Supplementary Information for: **Effect of Organic Solvents on Li^+ Ion Solvation and Transport in Ionic Liquid Electrolytes: A Molecular Dynamics Simulation Study.**

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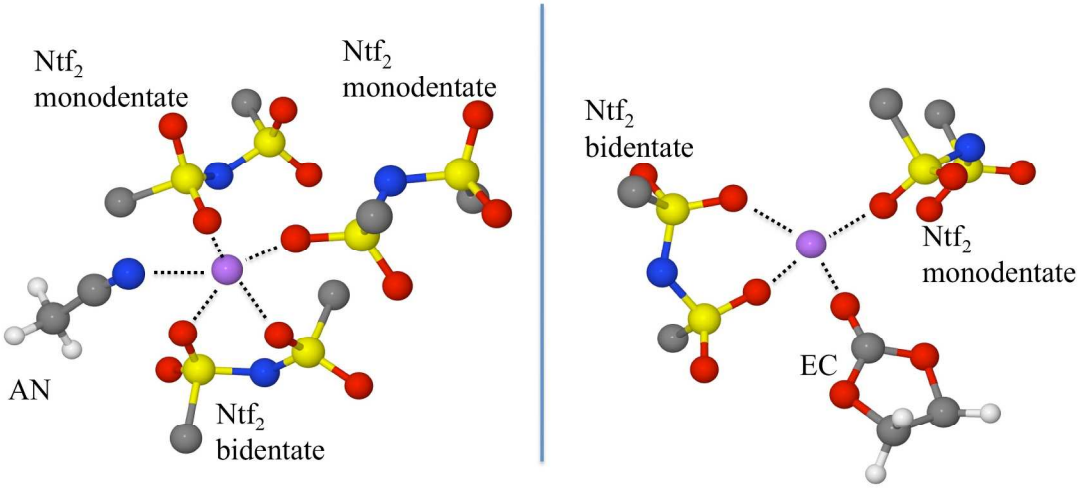

Figure SI.1. Representative snapshots of Li-ion first coordination shell in ILEs with 20% organic cosolvent. (Fluorine atoms are not shown).

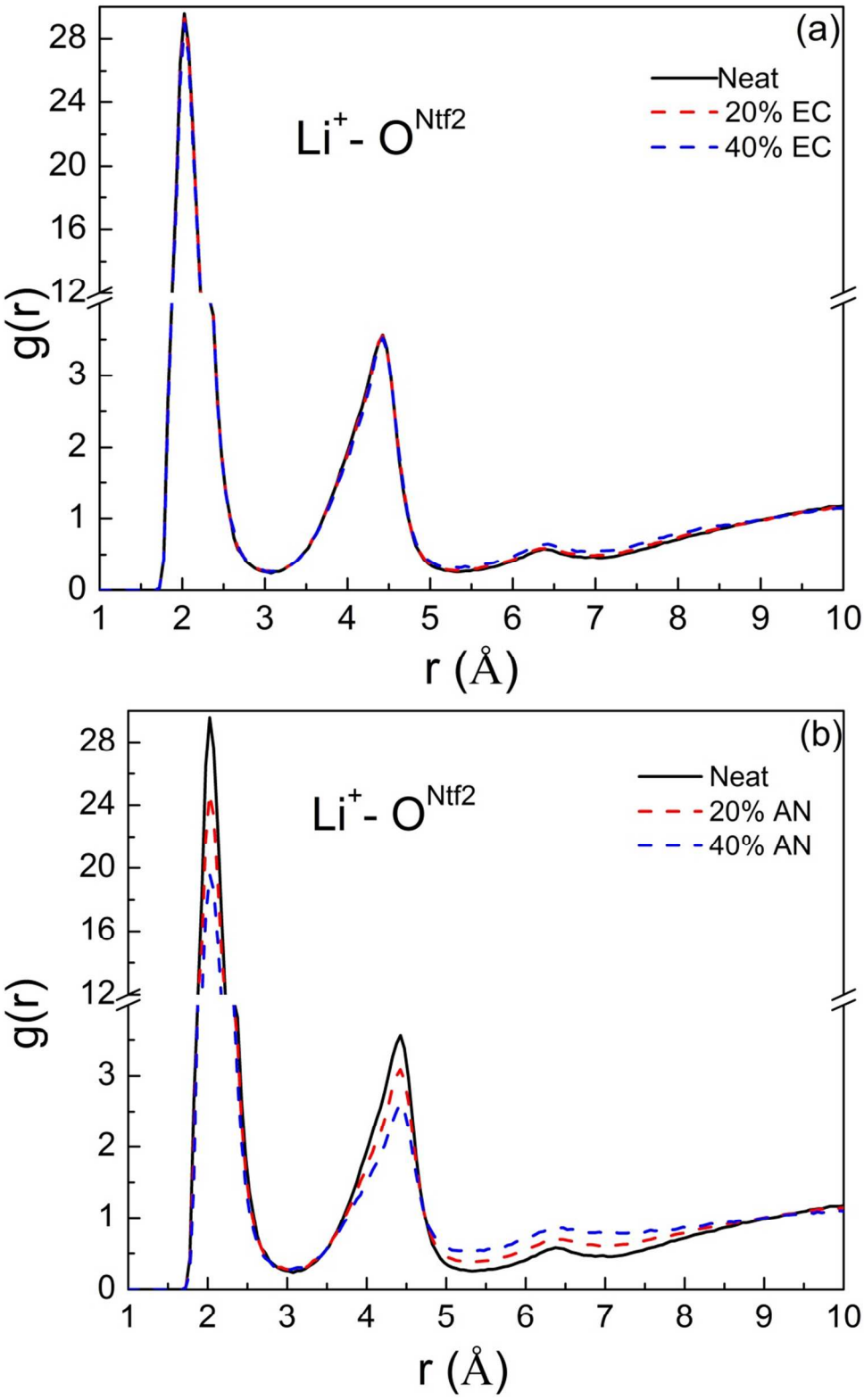

Figure SI.2. Radial distribution functions for Li^{+}-O^{Ntf2} in ILEs with (a) EC and (b) AN at 363K.

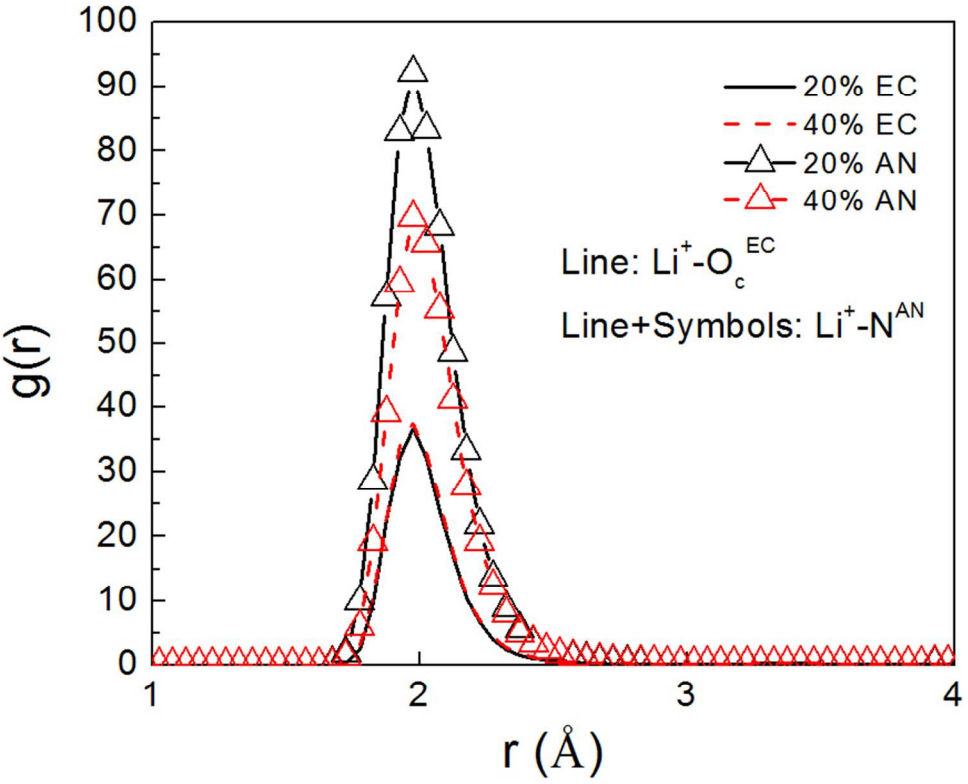

Figure SI.3. Radial distribution functions for Li^+-O_c^{EC} and Li^+-N^{AN} obtained from simulations of ILEs at 363K

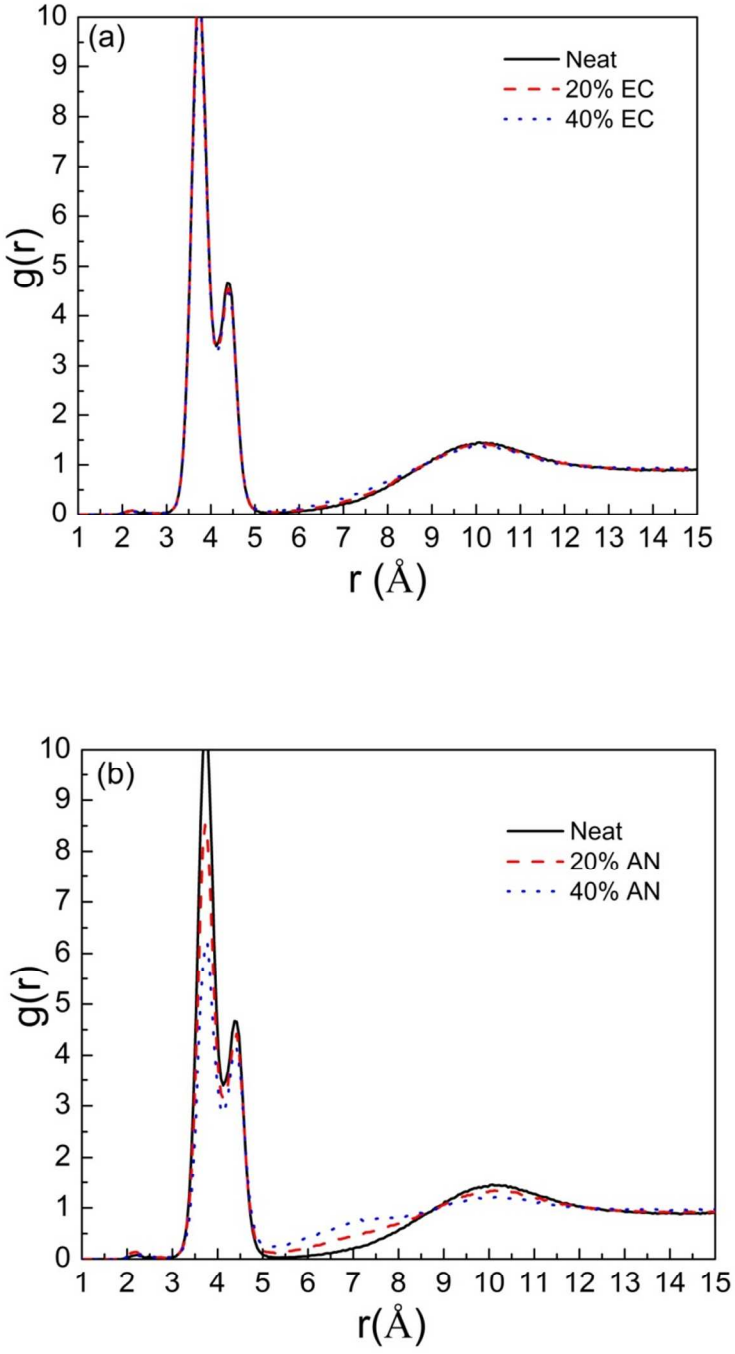

Figure SI.4. Radial distribution functions for Li^{+}-N^{Ntf2} obtained from simulations of ILE at 363K.

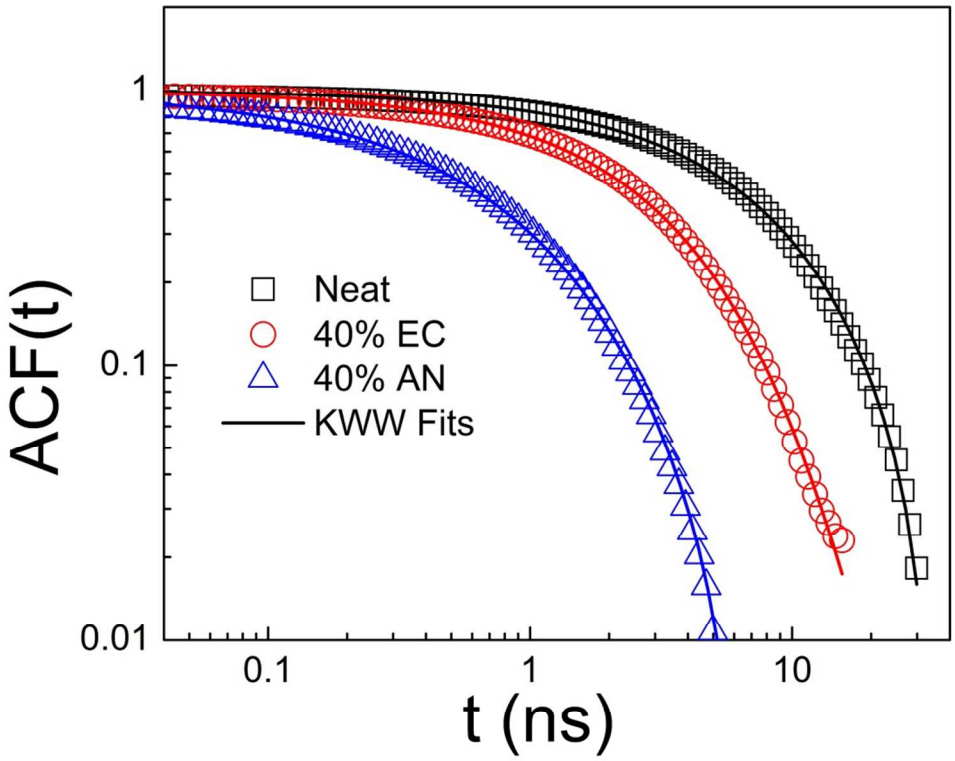

Figure SI.5. Evolution of Li^{+}-N^{Ntf2} residence time auto correlation functions (ACF) and their KWW fits as obtained from MD simulations at 363K.