

Supplementary Materials: Zeolite Supported Ionic Liquid Catalysts for the Hydrochlorination of Acetylene

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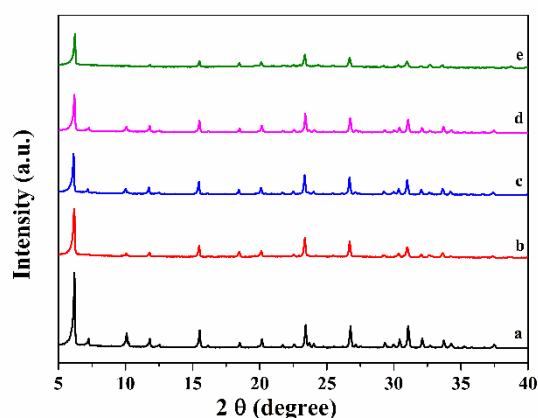


Figure S1. X-ray diffraction patterns (XRD) patterns of CaX as a function of the amount of Ca loading: a) CaX, b) CaX-1.46 wt % Ca, c) CaX-3.11 wt % Ca, d) CaX-5.19 wt % Ca, and e) CaX-8.04 wt % Ca.

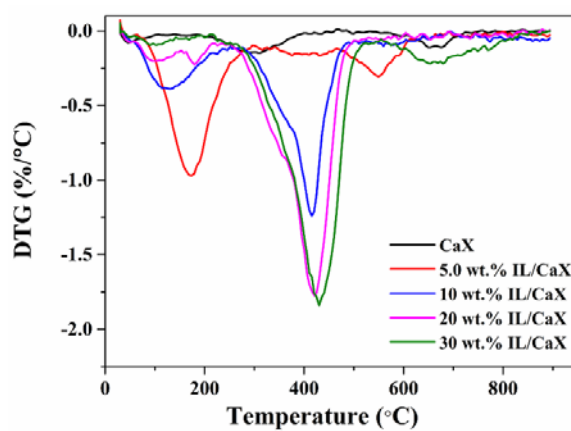


Figure S2. The decomposition temperature of [Emim][BF₄] with different amounts of supporting IL.

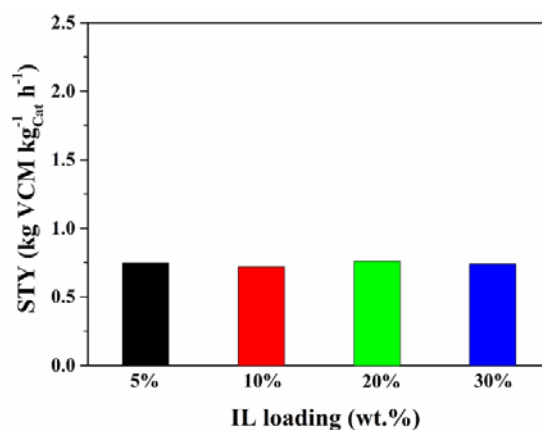
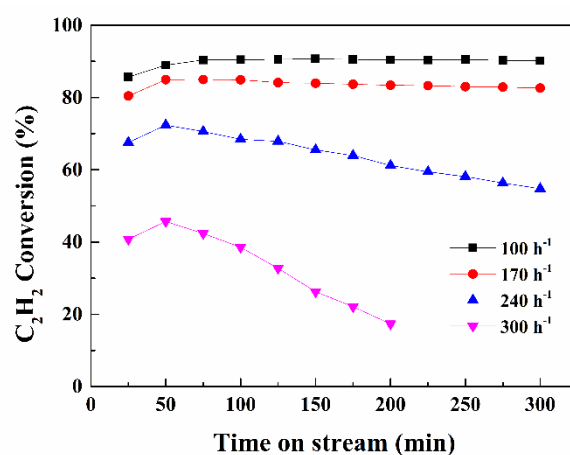
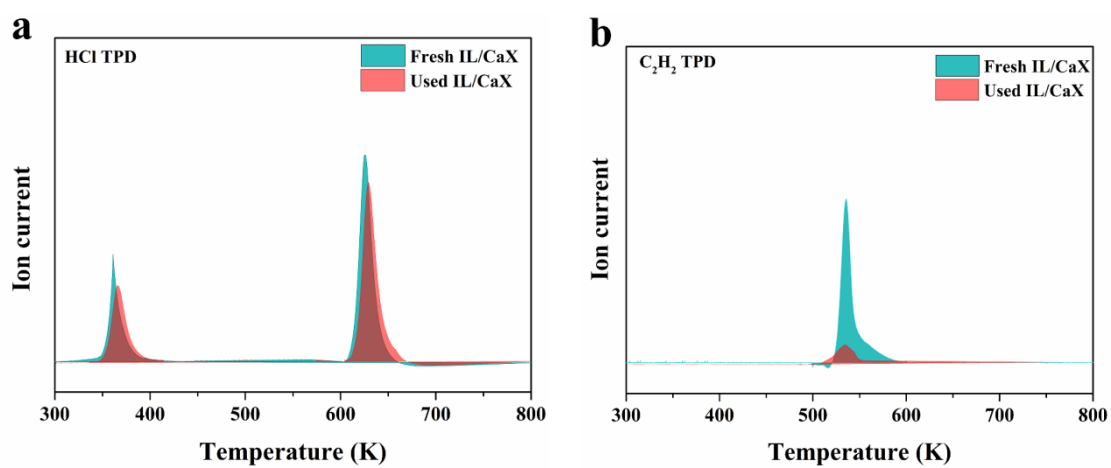


Figure S3. Space-time yields of vinyl chloride (VCM) with different supporting ILs catalysts.**Figure S4.** Catalytic performance as functions of different GHSV (C₂H₂) for IL/CaX. Reaction conditions: 320 °C; V(HCl)/V(C₂H₂) = 1.2.**Figure S5.** TPD-MS profiles of HCl and C₂H₂ on the fresh and used IL/CaX catalysts.