

Enhanced dehydrogenative aromatization of propane by incorporating Fe and Pt into Zn/HZSM-5 catalyst

*Wei Zhou, Jiaxu Liu, Long Lin, Xiaotong Zhang, Ning He, Chunyan Liu, Hongchen Guo**

State Key Laboratory of Fine Chemicals & School of Chemical Engineering, Dalian University of Technology, Dalian 116012, P. R. Chin

Corresponding Author

E-mail: hongchenguo@dlut.edu.cn

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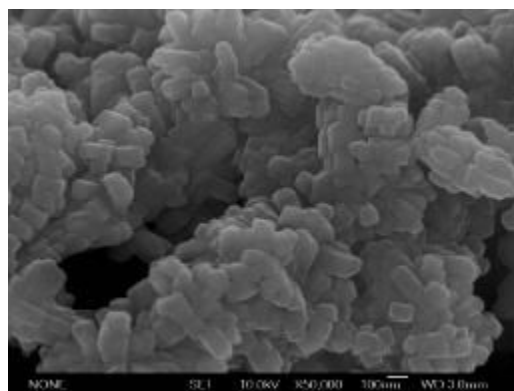


Figure S1. SEM image of ZSM-5 with a Si/Al ratio of 15

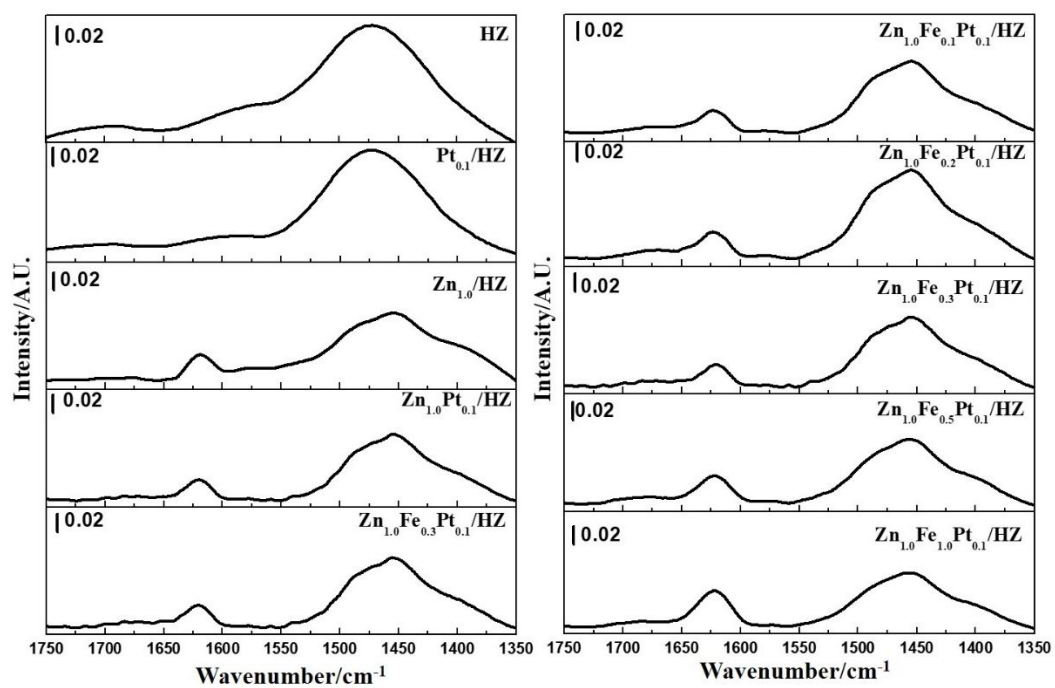


Figure S2. NH_3 adsorbed FT-IR spectra of $\text{Zn}_{1.0}\text{Fe}_{0.3}\text{Pt}_{0.1}/\text{HZSM-5}$ catalyst and its references

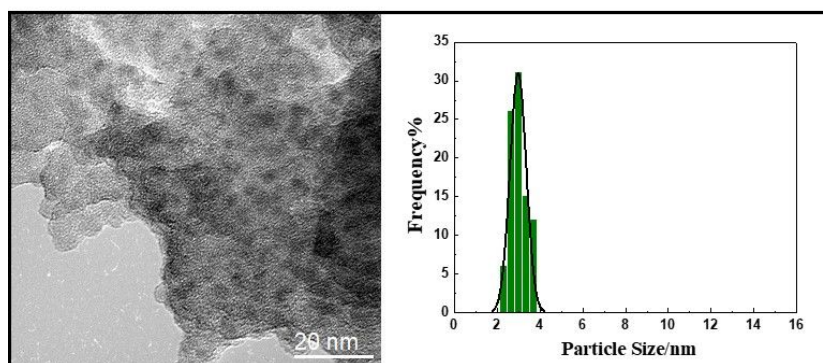


Figure S3. Zn particles dispersion image and size distribution provided by TEM.

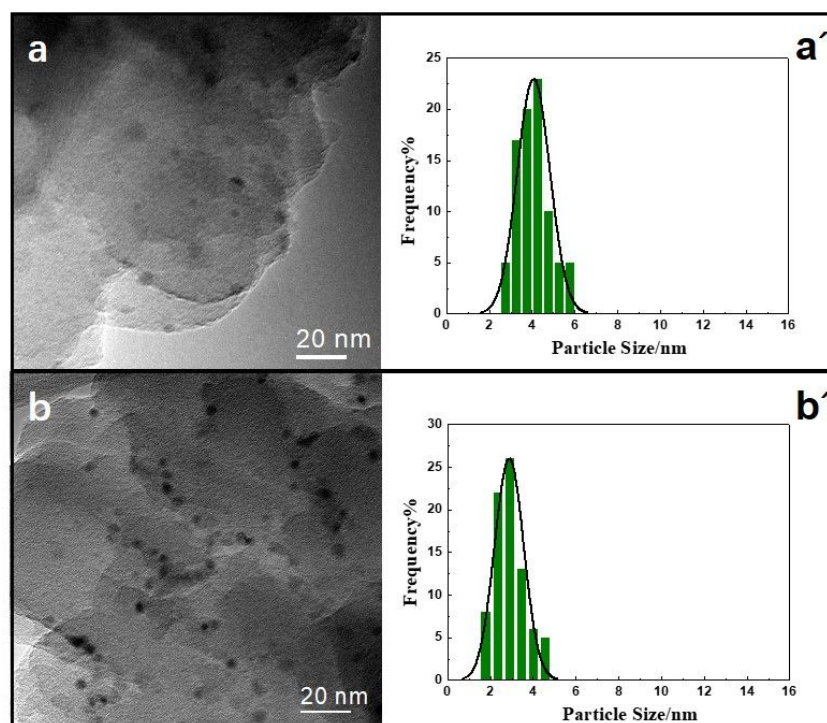


Figure S4. Metal particles dispersion images(a, b) and size distribution (a', b'): (a, a') $\text{Fe}_{0.3}/\text{HZSM-5}$; (b, b') $\text{Fe}_{0.3}\text{Pt}_{0.1}/\text{HZSM-5}$ provided by TEM.

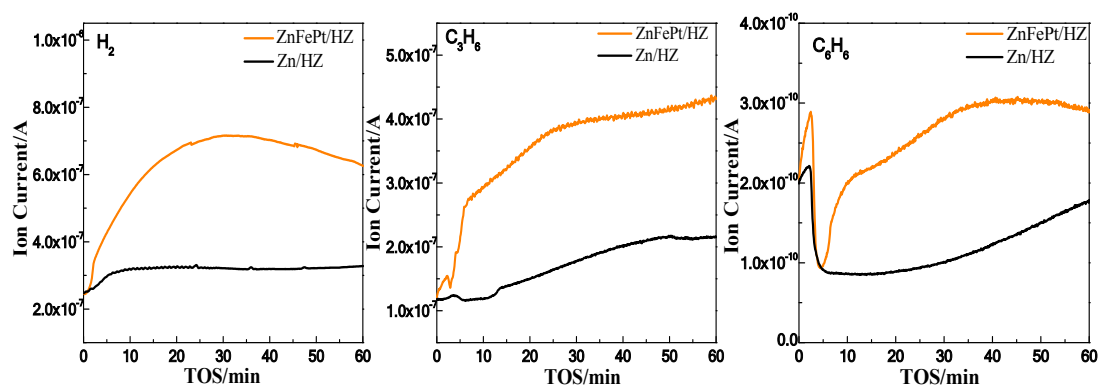


Figure S5. On-line mass spectra of propane aromatization on Zn_{1.0}/HZSM-5 and Zn_{1.0}Fe_{0.3}Pt_{0.1}/HZSM-5 at 101.33 kPa, GHSV=180 h⁻¹.