Supporting information:

Thermally stable nanosized LEV zeolite synthesized by hydrothermal conversion of FAU zeolite in the presence of N,N-dimethylpiperidinium cation

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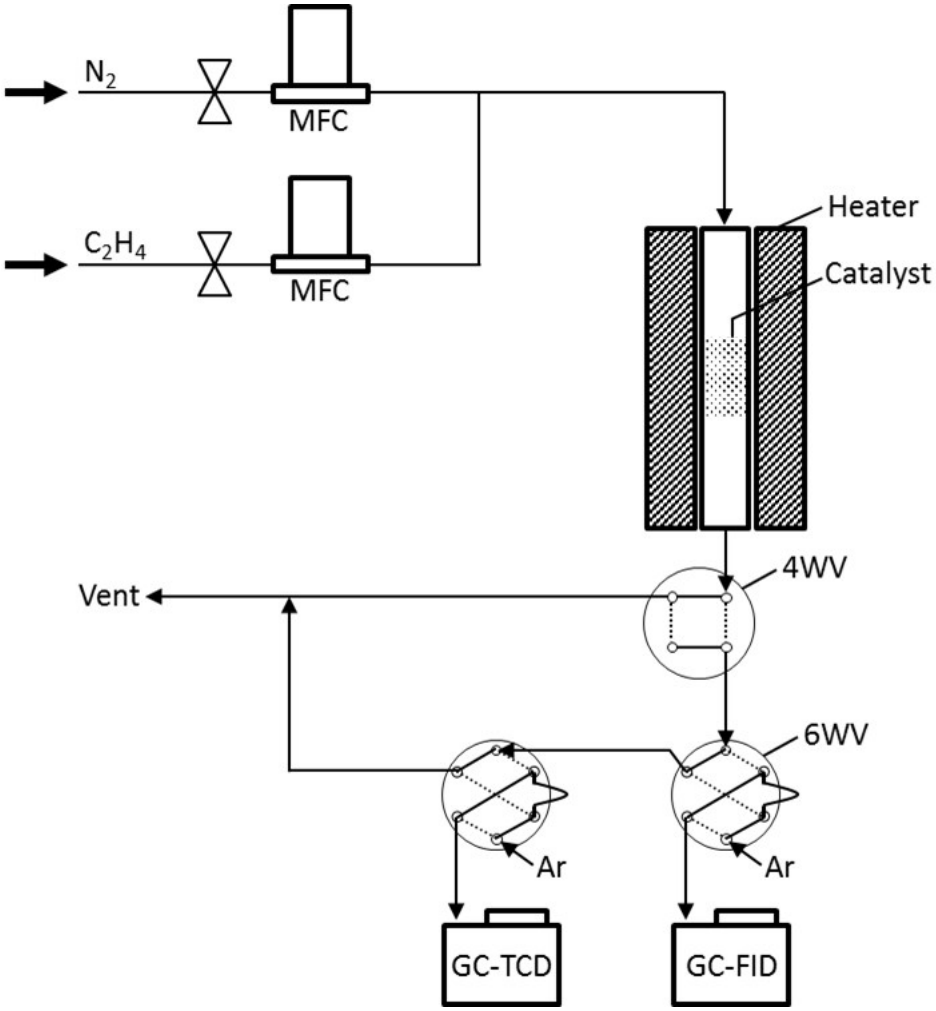

Figure S1. Illustration of setup of fixed-bed flow reactor for ethylene conversion. MFC, 4WV, 6WV, GC-FID, and GC-TCD indicate mass flow controller, four-way valve, six-way valve, gas chromatography with thermal conductivity detector, and gas chromatography with flame ionization detector, respectively.

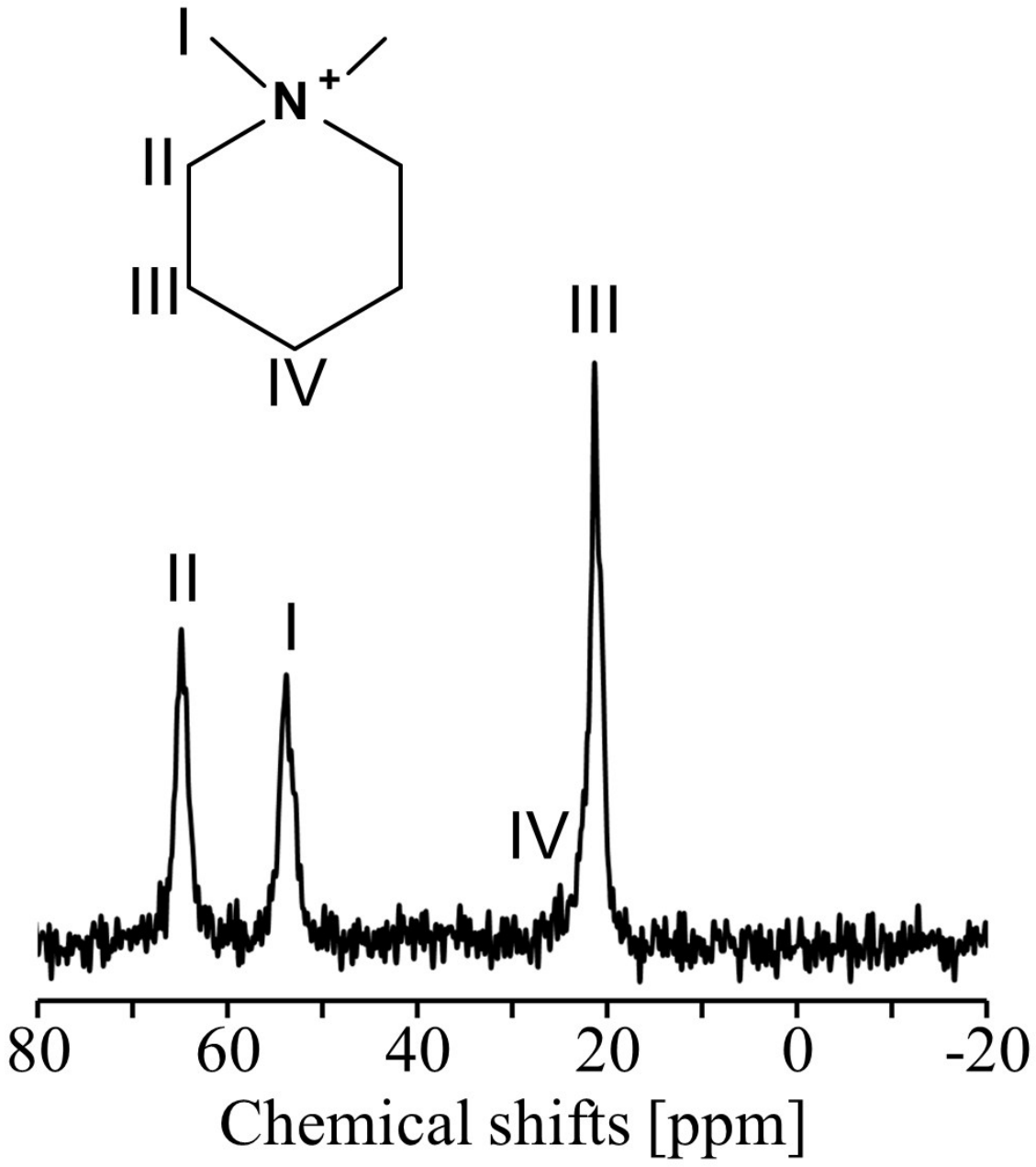

Figure S2. ^{13}C CP MAS NMR spectrum of as-synthesized LEV zeolite obtained from FAU zeolite in the presence of DMPOH (sample no. 5).

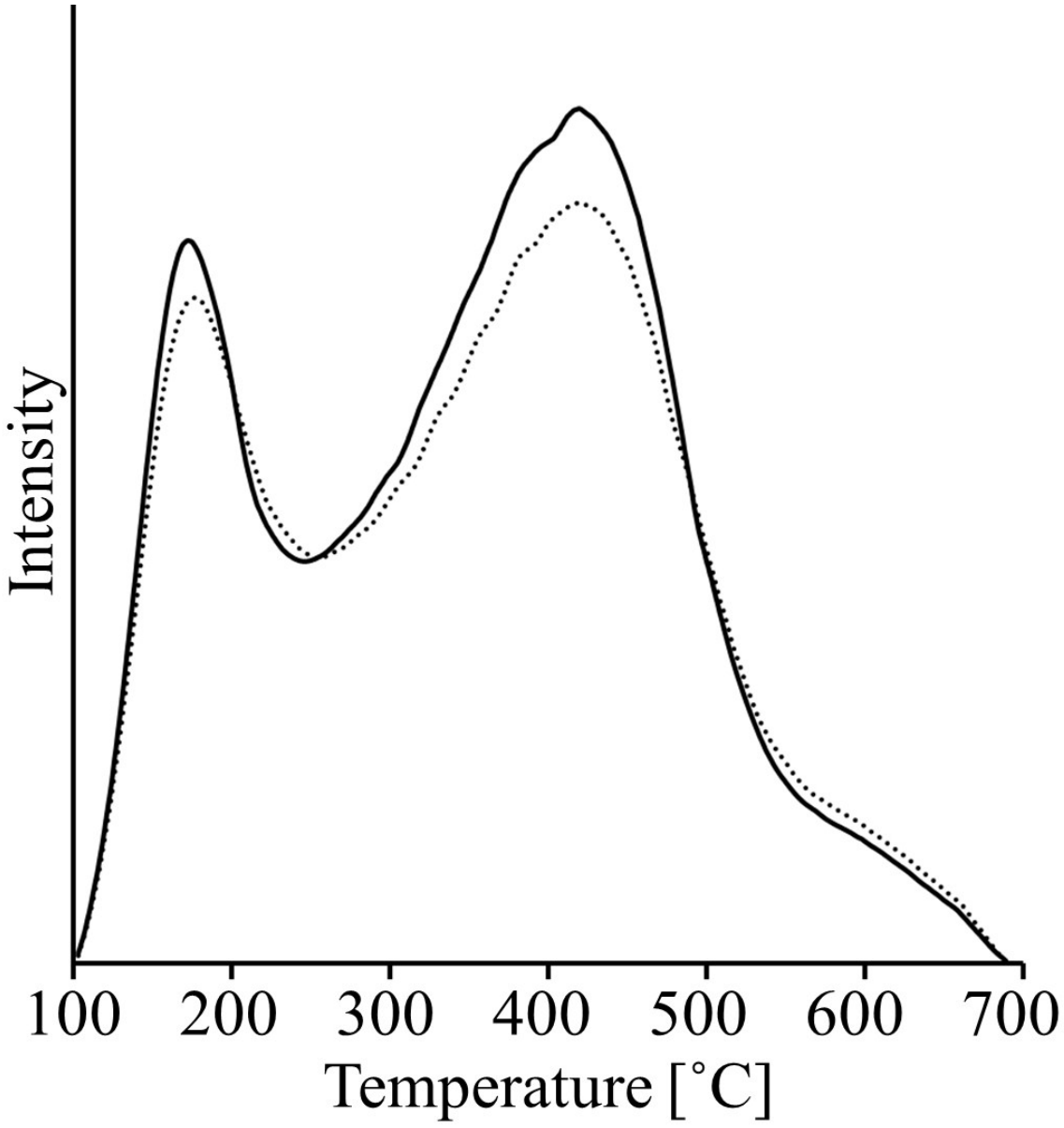

Figure S3. NH_3-TPD curves of LEV zeolites (H-form) obtained from FAU zeolite in the presence of (solid line) DMPOH (sample no. 5) and (dotted line) cholineOH (sample no. 11).

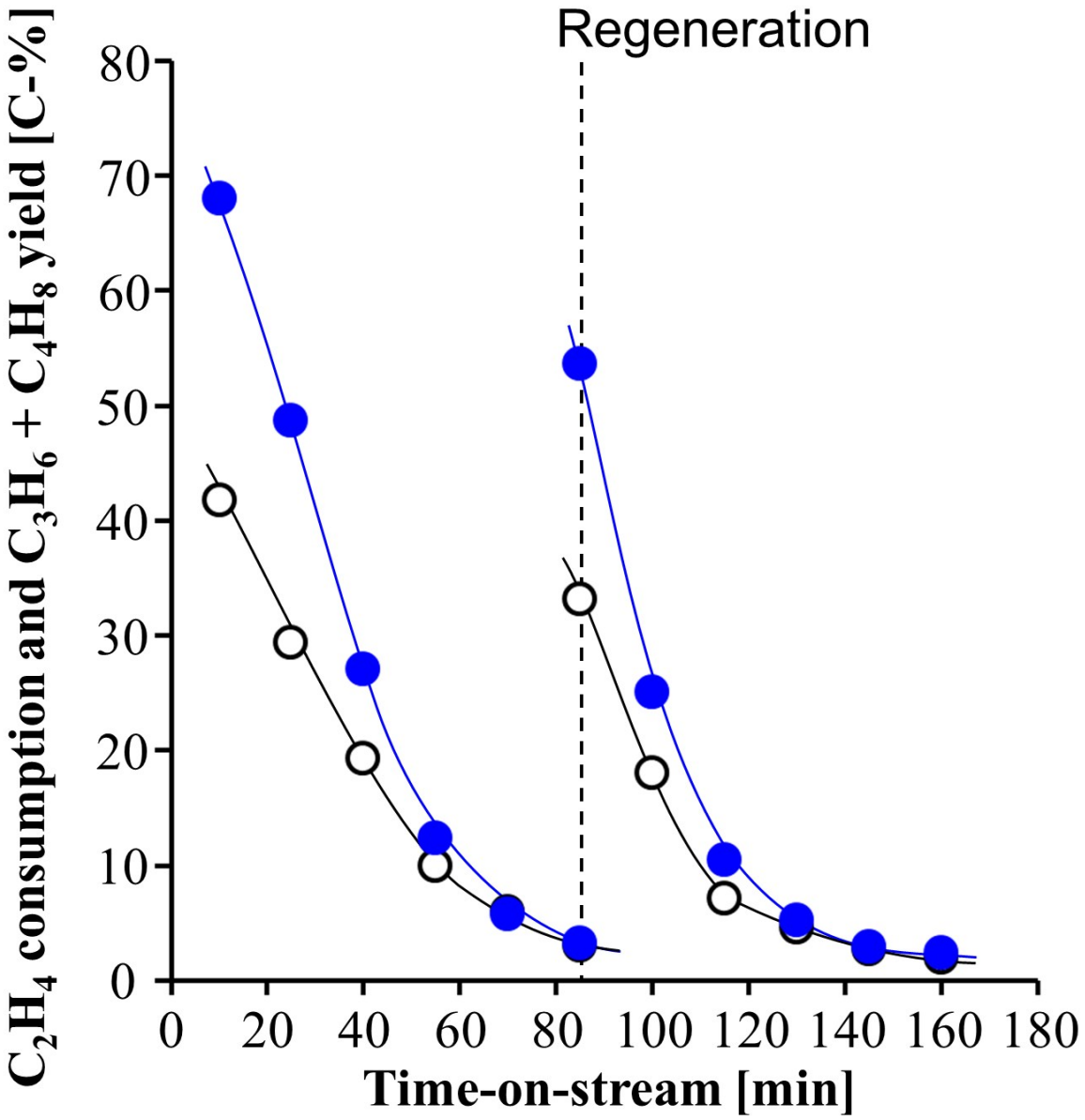

Figure S4. Time-on-stream of (●) C_2H_4 consumption and (○) C_3H_6 + C_4H_8 yield for ethylene conversion over nanosized LEV zeolite (H-form) obtained from FAU zeolite in the presence of DMPOH through catalyst regeneration (calcination at 500 °C for 10h).