## Accepted Manuscript

Non-aqueous lithium bromine battery of high energy density with

Xiaoli Xi, Xianfeng Li, Chenhui Wang, Qinzhi Lai , Yuanhui Cheng, Pengcheng Xu, Huamin Zhang

PII: S2095-4956(16)30468-5
DOI: 10.1016/j.jechem.2017.04.013
Reference: JECHEM 310

To appear in: Journal of Energy Chemistry
Received date: 27 December 2016
Revised date: 8 April 2017
Accepted date: 10 April 2017

Please cite this article as: Xiaoli Xi, Xianfeng Li, Chenhui Wang, Qinzhi Lai, Yuanhui Cheng, Pengcheng Xu, Huamin Zhang, Non-aqueous lithium bromine battery of high energy density with carbon coated membrane, Journal of Energy Chemistry (2017), doi: 10.1016/j.jechem.2017.04.013

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- The non-aqueous $\mathrm{Li} / \mathrm{Br}$ battery shows high practical energy density $232.6 \mathrm{~Wh} \mathrm{~kg}^{-1}$.
- The maximum power density of the $\mathrm{Li} / \mathrm{Br}$ battery is $29.1 \mathrm{~mW} \mathrm{~cm}^{-2}$.
- The non-aqueous electrolyte has a high solubility $3.0 \mathrm{~mol} \mathrm{~L}^{-1}$.
- The static battery runs continuously over 1000 cycles at $1.0 \mathrm{~mA} \mathrm{~cm}{ }^{-2}$.
- The non-aqueous $\mathrm{Li} / \mathrm{Br}$ flow battery is investigated tentatively at $10 \mathrm{~mA} \mathrm{~cm}{ }^{-2}$.


# https://daneshyari.com/en/article/6530067 

Download Persian Version:

## https://daneshyari.com/article/6530067

## Daneshyari.com

