

Electronic Supplementary Information 1:

Surface effects on the structure and mobility of the ionic liquid $C_6C_1ImTFSI$ in silica gels

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Estimating volume fraction silica

The volume fraction of silica, ϕ , was estimated using the mole mass of SiO_2 and the ionic liquid together with the densities $\rho_{SiO_2} = 2.2 \text{ g/cm}^3$ and $\rho_{IL} = 1.37 \text{ g/cm}^3$ which allows us to calculate the molar volumes V_{SiO_2} and V_{IL} . These values in turn give that the silica volume fraction in the ionogel is:

$$\phi_{SiO_2}(x) = \frac{V_{SiO_2}}{V_{SiO_2} + V_{IL}x}.$$

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