

Ionogels obtained by thiol-ene photopolymerization – physicochemical characterization and application in electrochemical capacitors

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1. Cyclic voltammograms on the AC/AC capacitors

The cyclic voltammograms (CVs) of AC/AC capacitors with different ionogels were recorded at increasing values of maximum cell potential (fig. S1). As it can be seen, the CVs are almost identical for ECs containing EMImNTf₂/EMImOTf and BMImNTf₂/BMImOTf respectively.

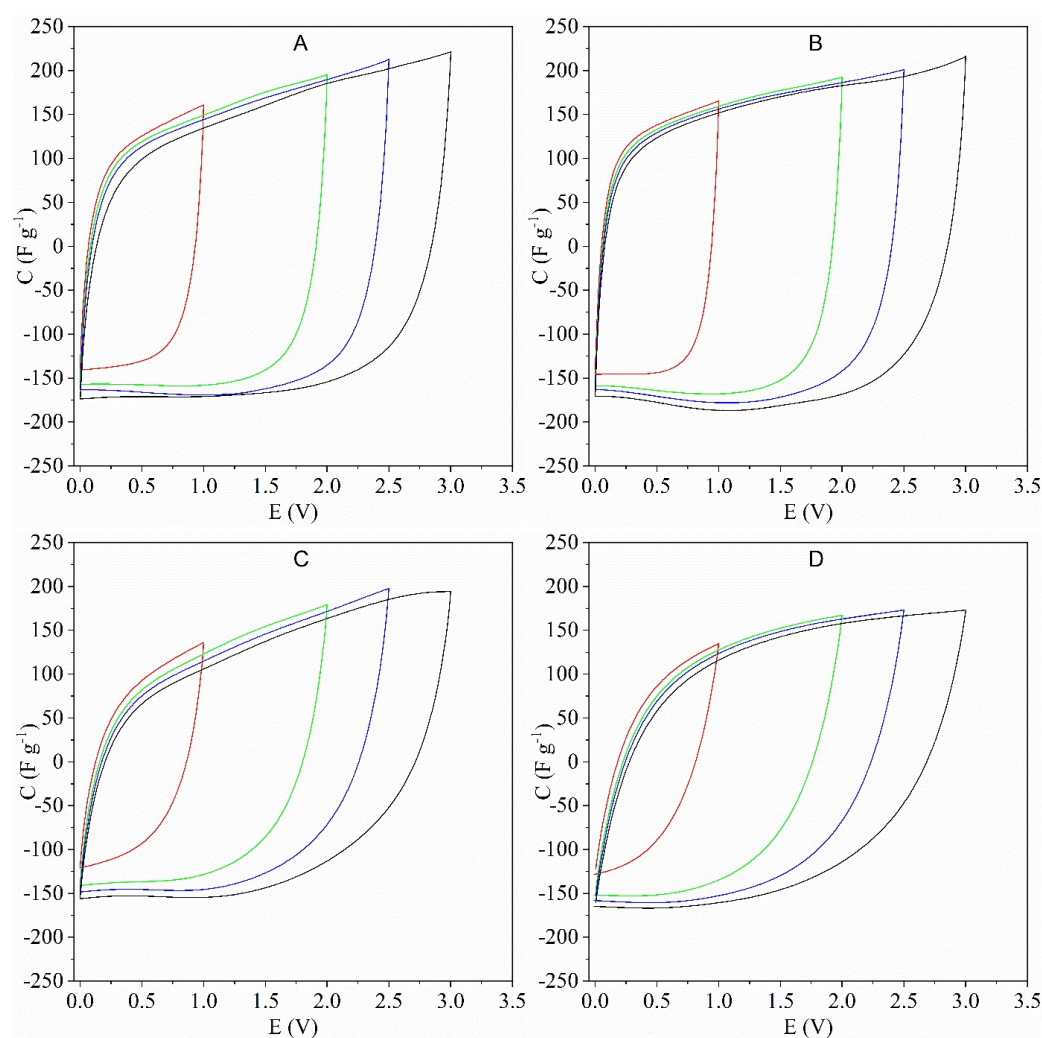


Figure S1. Cyclic voltammograms of AC/AC capacitors with ionogels: (A) EMImNTf₂, (B) EMImOTf, (C) BMImNTf₂, (D) BMImOTf up to various values of maximum potential. Scan rate 5 mV s⁻¹.

2. Dependence of capacitance on scan rate for AC/AC capacitors with different iongels

The cells were investigated by cyclic voltammetry (CV) with various scan rates from 1 to 50 mV s^{-1} up to maximal potential equal 2V. Based on the obtained results, the dependence of capacitance on the scan rate was plotted (fig. S2). As can be seen, decreasing of capacitances in function of scan rate is almost identical for ECs containing EMImNTf₂/EMImOTf and BMImNTf₂/BMImOTf respectively.

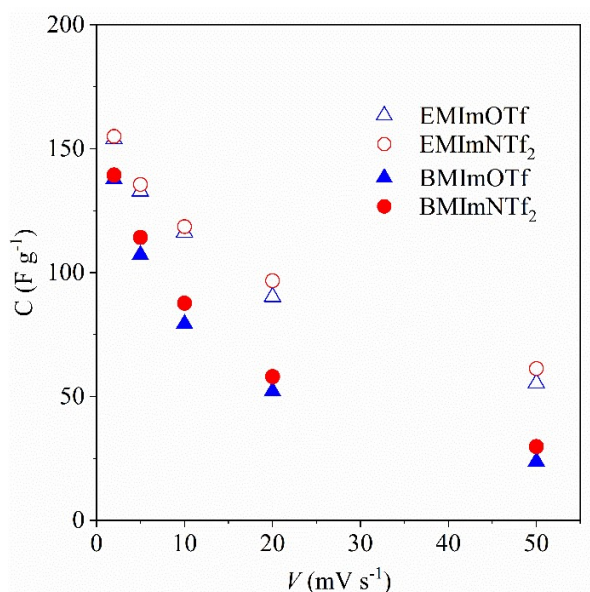


Figure S2. Dependence of capacitance on scan rate of AC/AC capacitors with different iongels. Scan rates from 1 to 50 mV s^{-1} , maximum potential 2 V.