## Accepted Manuscript

A facile in-situ polymerization strategy towards polyimide/carbon black composites as high performance lithium ion battery cathodes

Guangfeng Zhang, Zhixiao Xu, Ping Liu, Yuezeng Su, Tao Huang, Ruili Liu, Xin Xi, Dongqing Wu

PII: S0013-4686(17)32635-X

DOI: 10.1016/j.electacta.2017.12.075

Reference: EA 30863

To appear in: Electrochimica Acta

Received Date: 28 August 2017

Revised Date: 17 October 2017

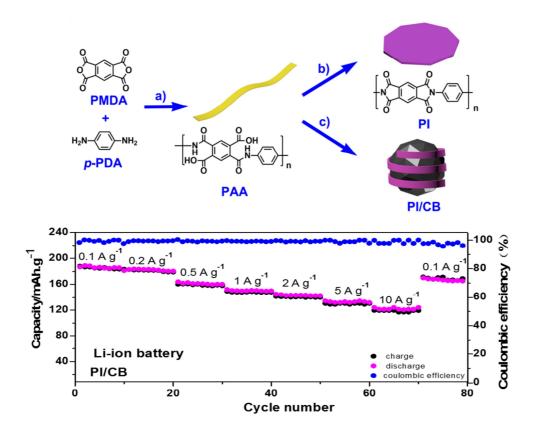
Accepted Date: 10 December 2017

Please cite this article as: G. Zhang, Z. Xu, P. Liu, Y. Su, T. Huang, R. Liu, X. Xi, D. Wu, A facile in-situ polymerization strategy towards polyimide/carbon black composites as high performance lithium ion battery cathodes, *Electrochimica Acta* (2018), doi: 10.1016/j.electacta.2017.12.075.

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.



A Facile In-Situ Polymerization Strategy towards Polyimide/Carbon Black



**Composites as High Performance Lithium Ion Battery Cathodes** 

An in-situ polymerization strategy is utilized to fabricate the composites of polyimide and carbon black (PI/CBs) by the condensation of 1,2,4,5-benzenetetracarboxylic anhydride and *p*-phenylenediamine with the presence of carbon black. As the cathode material in LIBs, the PI/CB composite manifests an extraordinary capacity of 182 mAh g<sup>-1</sup> at 0.1 A g<sup>-1</sup>, which can be retained as 116 m Ah g<sup>-1</sup> even at 10 A g<sup>-1</sup>. Download English Version:

## https://daneshyari.com/en/article/6604909

Download Persian Version:

https://daneshyari.com/article/6604909

Daneshyari.com