Accepted Manuscript

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PII: S0013-4686(18)31067-3

DOI: 10.1016/j.electacta.2018.05.044

Reference: EA 31830

To appear in: *Electrochimica Acta*

Received Date: 18 October 2017

Revised Date: 11 April 2018

Accepted Date: 4 May 2018

Please cite this article as: A. Fdz De Anastro, N. Casado, X. Wang, J. Rehmen, D. Evans, D. Mecerreyes, M. Forsyth, C. Pozo-Gonzalo, Poly(ionic liquid) iongels for all-solid rechargeable zinc/ PEDOT batteries, *Electrochimica Acta* (2018), doi: 10.1016/j.electacta.2018.05.044.

Poly(ionic liquid) Iongels for All-Solid Rechargeable Zinc/PEDOT Batteries

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ABSTRACT

Iongels composed of a polymer matrix and ionic liquids have been proposed as an alternative to liquid electrolytes for energy storage devices to prevent leakage and evaporation of the electrolyte which lead to device failure. Furthermore, the intrisic nature of ionic liquid and poly(ionic liquid) promote the ionic conductivity in the iongels in comparison with solid polymer electrolytes, and prevent the exuding of the ionic liquid due to similarity in chemical structure.