

Accepted Manuscript

The Impact of Multi-Layered Porosity Distribution on the Performance of a Lithium Ion Battery

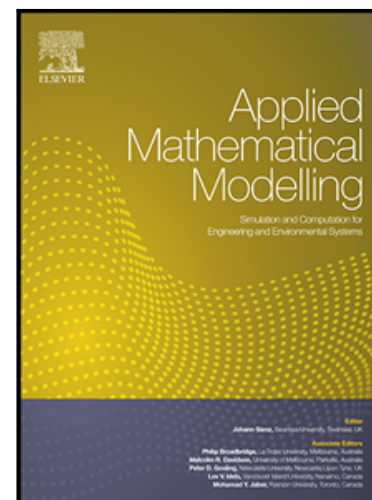
Elham Hosseinzadeh , James Marco , Paul Jennings

PII: S0307-904X(18)30173-2
DOI: [10.1016/j.apm.2018.04.001](https://doi.org/10.1016/j.apm.2018.04.001)
Reference: APM 12240

To appear in: *Applied Mathematical Modelling*

Received date: 12 October 2017
Revised date: 26 March 2018
Accepted date: 5 April 2018

Please cite this article as: Elham Hosseinzadeh , James Marco , Paul Jennings , The Impact of Multi-Layered Porosity Distribution on the Performance of a Lithium Ion Battery, *Applied Mathematical Modelling* (2018), doi: [10.1016/j.apm.2018.04.001](https://doi.org/10.1016/j.apm.2018.04.001)



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:

- Coupled electrochemical - thermal model in 3D
- Impact of a multi-layered porosity distribution within the positive electrode
- Reduction in the heat generation by multi-layered porosity
- Improved specific energy and power of the cell
- Correlation of the location of the hot spot with the electrode design

Download English Version:

<https://daneshyari.com/en/article/8051342>

Download Persian Version:

<https://daneshyari.com/article/8051342>

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