

## Accepted Manuscript

Title: Rapid self-heating and internal temperature sensing of lithium-ion batteries at low temperatures

Author: Guangsheng Zhang Shanhai Ge Terrence Xu  
Xiao-Guang Yang Hua Tian Chao-Yang Wang



PII: S0013-4686(16)32035-7  
DOI: <http://dx.doi.org/doi:10.1016/j.electacta.2016.09.117>  
Reference: EA 28047

To appear in: *Electrochimica Acta*

Received date: 26-8-2016

Accepted date: 22-9-2016

Please cite this article as: Guangsheng Zhang, Shanhai Ge, Terrence Xu, Xiao-Guang Yang, Hua Tian, Chao-Yang Wang, Rapid self-heating and internal temperature sensing of lithium-ion batteries at low temperatures, *Electrochimica Acta* <http://dx.doi.org/10.1016/j.electacta.2016.09.117>

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.

# Rapid self-heating and internal temperature sensing of lithium-ion batteries at low temperatures

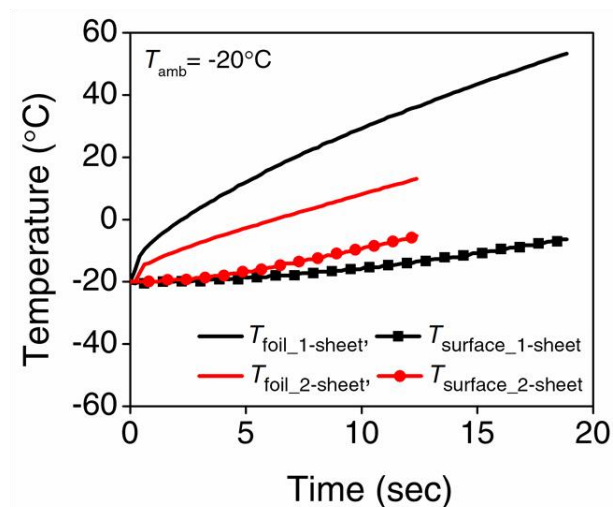
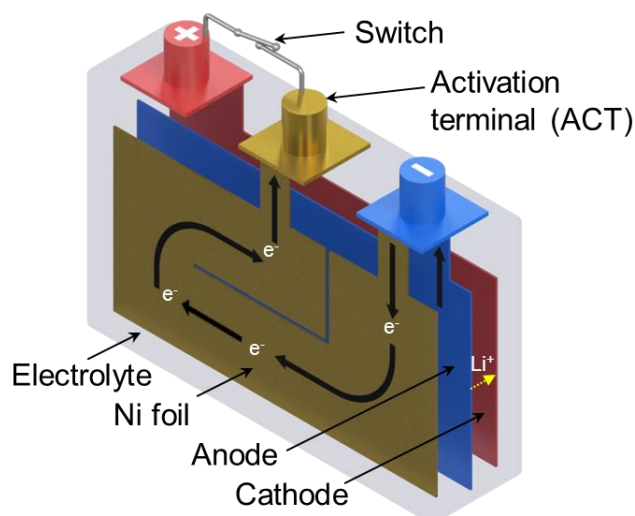
Guangsheng Zhang<sup>a</sup>, Shanhai Ge<sup>b</sup>, Terrence Xu<sup>b</sup>, Xiao-Guang Yang<sup>a</sup>, Hua Tian<sup>a</sup>, and  
Chao-Yang Wang<sup>a,b,\*</sup>

<sup>a</sup>Department of Mechanical and Nuclear Engineering and Electrochemical Engine Center (ECEC), The Pennsylvania State University, University Park, PA 16802 USA

<sup>b</sup>EC Power, 341 Science Park Road, State College, PA 16803 USA

\*Correspondence to: [cxw31@psu.edu](mailto:cxw31@psu.edu) (C.Y.W)

## Graphical abstract



Download English Version:

<https://daneshyari.com/en/article/4767654>

Download Persian Version:

<https://daneshyari.com/article/4767654>

[Daneshyari.com](https://daneshyari.com)