

SUPPLEMENTARY INFORMATION

Imidazolium-based ionic liquids immobilized on solid supports: effect on the structure and thermostability

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Figures

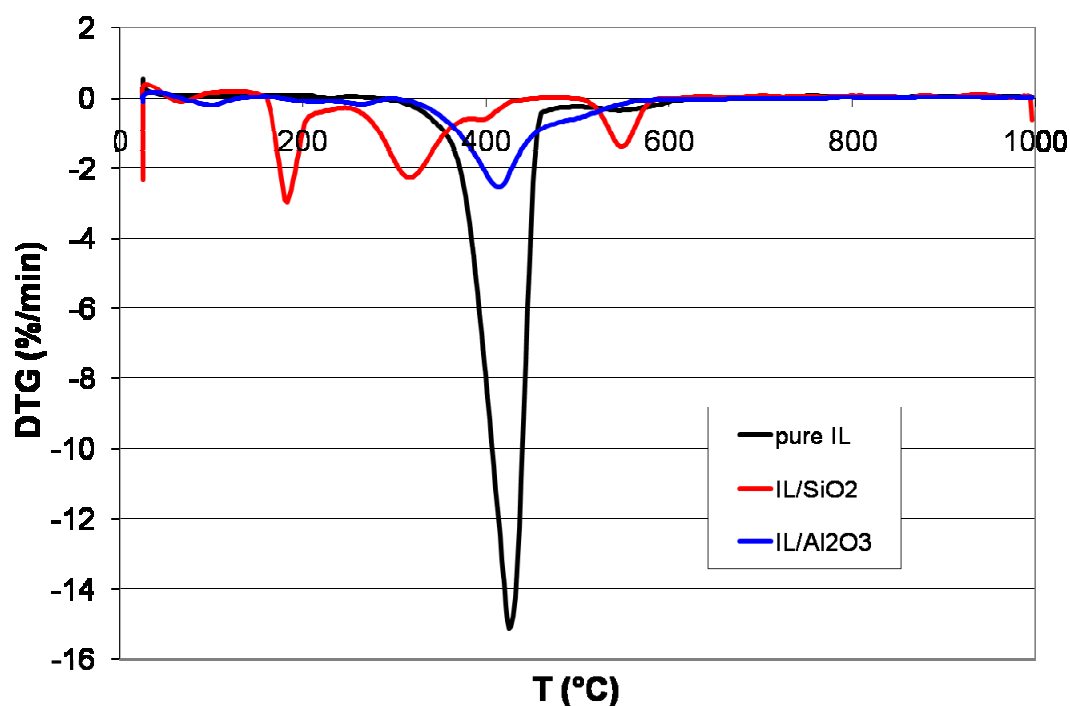


Figure S1. Differential thermal gravimetric analyses of neat [BMI][PF₆] (black), [BMI][PF₆]/SiO₂ (red) and [BMI][PF₆]/Al₂O₃ (blue).

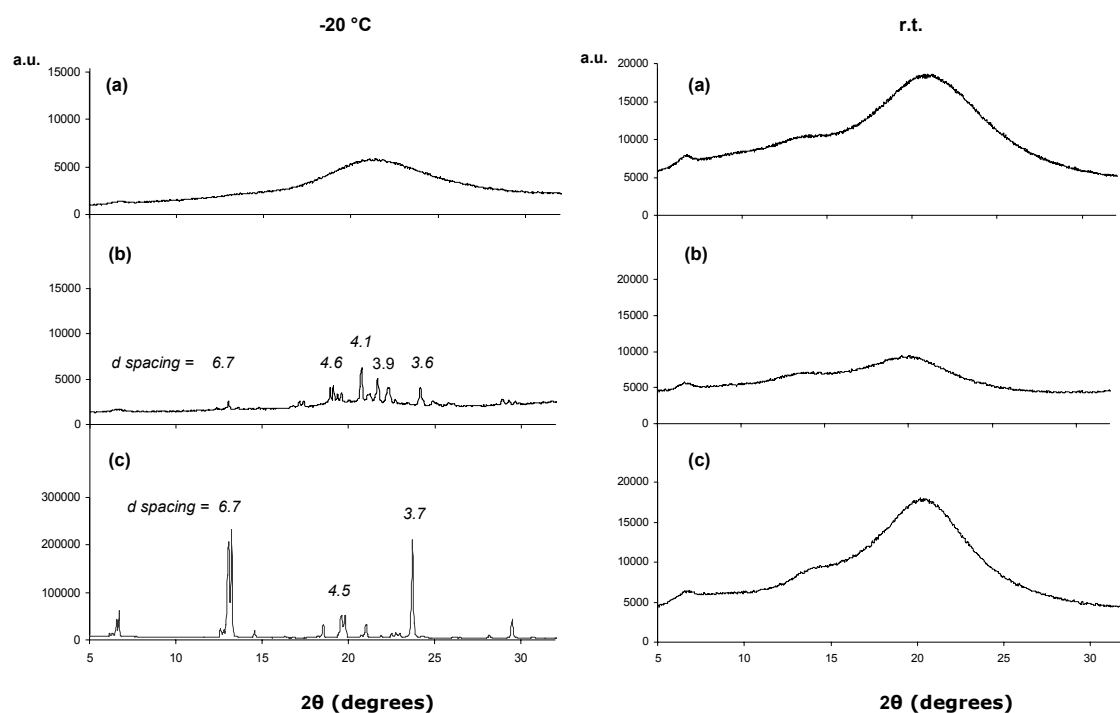


Figure S2. XRD diffractograms at – 20 °C (left) and room temperature (right) for: [BMI][PF₆]/SiO₂ (a), [BMI][PF₆]/Al₂O₃ (b) and [BMI][PF₆] (c).

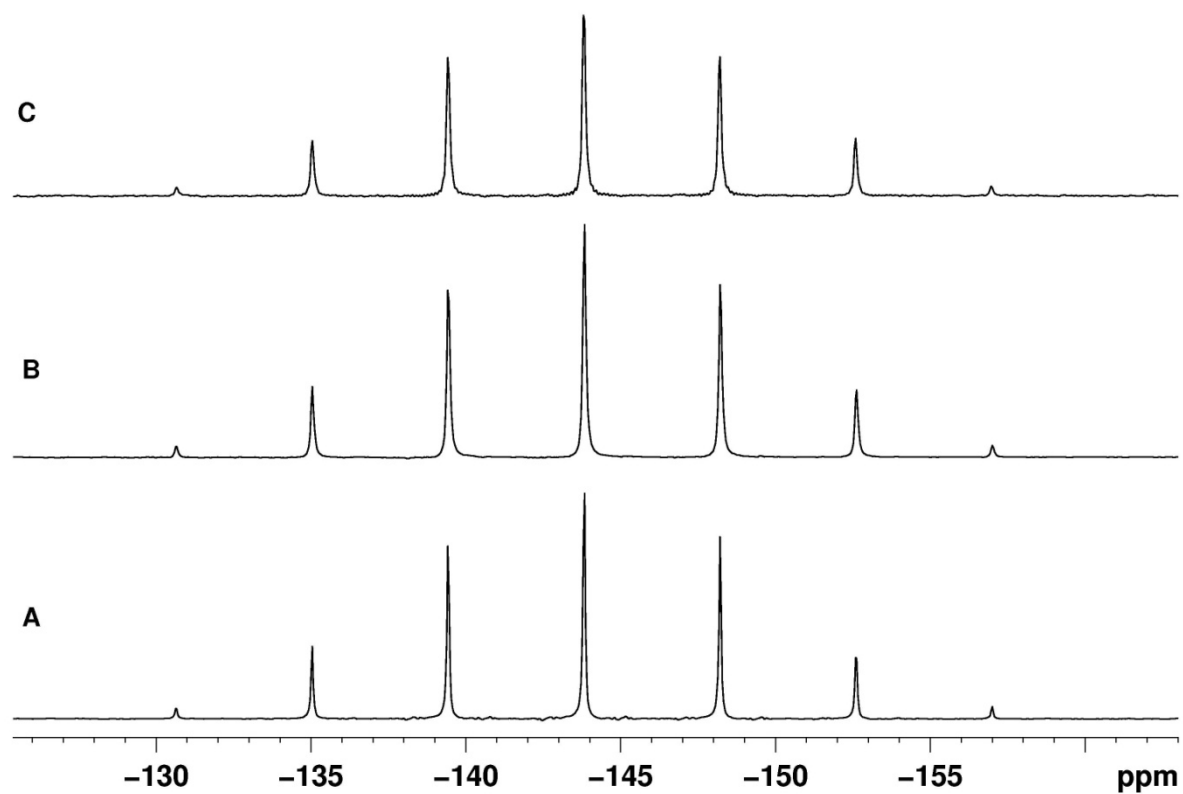


Figure S3. $^{31}\text{P}\{^1\text{H}\}$ MAS NMR spectra of $[\text{BMI}][\text{PF}_6]$ (**A**), $[\text{BMI}][\text{PF}_6]/\text{Al}_2\text{O}_3$ (**B**) and $[\text{BMI}][\text{PF}_6]/\text{SiO}_2$ (**C**)

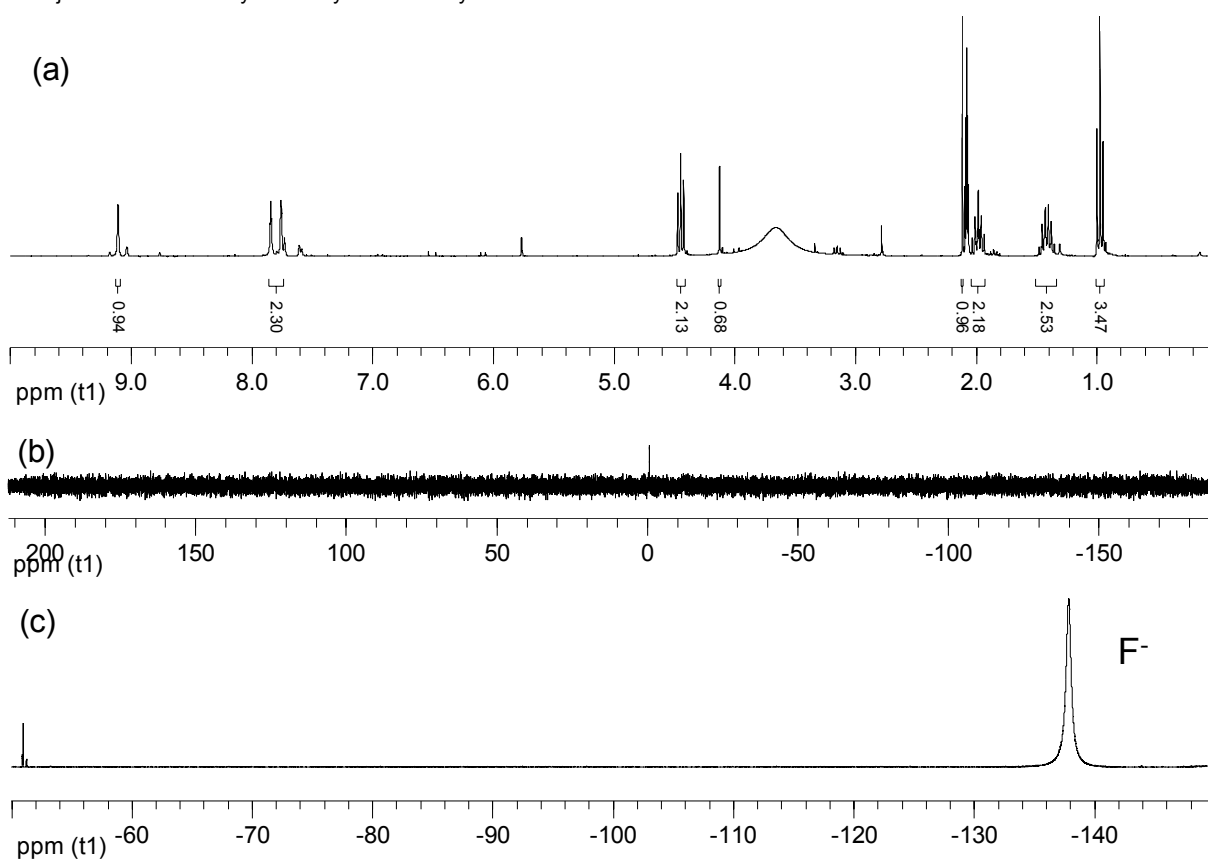


Figure S4. ^1H (a), ^{31}P (b) and ^{19}F (c) NMR spectra (acetone- d_6) of distilled compound of $[\text{BMI}][\text{PF}_6]/\text{SiO}_2$.

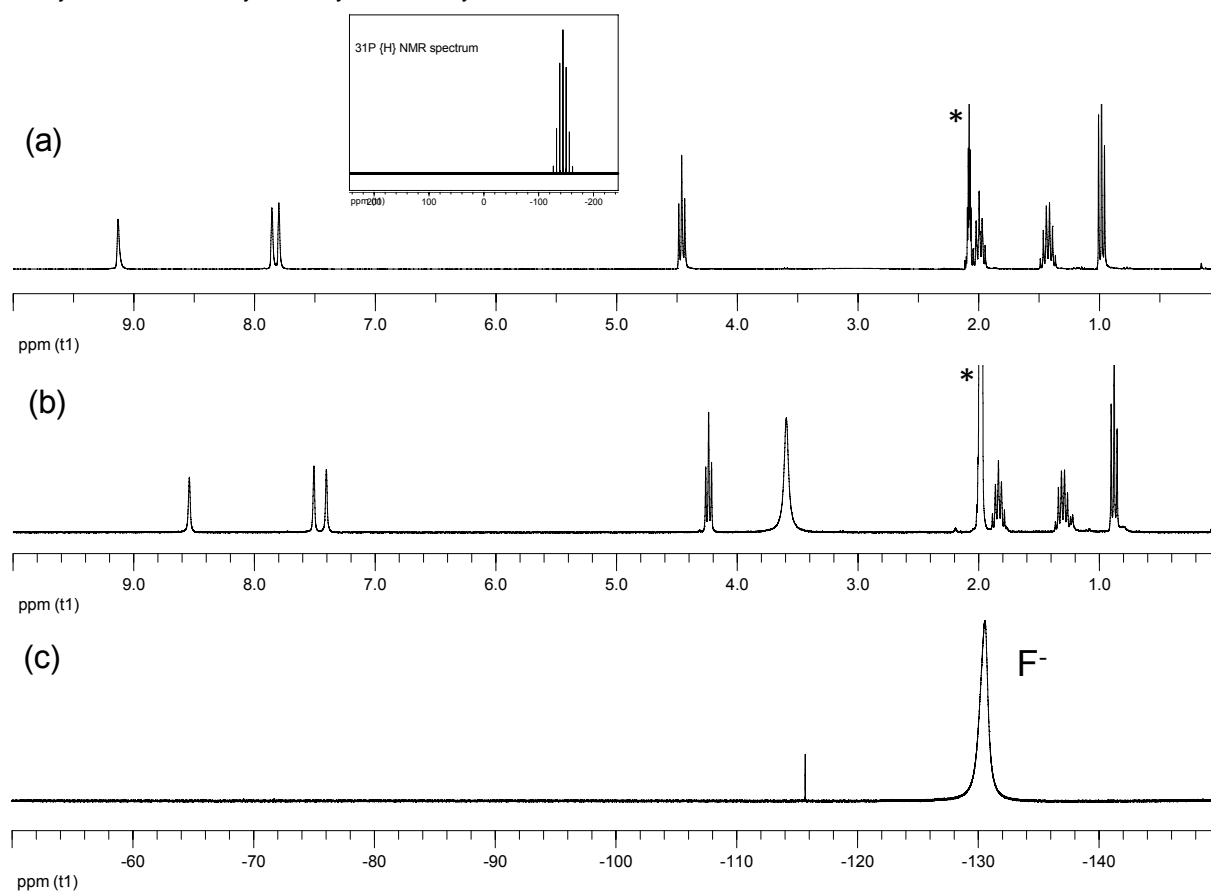


Figure S5. ^1H (300 MHz, acetone- d_6) and ^{31}P (121 MHz) NMR spectra of neat $[\text{BI}][\text{PF}_6]$ (a). ^1H and ^{19}F (282 MHz) NMR spectra of distilled compound of $[\text{BI}][\text{PF}_6]/\text{SiO}_2$ (b and c, respectively); no signals were observed in ^{31}P NMR spectrum. * Denotes solvent signal.