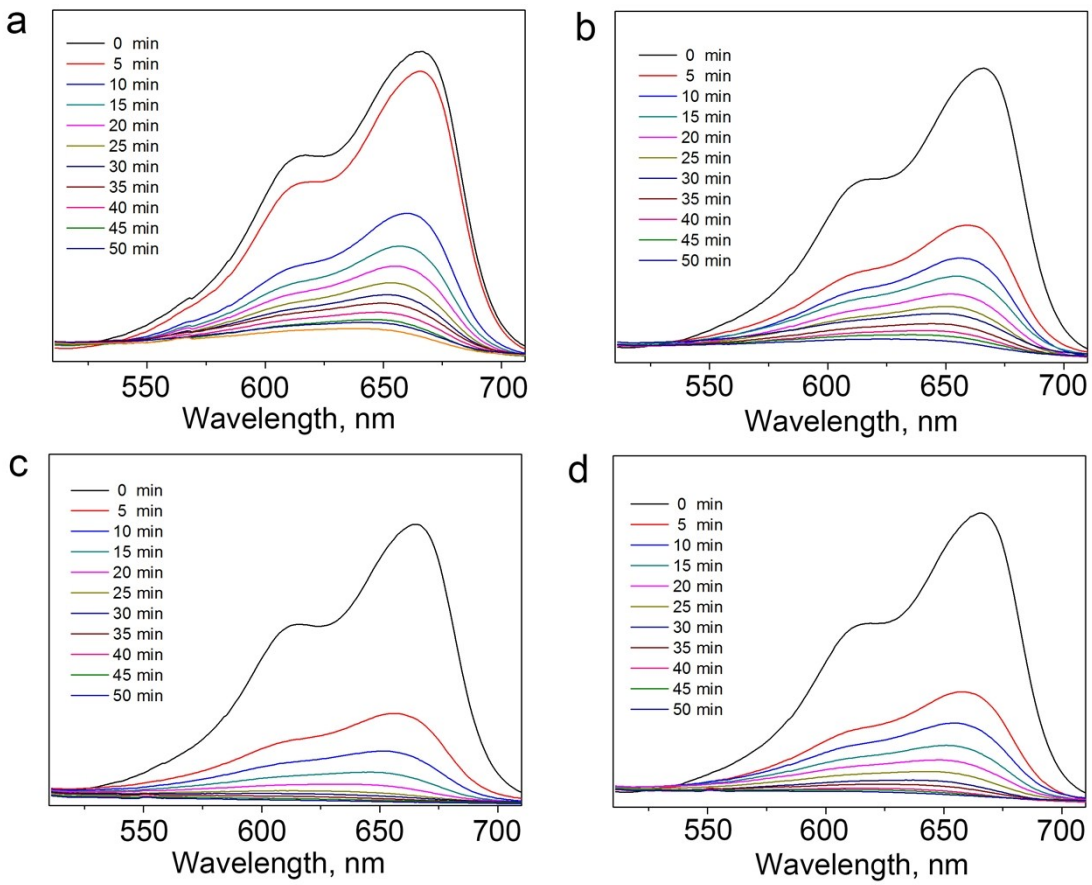

Fig. S8. UV-Vis adsorption changes of methylene blue solutions during photo-assisted Fenton process. 0.75 g/L NFC-8 with H_2O_2 (a) 0.1 M, (b) 0.125 M, (c) 0.15 M, (d) 1.0 M.

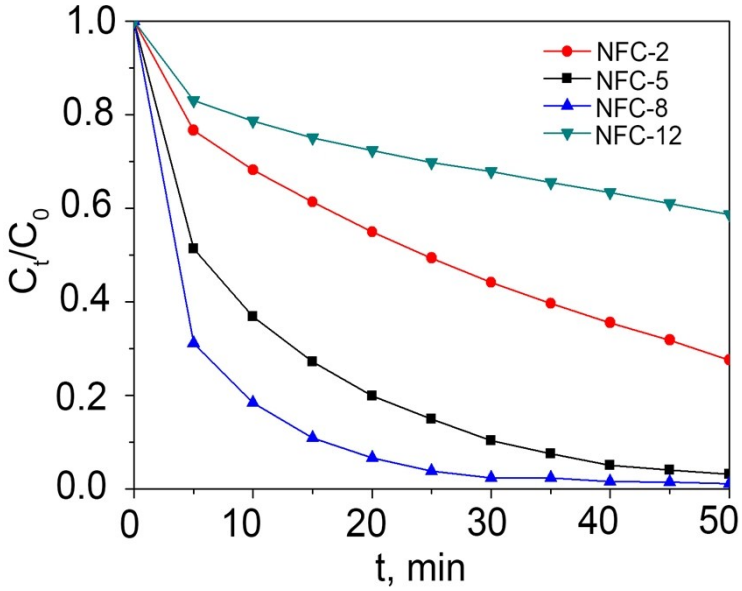

Fig. S9. The MB degradation efficiency of NFC-2, NFC-5, NFC-8 and NFC-12.