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

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ABSTRACT

Ionogels 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 intrinsic nature of ionic liquid and poly(ionic liquid) promote the ionic conductivity in the ionogels in comparison with solid polymer electrolytes, and prevent the exuding of the ionic liquid due to similarity in chemical structure.

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