

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: AIMD animation of $[\text{BMIM}]^+[\text{TCM}]^-$ molecular motion restricted between two silica slabs. The animation was acquired at temperature of 300K in a time span of 11ps. Blue: nitrogen, grey: carbon, white: hydrogen, yellow: silicon, red: oxygen. Displacements of the RTIL molecules are observed to be highly correlated, apparently due to Coulomb interactions and Van der Waals forces.