Supplementary information

for

Vesicles in ionic liquids

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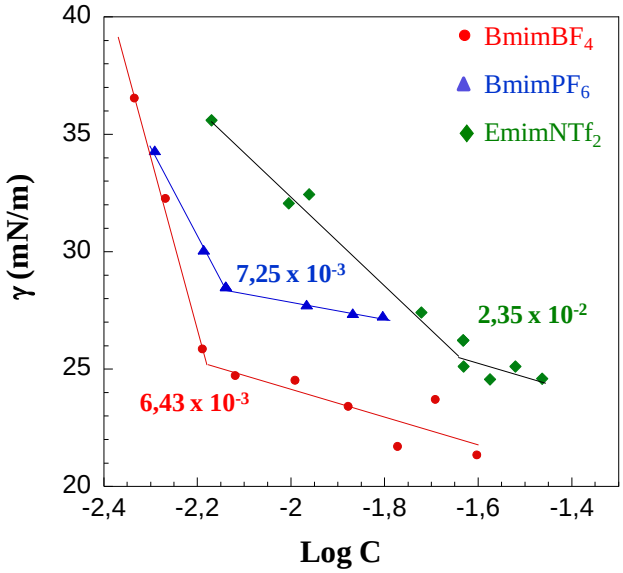

Figure S1. Surface tension measurements of DPPC in $BmimBF_4$, $BmimPF_6$, $EmimNTf_2$ versus log of concentration of surfactant. The critical aggregation concentration values in $BmimBF_4$, $BmimPF_6$ and $EmimNTf_2$ were 6.43 10^{-3} $mol.L^{-1}$, 7.25 10^{-3} $mol.L^{-1}$ and 2.35 10^{-3} $mol.L^{-1}$ respectively.

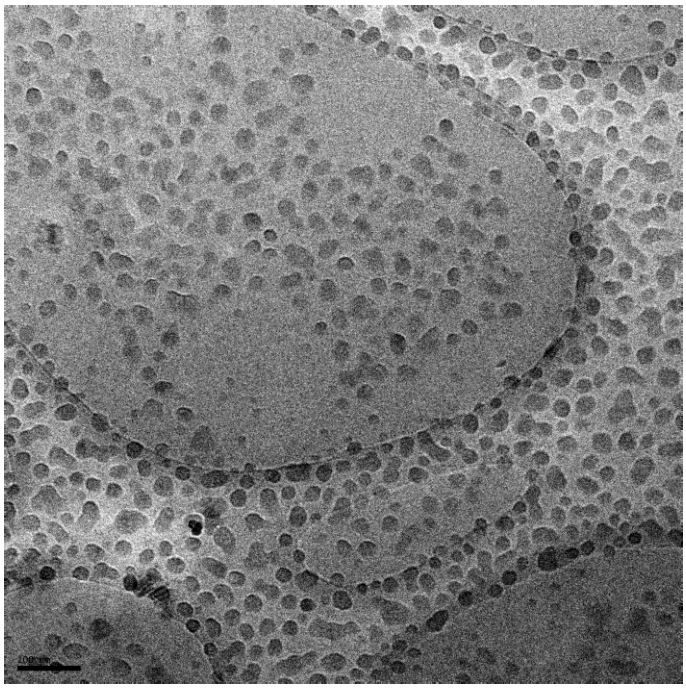

Figure S2. Freeze Fracture Transmission Electron Microscopy of vesicles of DPPC in $BmimBF_4$; [DPPC] = 1 %w/v; scale bar = 200 nm showing the presence of small aggregates in addition to larger ones (Figure 1b).

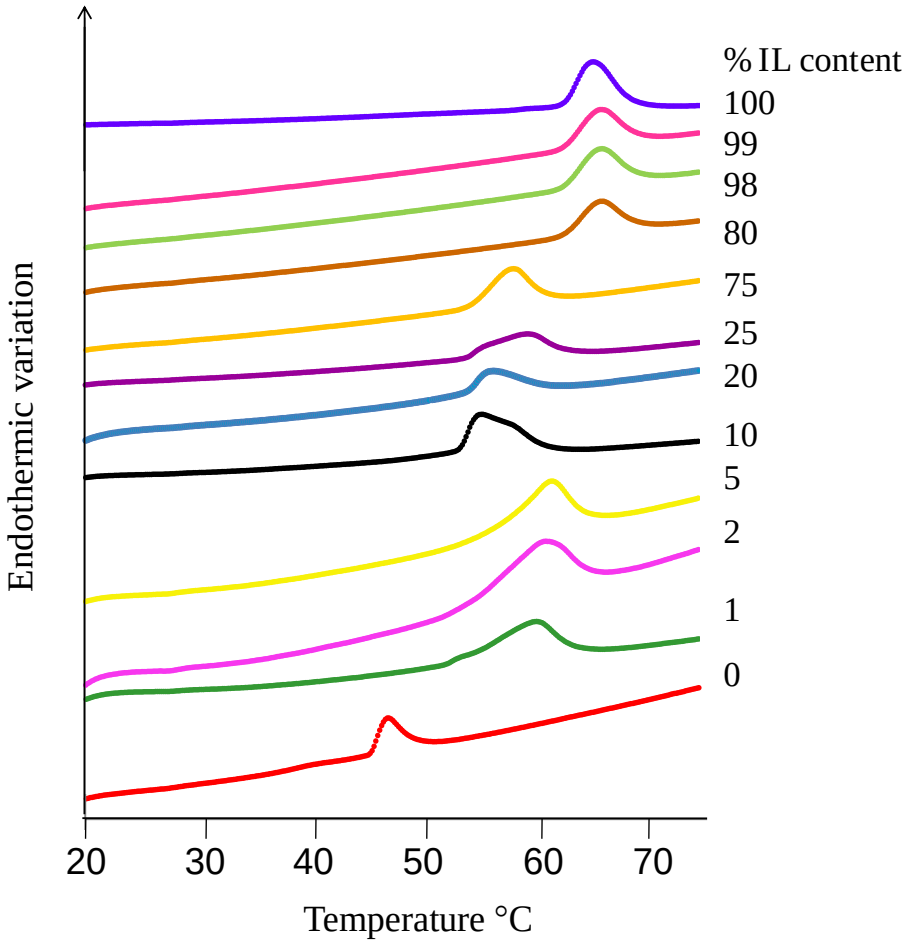

Figure S3. DSC thermograms of DPPC–water/$BmimBF_4$ system at a heating rate of 5 deg.min^{-1}. The chosen scale does not allow showing the pre-transition phenomena.

% $BmimBF_4$ (%v/v)	ΔH (kJ.mol^{-1})
0	42
1	34
2	26
5	30
10	40
20	39
25	41
75	42
90	1
95	0.4
98	1.4
99	43
100	85

Table S4. Thermodynamic parameters of the phase transitions of DPPC MLV in mixture of $BmimBF_4$ and water determined by DSC measurements (experimental error ±2 kJ.mol^{-1})