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Low-cost iron-doped catalyst for phenol degradation by heterogeneous Fenton

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Highlights:

- Iron-carbon catalysts were obtained by chemical and thermal treatment of textile sludge.
- Those catalysts were applied into CWPO of phenol.
- 98.2 % of phenol conversion and 68.2 % TOC removal were achieved.
- Textile sludge is suitable to be employed as an iron-carbon catalyst precursor.