Supporting information

Studies on Nitrate Acid Based Imidazolium Ionic Liquids: Synthesis and Application in Desulfurization of Oil

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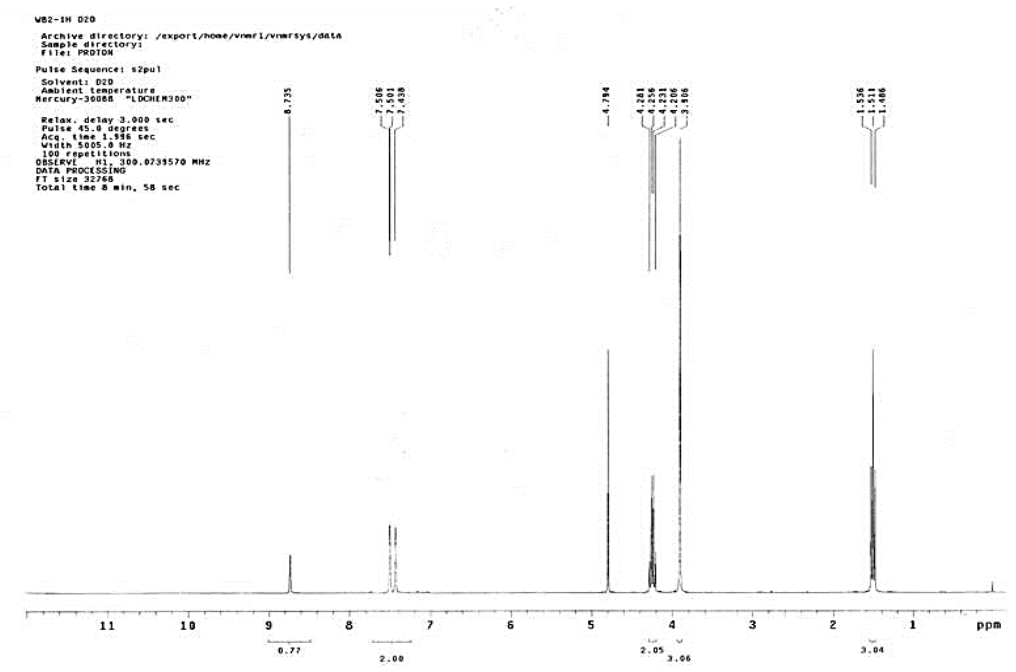


Fig. S1 The ^{1}H-NMR spectrum of [C_2mim]Br

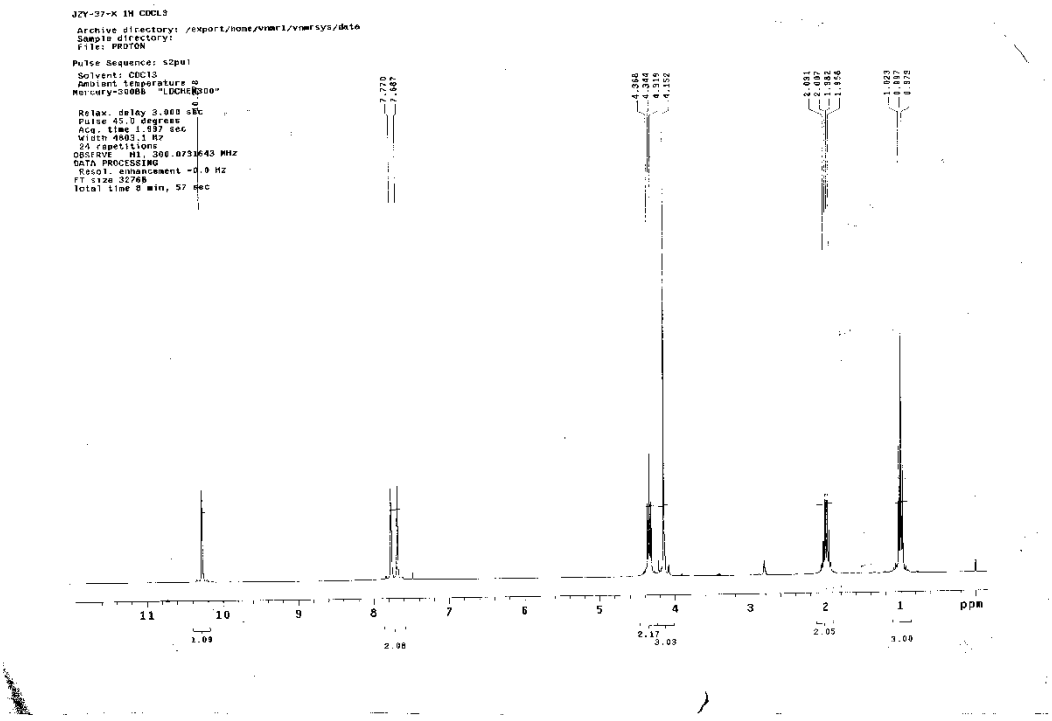


Fig. S2 The ^{1}H-NMR spectrum of [C_3mim]Br

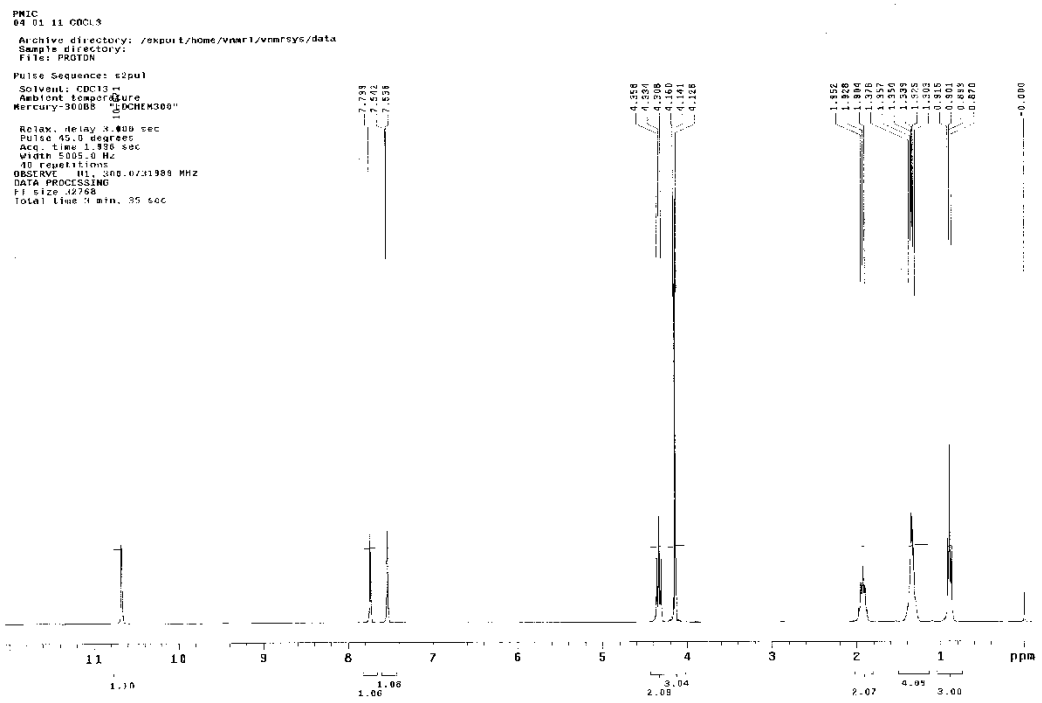


Fig. S3 The ^{1}H-NMR spectrum of [C_5mim]Br

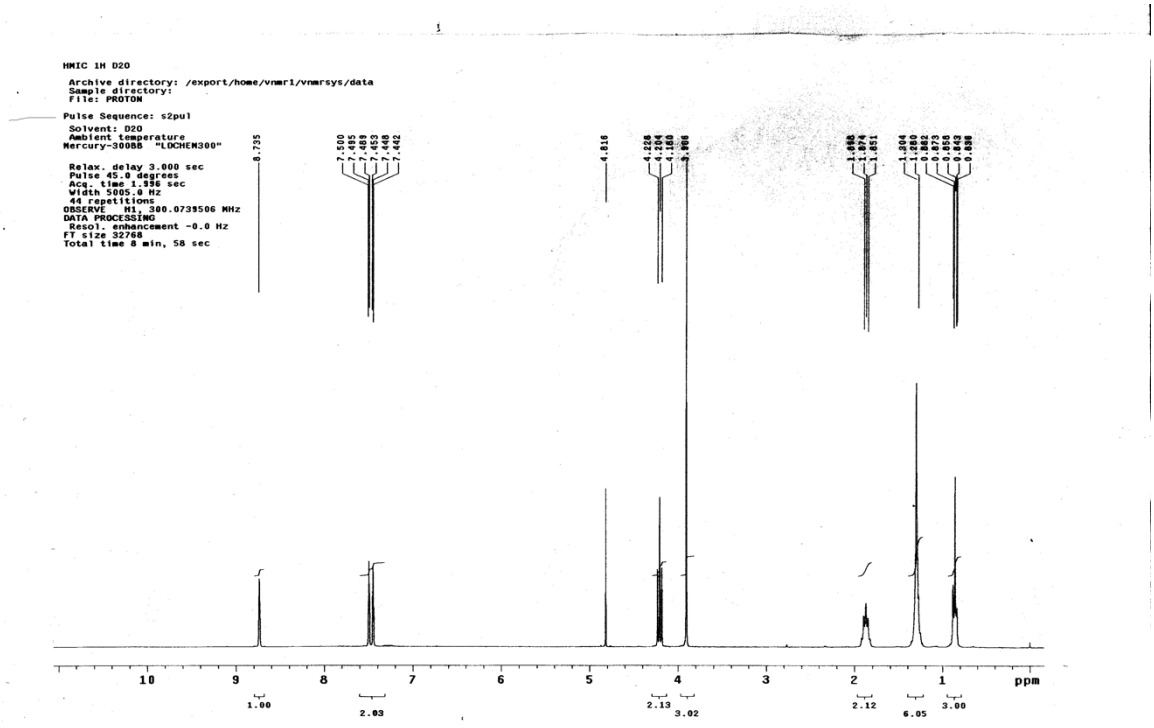


Fig. S4 The ^{1}H-NMR spectrum of [C_6mim]Br

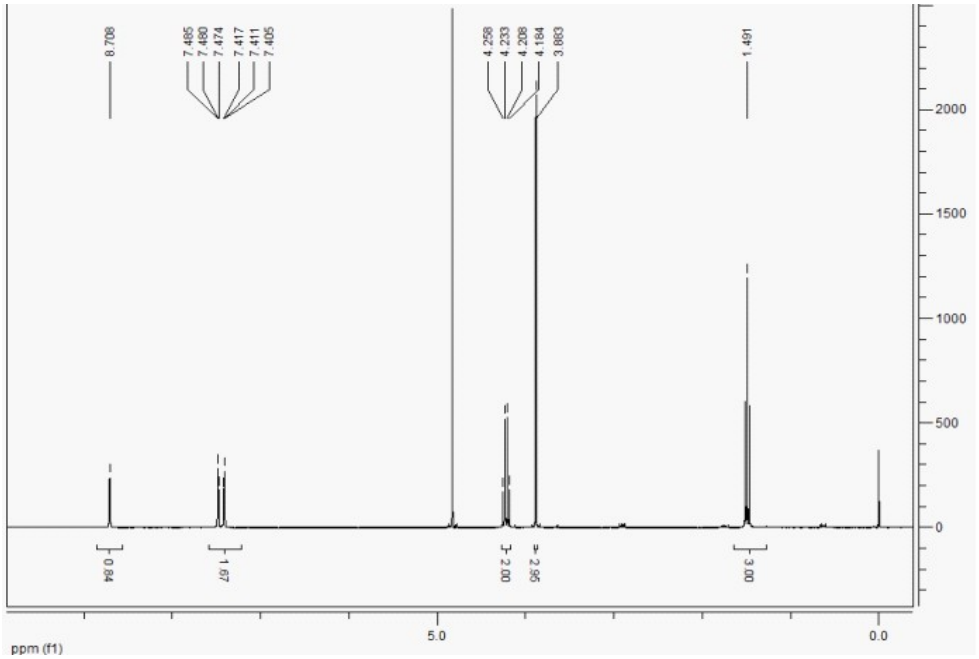


Fig. S5 The ^{1}H-NMR spectrum of $[C_2mim]NO_3$

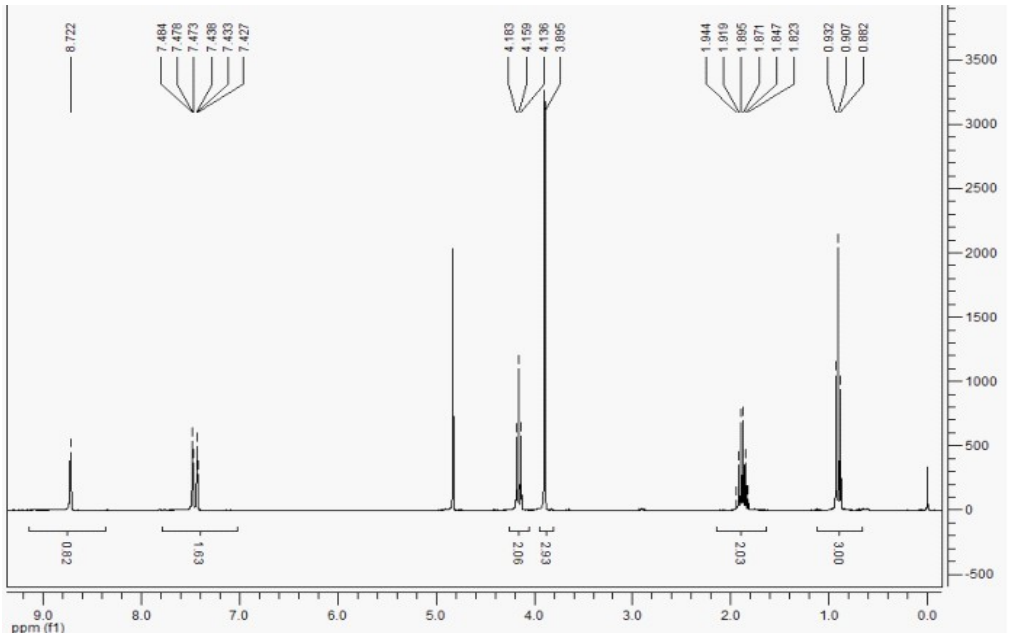


Fig. S6 The ^{1}H-NMR spectrum of $[C_3mim]NO_3$

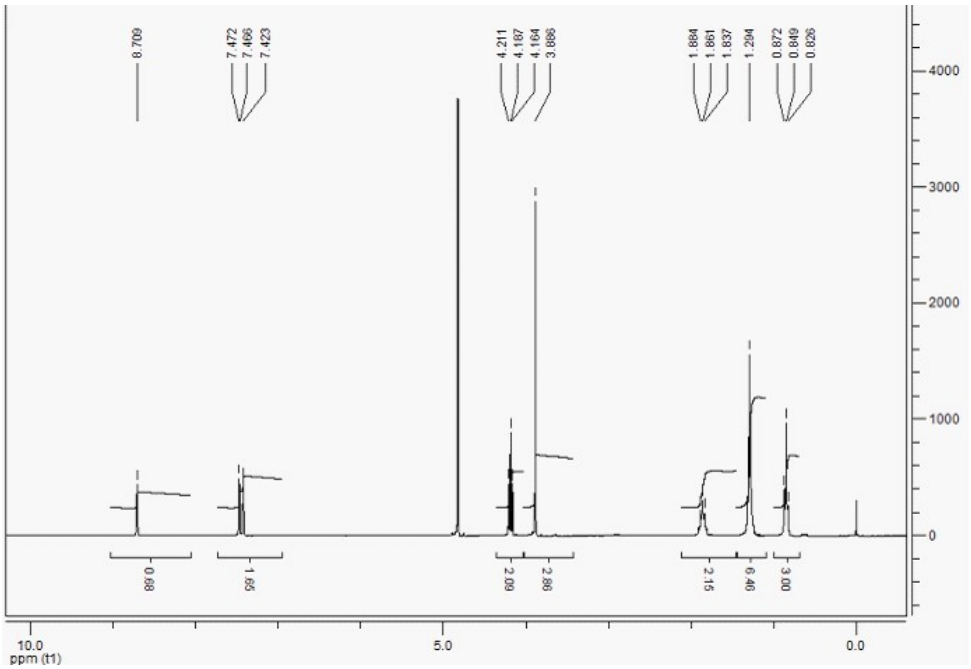


Fig. S7 The ^{1}H-NMR spectrum of $[C_5mim]NO_3$

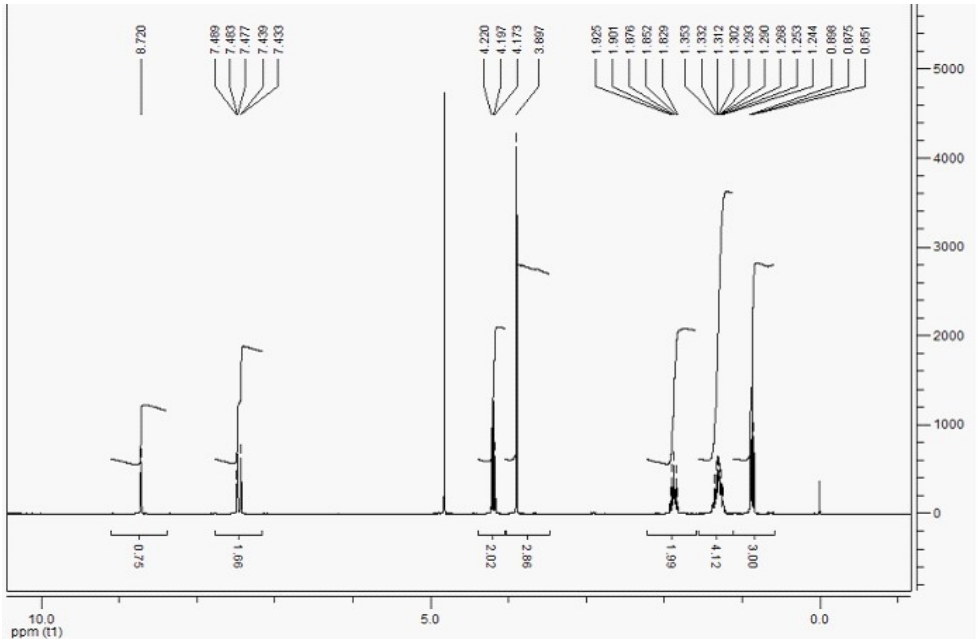


Fig. S8 The ^{1}H-NMR spectrum of $[C_6mim]NO_3$

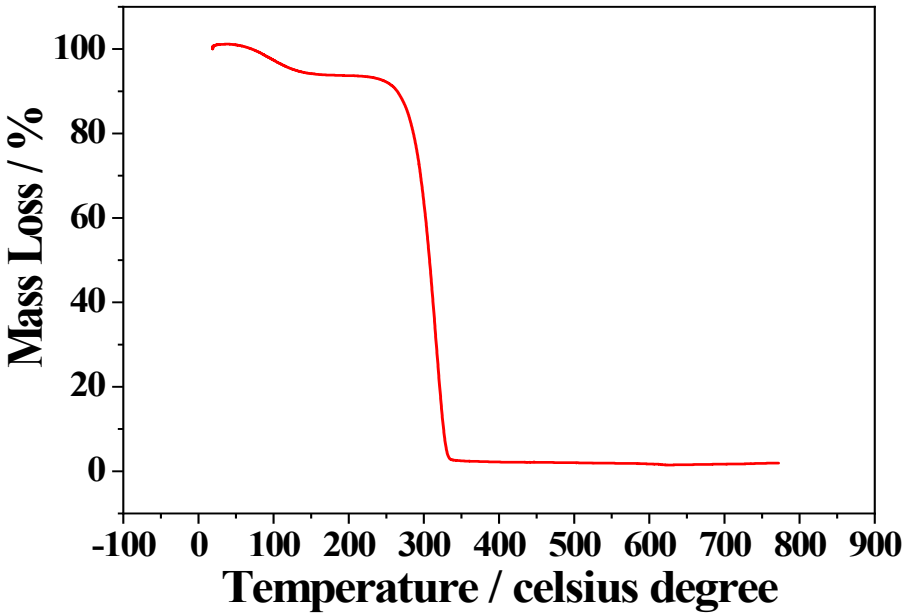


Fig. S9 TGA curves of $[C_2mim]NO_3$ at 10 $K \cdot min^{-1}$ under a nitrogen flow

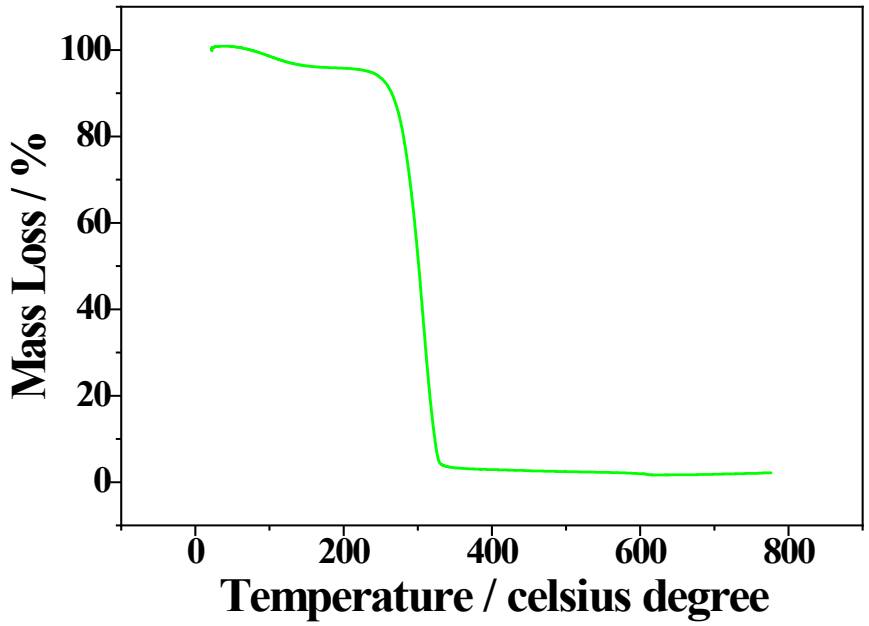


Fig. S10 TGA curves of $[C_3mim]NO_3$ at 10 $K \cdot min^{-1}$ under a nitrogen flow

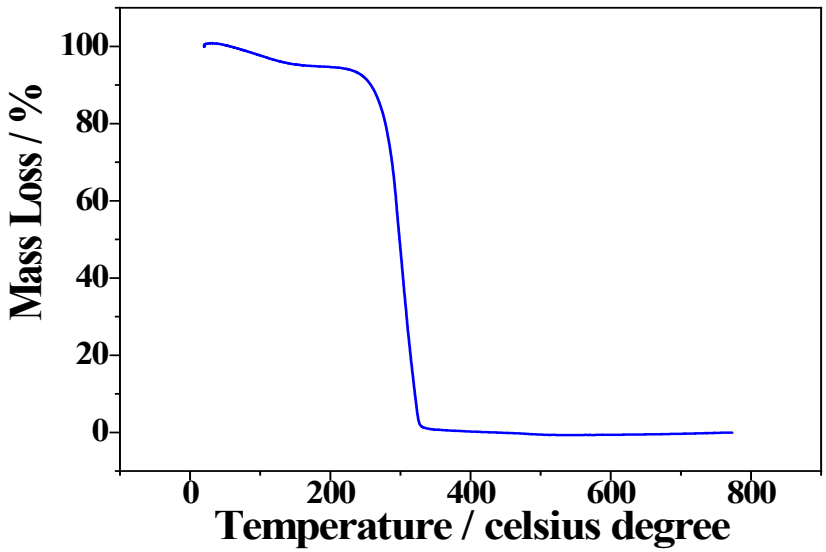


Fig. S11 TGA curves of $[C_5mim]NO_3$ at 10 $K \cdot min^{-1}$ under a nitrogen flow

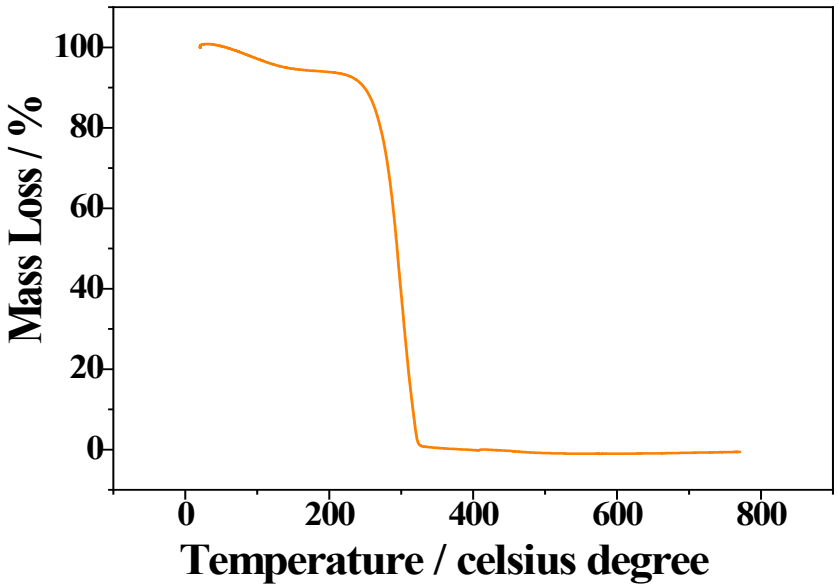
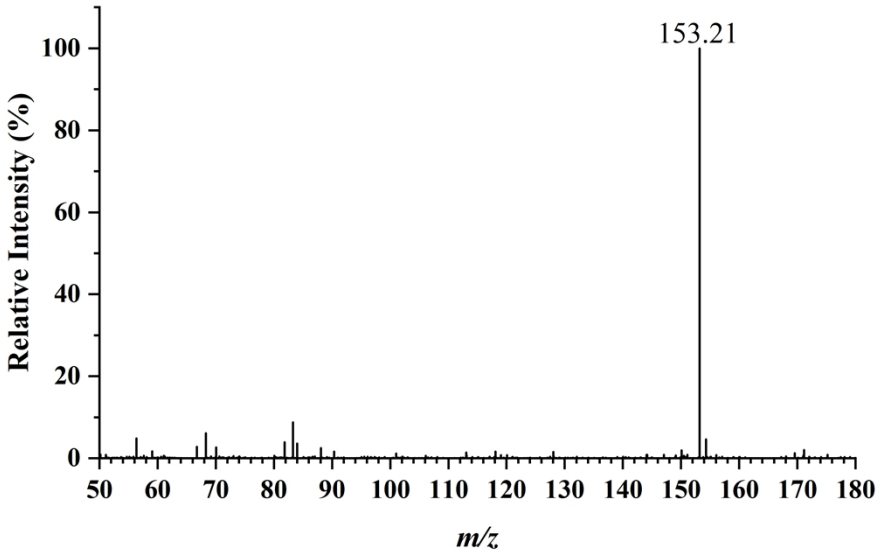


Fig. S12 TGA curves of $[C_6mim]NO_3$ at 10 $K \cdot min^{-1}$ under a nitrogen flow



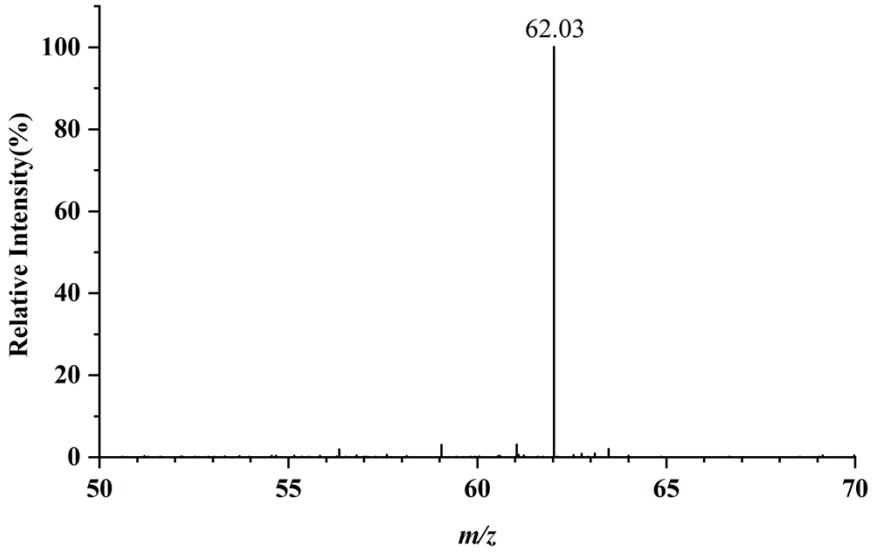


Fig. S13 ESI-MS spectrum of IL [C_5mim][NO_3]

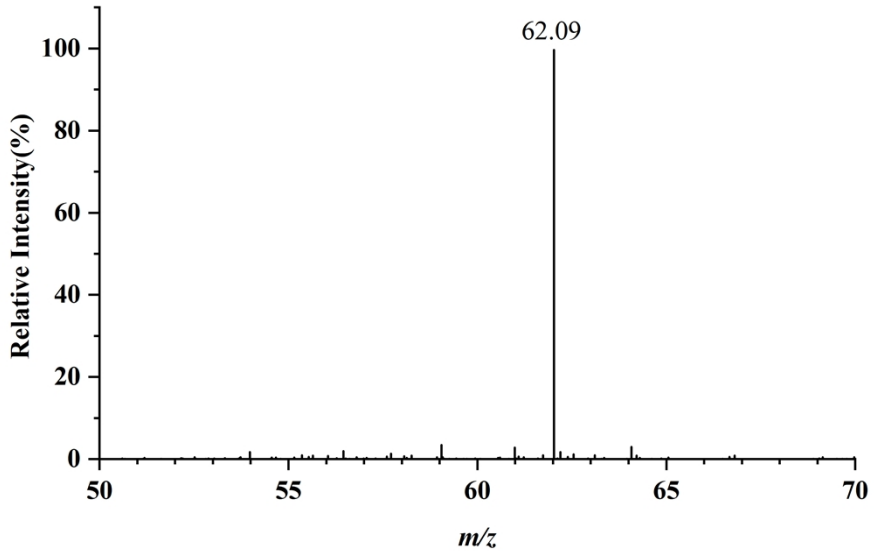


Fig. S14 ESI-MS spectrum of anion NO_3^- of recovered IL $[C_5mim][NO_3]$