



Figure S1. Experimental density data at 298.15 K of the binary systems composed of $[\text{C}_4\text{mim}][\text{NTf}_2]$ (1) + $[\text{C}_n\text{mim}][\text{NTf}_2]$ (2) (symbols and lines): \triangle , $[\text{C}_1\text{mim}][\text{NTf}_2]$; \square , $[\text{C}_2\text{mim}][\text{NTf}_2]$; \bullet , $[\text{C}_5\text{mim}][\text{NTf}_2]$; \blacksquare , $[\text{C}_6\text{mim}][\text{NTf}_2]$; \blacktriangle , $[\text{C}_8\text{mim}][\text{NTf}_2]$; \blacklozenge , $[\text{C}_{10}\text{mim}][\text{NTf}_2]$.