Supporting Information

Microwave-assisted synthesis of a thermally stable Zncontaining aluminophosphate with ERI-zeotype structure templated by diquaternary alkylammonium

Yan Xu,^{a,b} Yuchen Qiu,^a Yide Han,^b Qiming Sun,^a Rui Ge,^a Xiaowei Song*,^a

^a State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry, Jilin University, Changchun 130012, China

^b Department of Chemistry, College of Science, Northeastern University, Shenyang 110819, China

Corresponding Author:

Dr. Xiaowei Song

E-mail: xiaoweisong@jlu.edu.cn

Fax: +86-431-85168582

Tel: +86-431-85168582

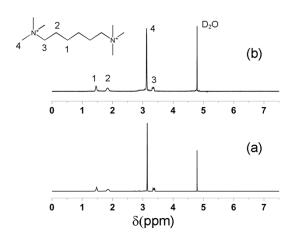


Figure S1. ¹H NMR spectrum of (a) SDA molecules and (b) SDA molecules extracted after dissolving the ZnAPO-ERI-MW framework.

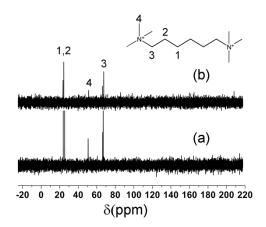


Figure S2. ¹³C NMR spectrum of (a) SDA molecules and (b) SDA molecules extracted after dissolving the ZnAPO-ERI-MW framework.

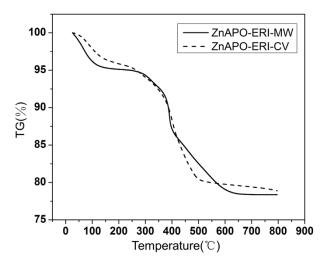


Figure S3. TG curves of ZnAPO-ERI-MW and ZnAPO-ERI-CV.

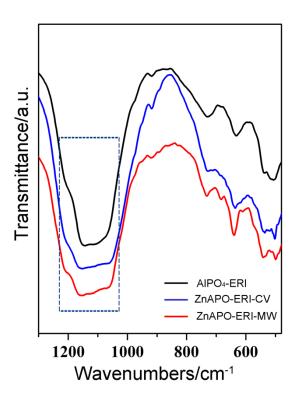


Figure S4. FT-IR spectra of AlPO₄-ERI, ZnAPO-ERI-CV and ZnAPO-ERI-MW (Note: there is a significant broadening and small red shift in the T-O-T asymmetric stretching region (1030~1220 cm-1) of the ZnAPO-ERI-CV and ZnAPO-ERI-MW spectra compared to the spectra of AlPO4-ERI, which indicates that Zn is successfully involved in the aluminophate lattice).