

Supporting Information for :

Synthesis of Al-incorporated sulfated zirconia with improved and stabilized
surface sulfur species for removal of trace olefins from aromatics

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Supplementary Figures:

Figure S1. Relationship between surface S concentration and Brønsted acidity and with the
ratio of total B/total L in the catalysts.

Figure S2. The mass spectra of reaction products (a. 16.392, b. 16.506, c. 16.817min).

Figure S3. Hourly conversion of olefins from aromatics upon SZ, Al_x-SZ and different
commercial solid acid catalysts.

Figure S4. FT-IR spectra of Al_{2.50}-SZ-R5 (activated) and SZ-R2 (activated) after pyridine
adsorption at 80 °C and desorption at (a) 200 °C; and (b) 450 °C.

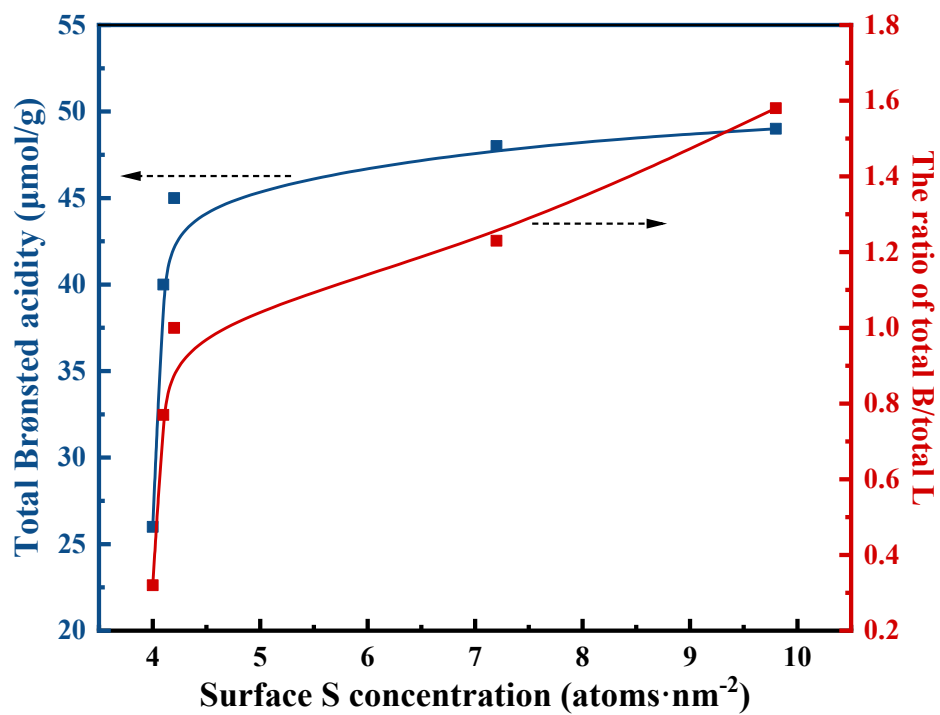


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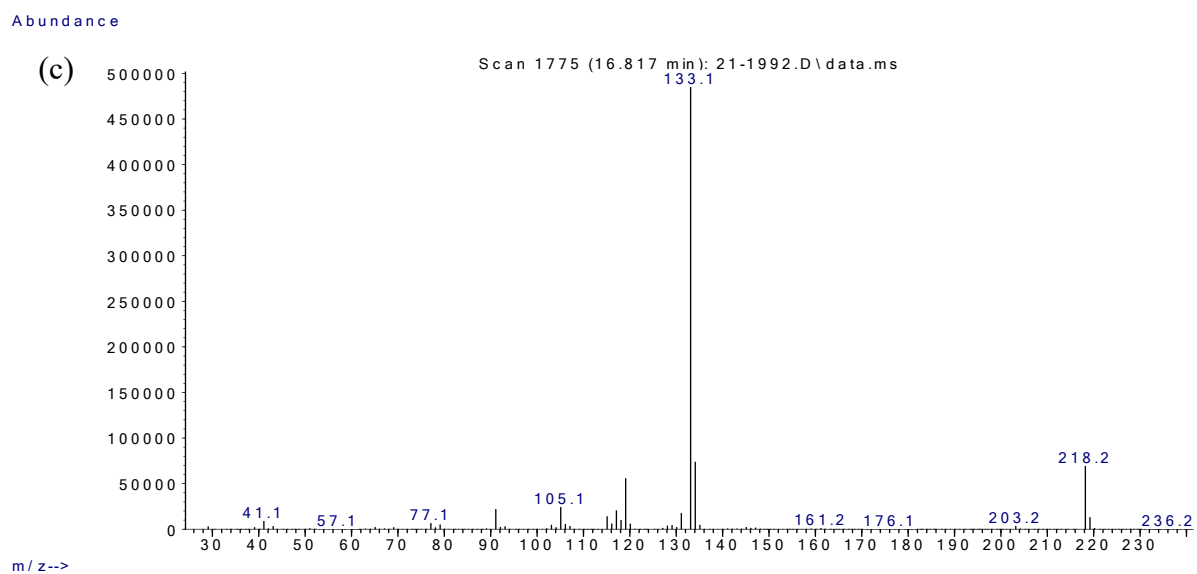
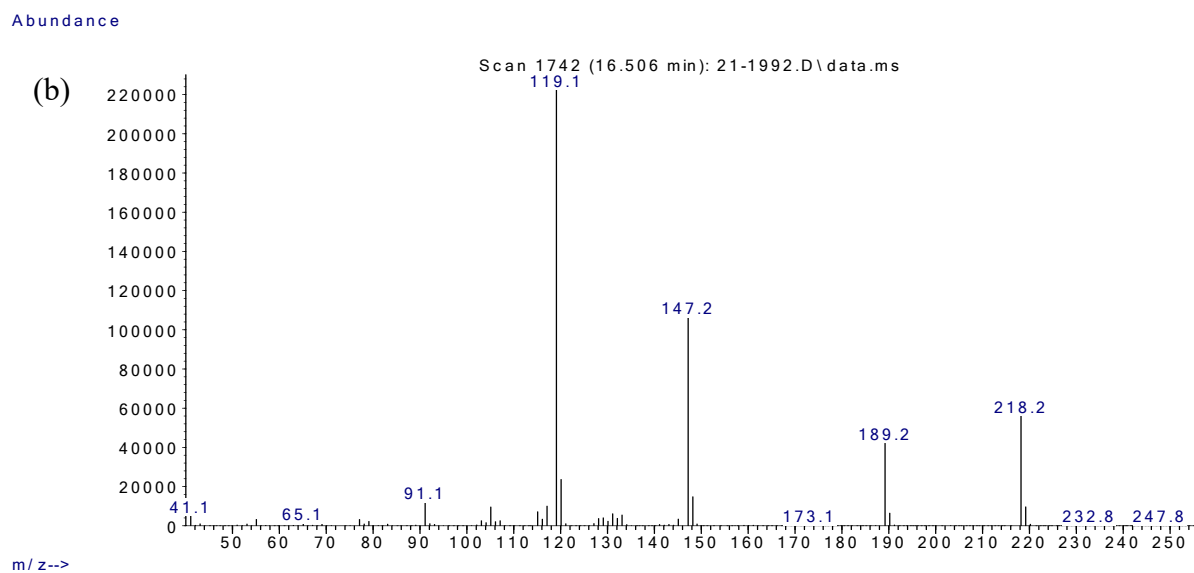
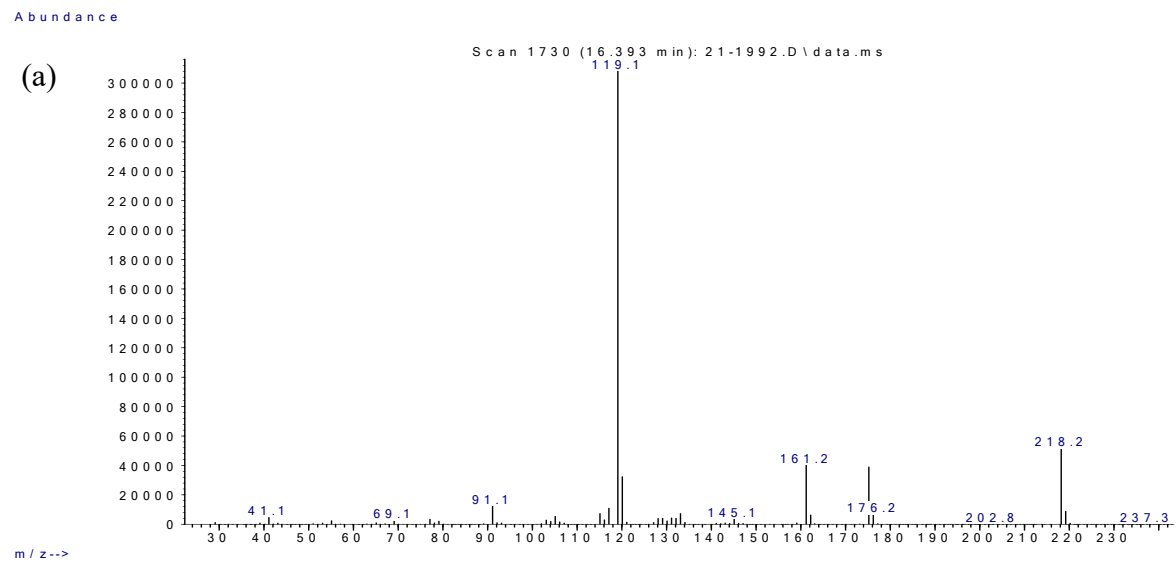


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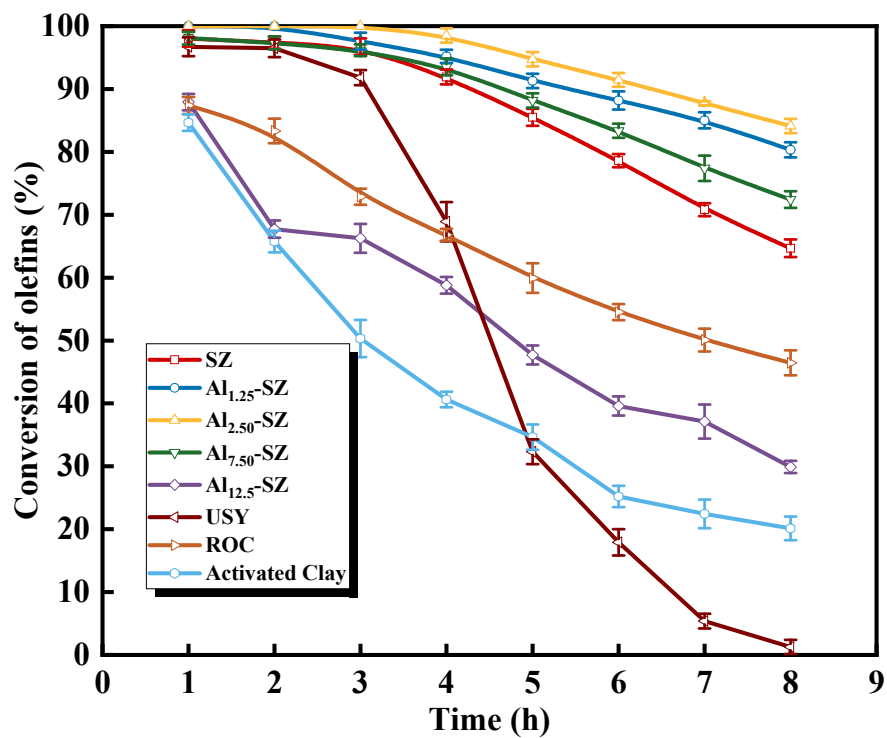


Figure S3. Hourly conversion of olefins from aromatics upon SZ, Al_x-SZ and different commercial solid acid catalysts.

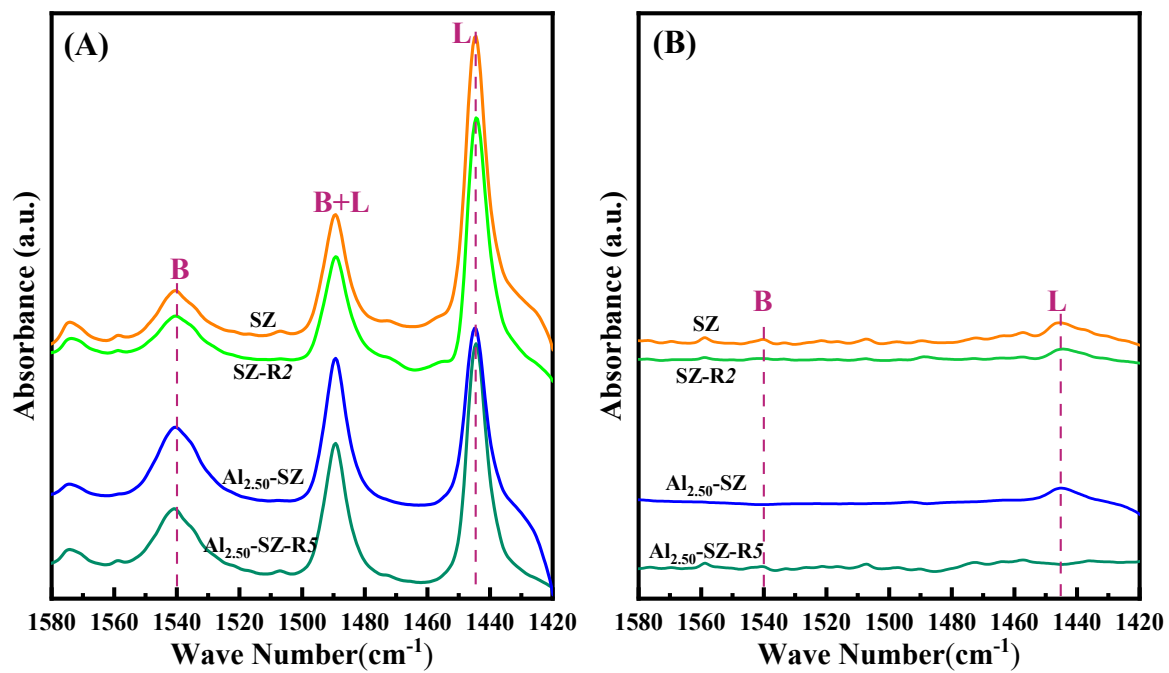


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