

Dipolar chains and micro-phase segregation in ionic fluids

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Abstract

The close examination of structure, dynamics, and phase behavior of organic ionic liquids (ILs) reveals a complex picture where long and short range forces often compete with each other. I will discuss two manifestations of such competition, the formation of dipolar chains in ILs/organic-solvent mixtures and the nanoscale segregation of ionic and neutral domains in ILs with long aliphatic tails.