

Supplementary Materials

Confinement Effects on the Magnetic Ionic Liquid 1-Ethyl-3-Methylimidazolium Tetrachloroferrate(III)

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Thermal Data for [C₂mim]FeCl₄ in SBA-15 Mesoporous Silica

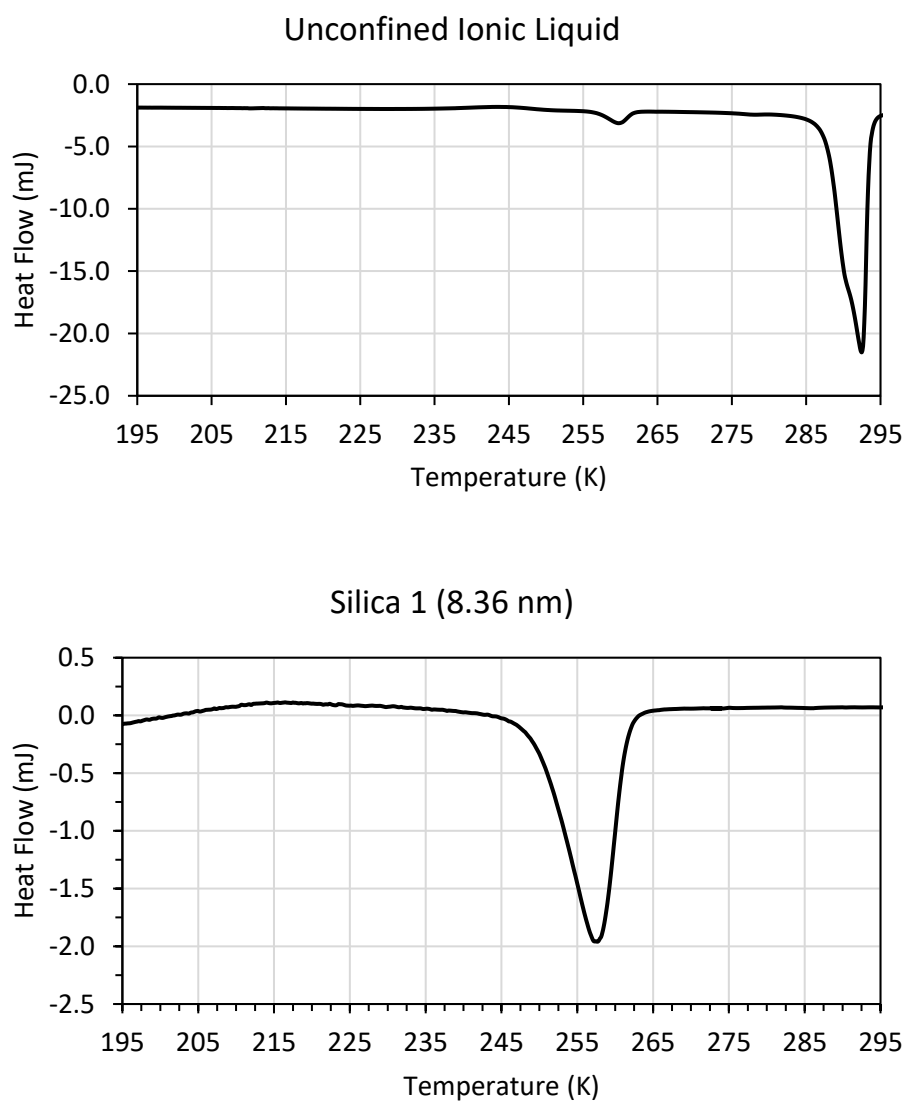


Figure S1. DSC traces of unconfined [C₂mim]FeCl₄ and confined [C₂mim]FeCl₄ in mesoporous SBA-15 silicas of various diameters. The atmospheric pressure is 98.43 ± 0.16 kPa. Endothermic transitions point down. (Continued on next page).

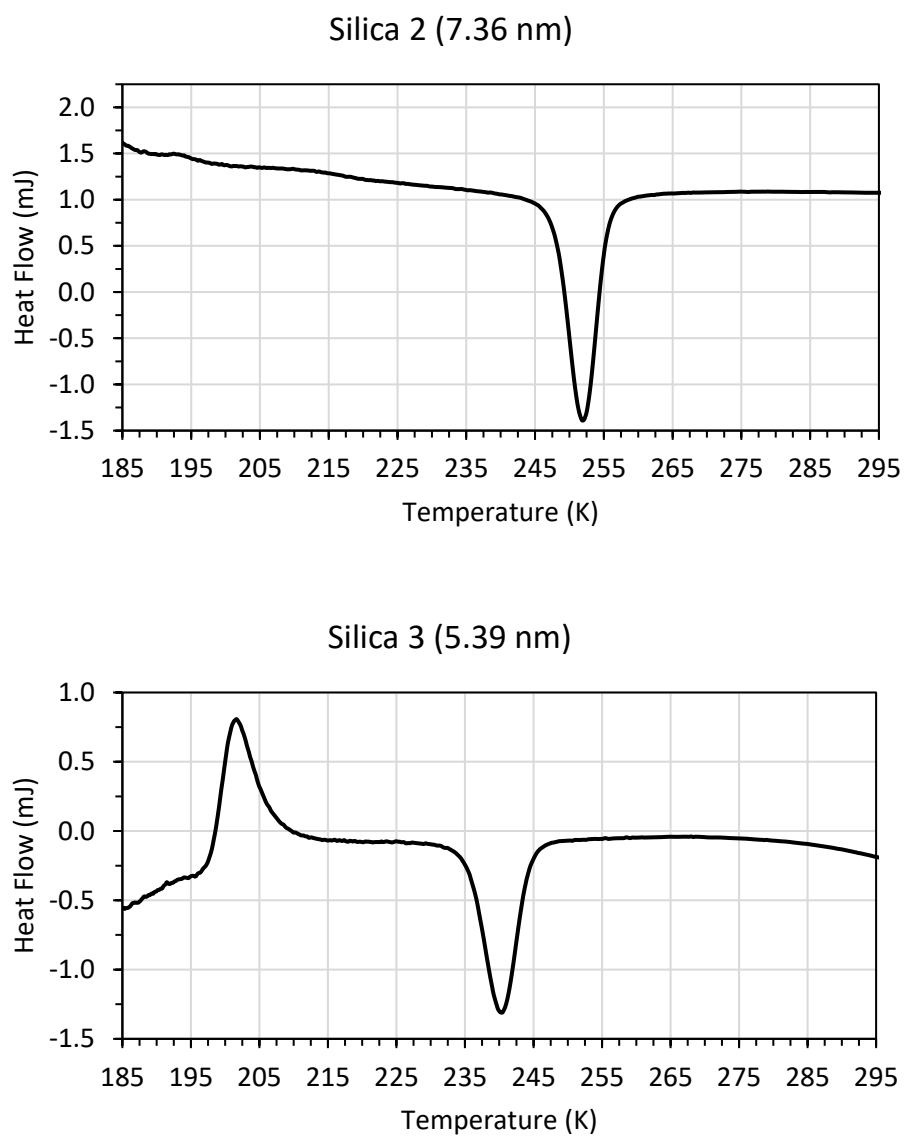


Figure S1. (continued) DSC traces of unconfined $[\text{C}_2\text{mim}]\text{FeCl}_4$ and confined $[\text{C}_2\text{mim}]\text{FeCl}_4$ in mesoporous SBA-15 silicas of various diameters. The atmospheric pressure is 98.43 ± 0.16 kPa. Endothermic transitions point down.

Drop Shape of [C₂mim]FeCl₄ on SiO₂

The [C₂mim]FeCl₄ contact angle on SiO₂ is measured by placing a small drop of IL on a glass slide. Images are then taken with a 20× macrolens attached to a 12 MP camera (f/1.8 aperture). The image analysis was subsequently performed through ImageJ v 1.8.0 on seven individual drops.

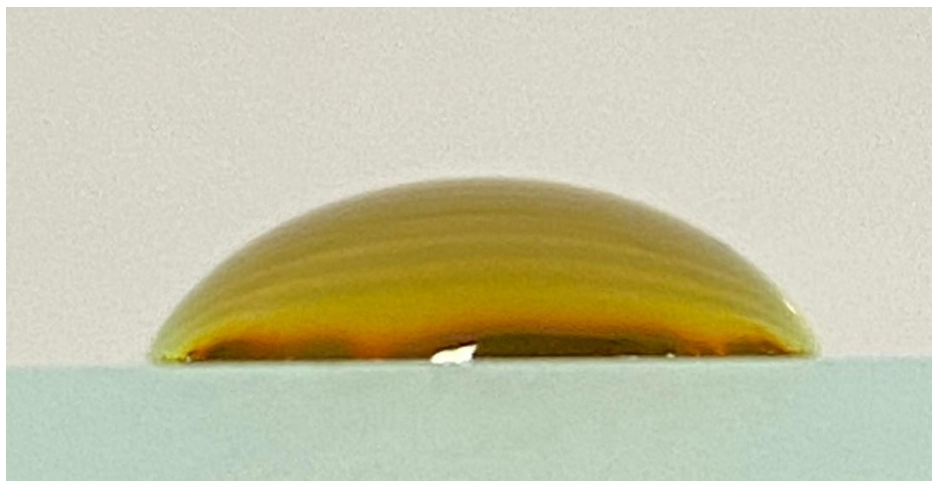


Figure S2. Representative image used to measure the [C₂mim]FeCl₄ contact angle on glass slide.

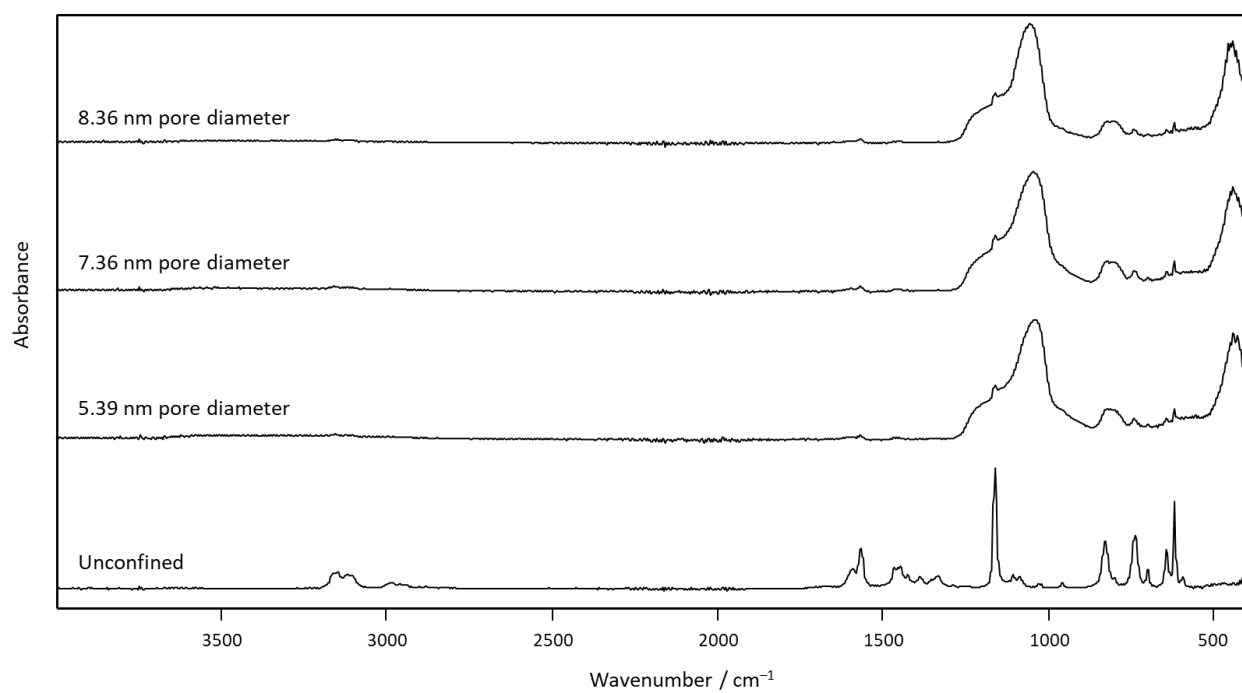
Mid-IR Spectra of [C₂mim]FeCl₄ in SBA-15 Mesoporous Silica

Figure S3. Mid-IR spectra of unconfined [C₂mim]FeCl₄ and confined [C₂mim]FeCl₄ in mesoporous SBA-15 silicas.

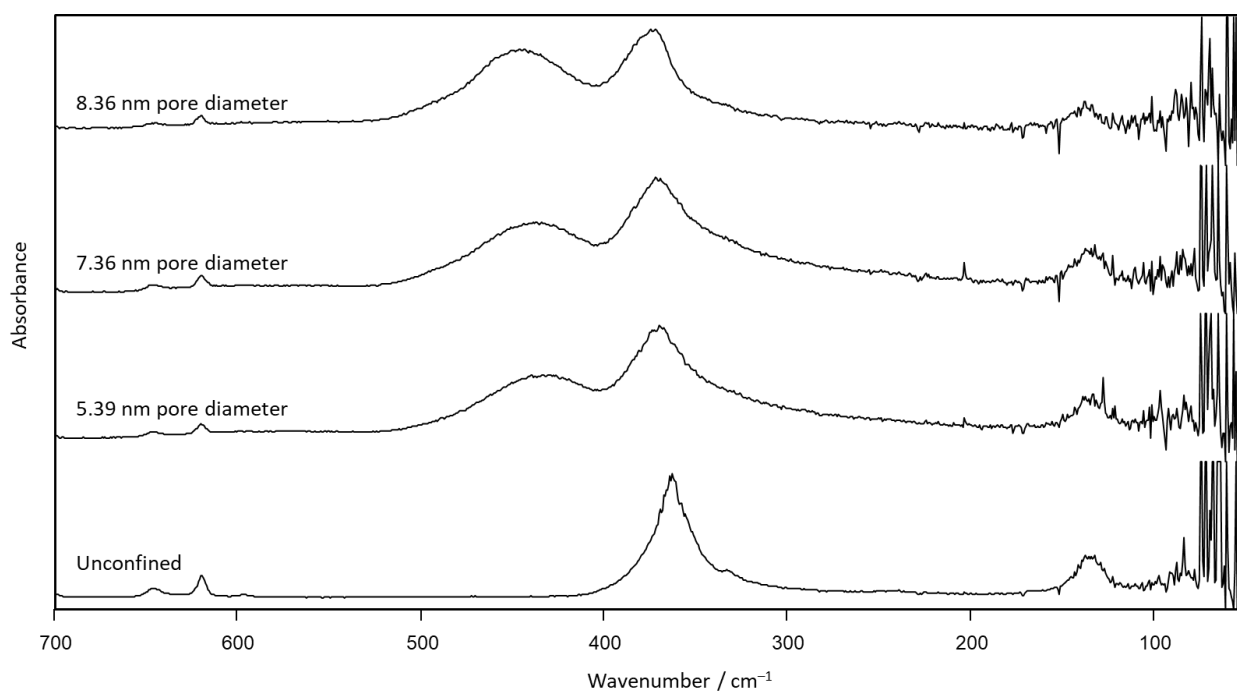
Far-IR Spectra of [C₂mim]FeCl₄ in SBA-15 Mesoporous Silica

Figure S4. Far-IR spectra of unconfined [C₂mim]FeCl₄ and confined [C₂mim]FeCl₄ in mesoporous SBA-15 silicas.