

Supplementary Materials

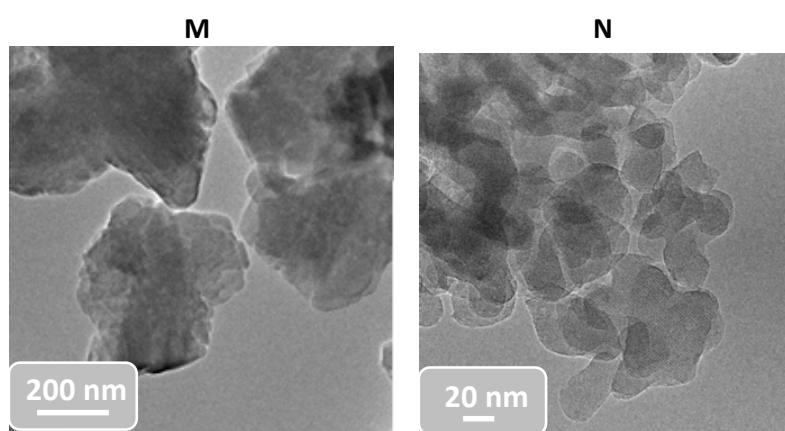
# Transformation of Dilute Ethylene at High Temperature on Micro- and Nano-Sized H-ZSM-5 Zeolites

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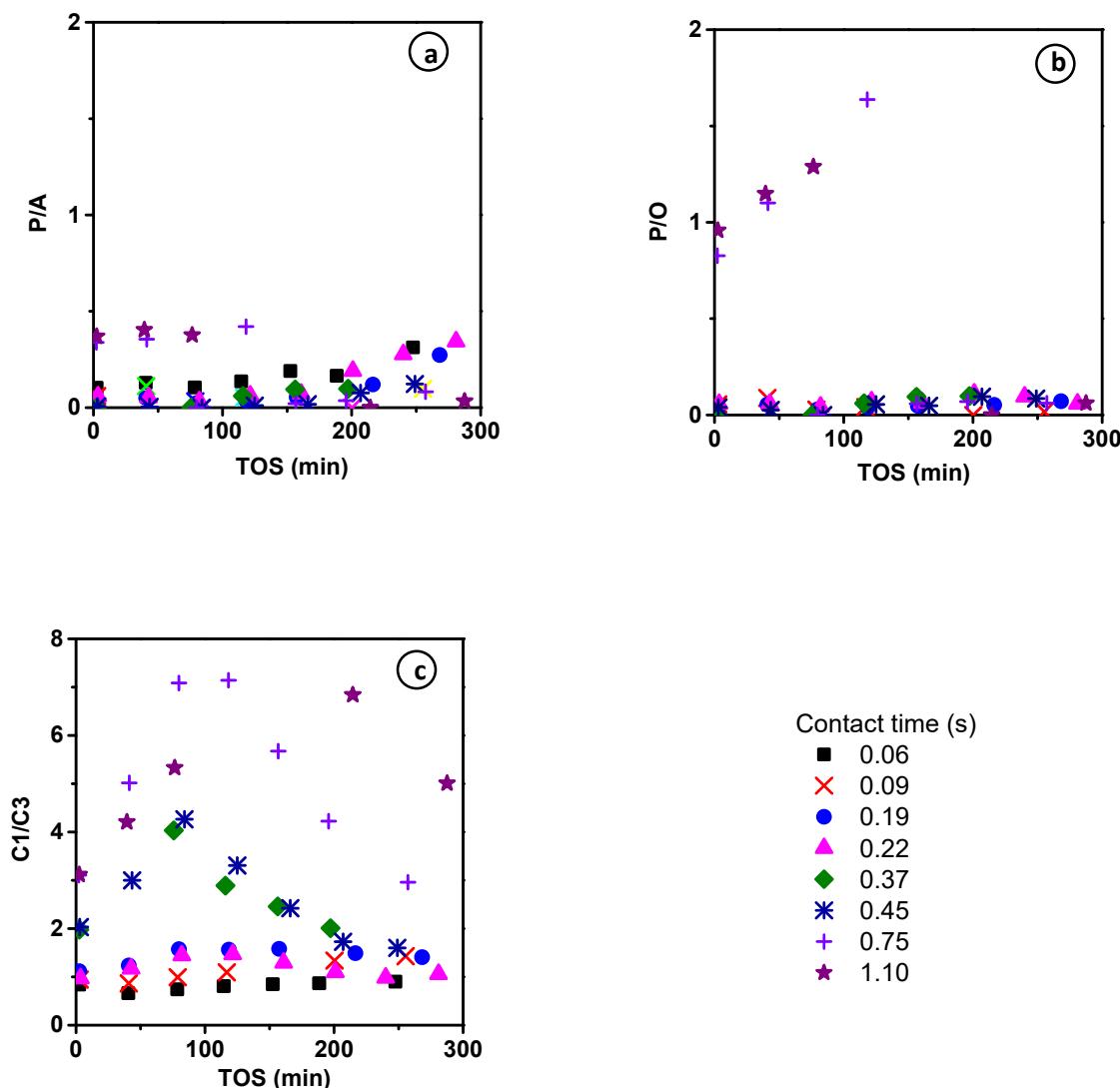
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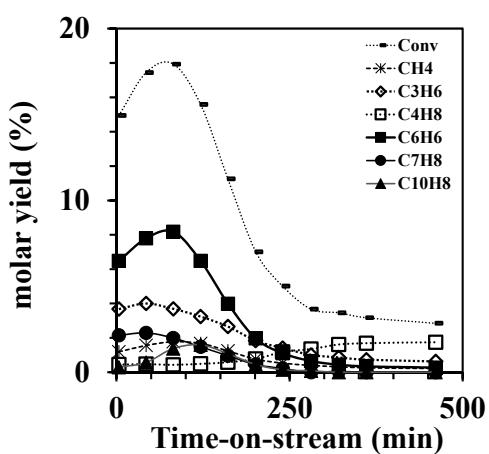
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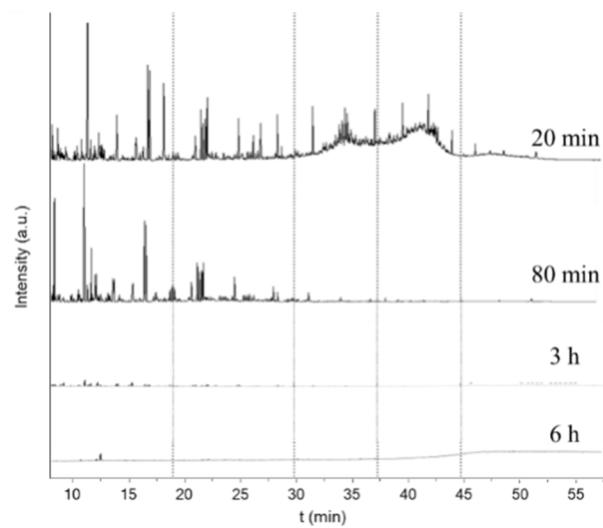
**Figure S1.** Transmission electron microscopy (TEM) images of the micro- (M) and nano-sized (N) H-ZSM-5 zeolites.



**Figure S2.** Evolution of the different molar ratio of products as a function of time on stream at different contact times: (a) the ratio aromatic/olefin, (b) the ratio paraffin/olefin and (c) the ratio methane/propylene.



**Figure S3.** Ethylene transformation at 700 °C and a contact time of 0.45 s as function of time-on-stream, for the micro-sized H-ZSM-5 zeolite (M).



**Figure S4.** Evolution of mass spectrum of soluble coke extracted after running for different reaction times.