

SUPPORTING INFORMATION:

Isothermogravimetric Determination of the Enthalpies of Vaporization of 1-Alkyl-3-methylimidazolium Ionic Liquids

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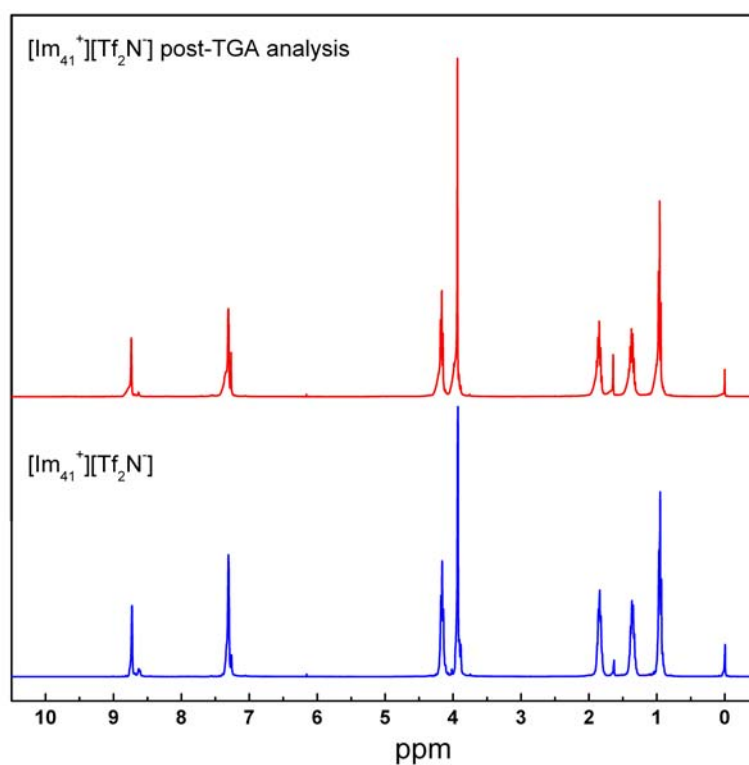


Figure S1. ¹H NMR spectrum of [Im₄₁⁺][Tf₂N⁻] before (lower) and after (upper) conducting the TGA analysis represented in Figure 1.

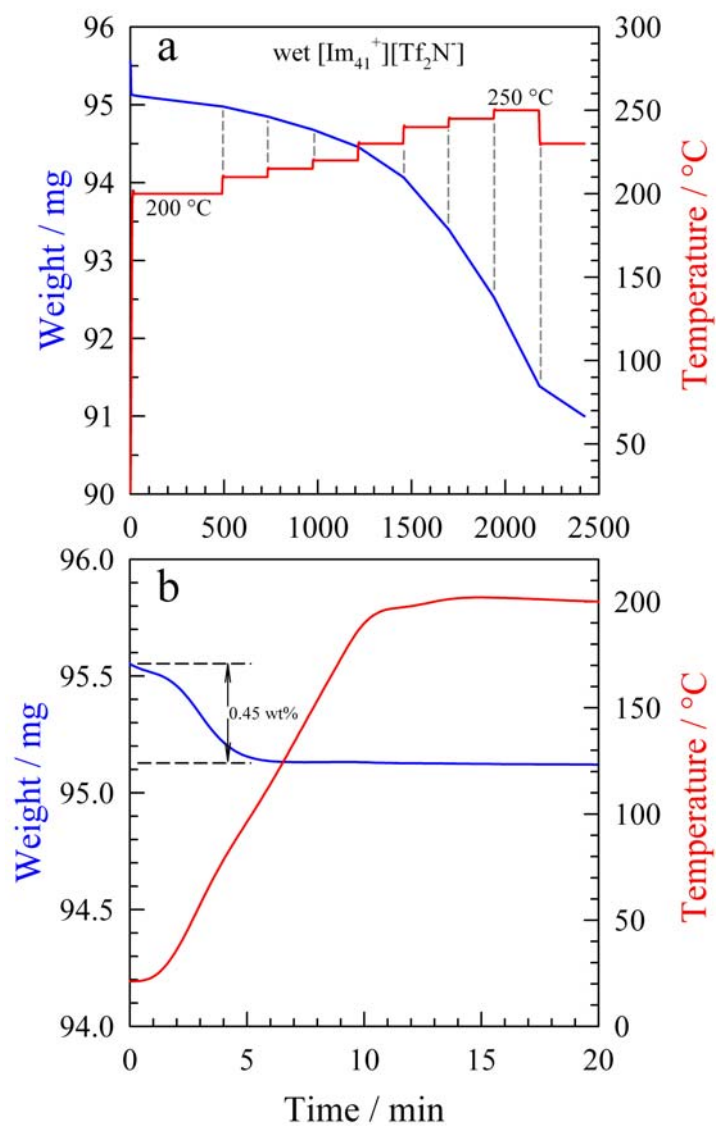


Figure S2. Step-programmed TGA analysis of "wet" $[\text{Im}_{41}^+][\text{Tf}_2\text{N}^-]$; see text for details. In panel b, rapid loss of water is clearly evident at early times, this step being essentially complete at $T \sim 120$ $^{\circ}\text{C}$.

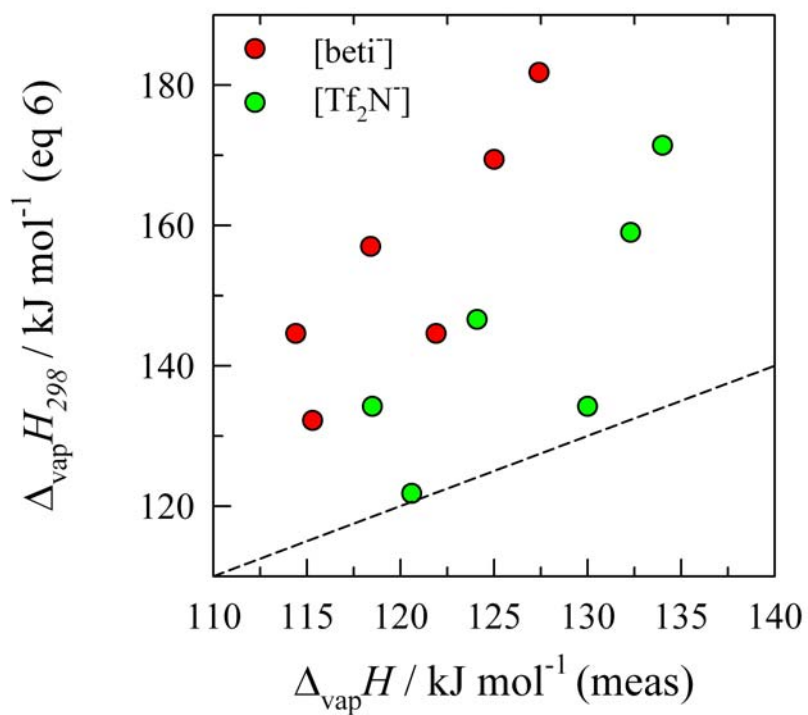


Figure S3. Plot illustrating the larger gap between the predicted $\Delta_{\text{vap}}H_{298}$ according to eq 6 (classification of effective atoms by kind: C, O, N, F, S) and the experimentally observed heats of vaporization for ILs from the [beti⁻] series. The dashed line represents perfect agreement between prediction and experiment.