

Decoupled ion mobility in nano-confined ionic plastic crystal

Haijin Zhu^{a,b,*}, Aleksandra Grzelak^{a,b}, Ruhamah Yunis^c, Jaime Martín^{d,e} and Maria Fosyth^{a,b,e}

^a Institute for Frontier Materials, Deakin University, Geelong VIC 3216, Australia

^b ARC Centre of Excellence for Electromaterials Science, Deakin University, 221 Burwood Highway, Burwood, Victoria 3125, Australia.

^c Centre for Materials Science, School of Chemistry and Physics, Queensland University of Technology, 2 George Street, Brisbane, Queensland, 4000, Australia.

^d POLYMAT and Polymer Science and Technology Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, Manuel de Lardizabal 3, 20018 Donostia-San Sebastian, Spain

^e Ikerbasque, Basque Foundation for Science, 48013 Bilbao, Spain

* Corresponding Author

Email: h.zhu@deakin.edu.au (H Zhu);

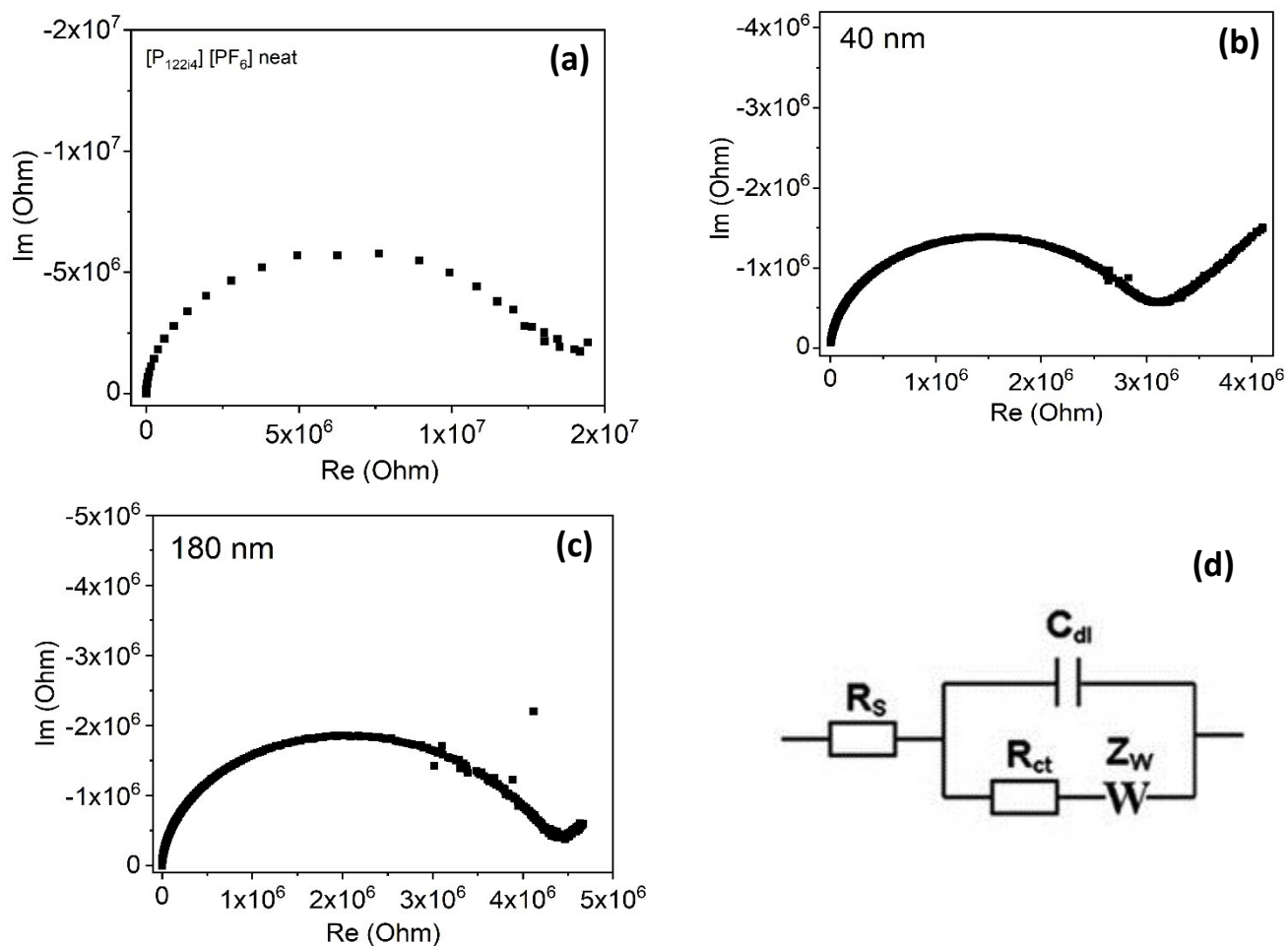


Fig S1. Nyquist plots of the impedance spectroscopy data of (a) the neat, (b) 40 nm and (c) 180 nm samples at 30 °C. (d) the equivalent circuit used to fit the experimental data. W is a so-called Warburg element which accounts for diffusion process. R_{ct} is the charge transfer resistance, R_s is the electrode surface resistance and C_{dl} is the double layer capacitance.