Supplementary materials

Thermo- and pH-tolerance xylanase immobilized magnetic responsive Zr-MOFs composites as recyclable biocatalyst for the degradation of corn straw

Qingtai Chen[1], Chongchong Wu[2]*, Shujie Hu[3], Lizhi Cui[4], Yong Zhang[5], Peng Hu[1], Pei Yu[1], Zhi Xu[1], Miao Yu[1]*

1. School of Chemistry and Pharmaceutical Engineering, Huanghuai University, Zhumadian 463000, China；

2. CNOOC Institute of Chemicals & Advanced Materials, Beijing 102200, China；

3. School of Physical Education, Huanghuai University, Zhumadian 463000, China；

4. China Meheco Topfond Pharmaceutical Co. Ltd, Zhumadian 463000, China；

5. Inspection and Testing Center, Zhumadian Bureau of Quality and Technical Supervision, Zhumadian 463000, China.

* Corresponding Authors' E-mail: chongchong.wu@ucalgary.ca; miaoy050666@126.com;

Experiment section

magnetic Zr-MOFs particles characterization

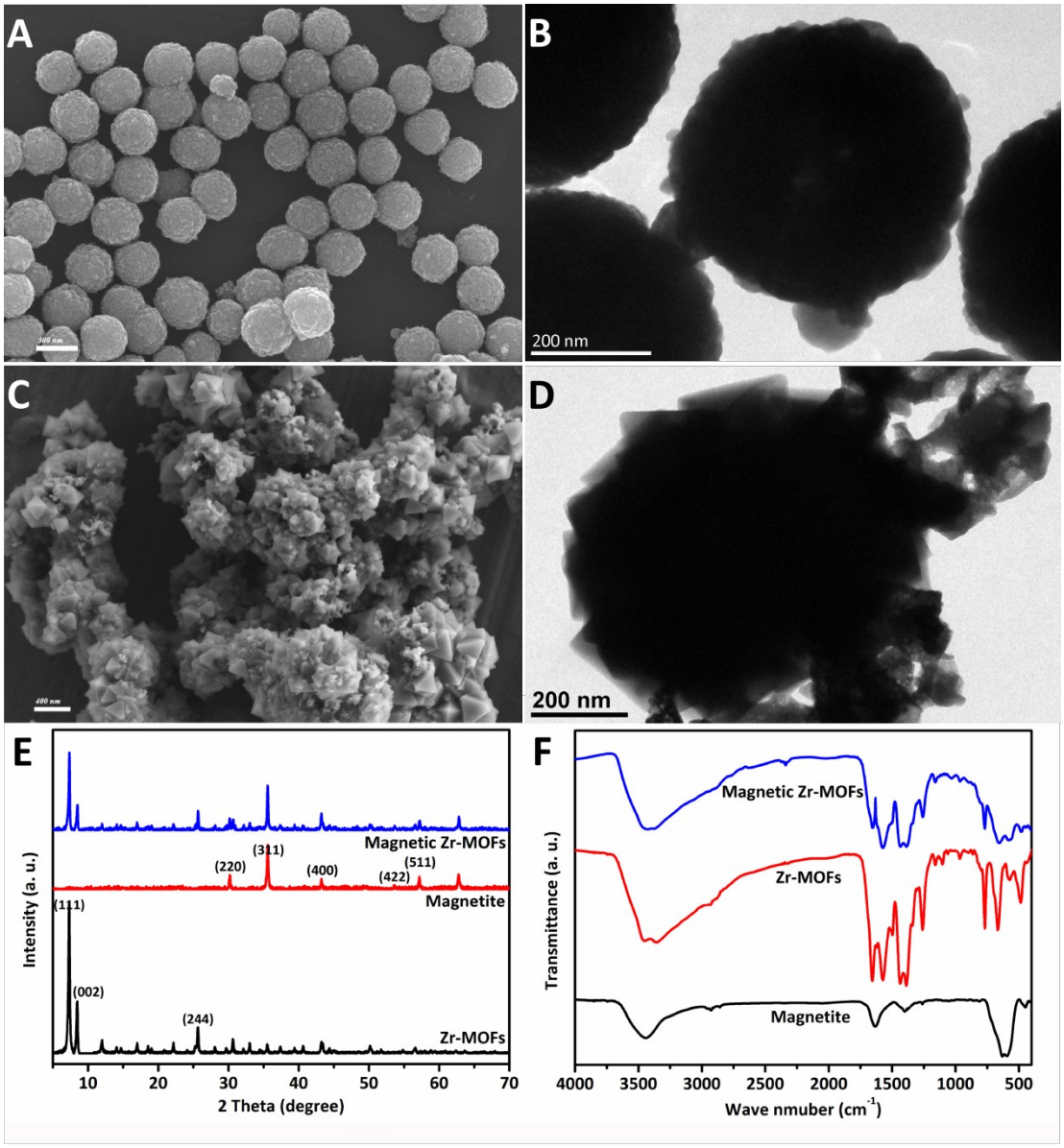

Fig. S1 Morphology and structural characterization of magnetic Zr-MOFs particles and their precursor. SEM images (A and C) and TEM images (B and D) of Fe_3O_4 and magnetic Zr-MOFs particles, respectively; XRD patterns (E) and FTIR spectra (F) of magnetic Zr-MOFs particles and their precursor, respectively.