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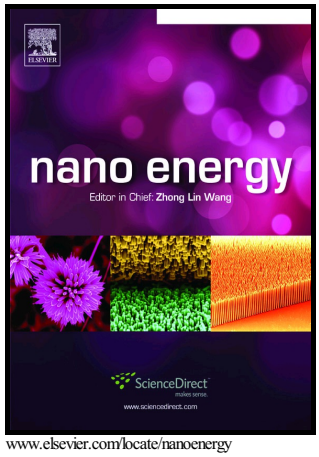

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Min Kyoung Cho[a,z], Jae Hyeon Jo[a,z], Ji Ung Choi[a], Jongsoon Kim[a], Hitoshi Yashiro[b], Shuai Yuan[c], Liyi Shi[c], Yang-Kook Sun[d,*], Seung-Taek Myung[a,*]

[a]*Department of Nano Technology and Advanced Materials Engineering & Sejong Battery Institute, Sejong University, Seoul 05006, South Korea*

[b]*Department of Chemistry and Bioengineering, Iwate University, 4-3-5 Ueda, Morioka, Iwate 020-8551, Japan*

[c]*Research Centre of Nanoscience and Nanotechnology, Shanghai University, Shanghai 200444, China*

[d]*Department of Energy Engineering, Hanyang University, Seoul 04763, South Korea*

[z]*These authors contributed equally to this work.*

Abstract

We have investigated a tunnel-type β-FeOOH cathode material for rapid sodium storage. Rietveld refinement of the X-ray diffraction (XRD) data obtained for β-FeOOH indicated that the structure was stabilized into [2 × 2] hollandite tunnel structure, and the adhesion of the β-FeOOH onto carbon nanotubes (CNTs) led to a high electrical conductivity of 3 S cm^{-1}. As a result, the β-FeOOH/CNTs composite electrode showed excellent electrode performance, with a discharge capacity of 205 mAh g^{-1} and a coulombic efficiency of 88.5% in the voltage

[*]Corresponding author

Tel: 82 2 3408 3454, Fax: 82 2 3408 4342, e-mail: smyung@sejong.ac.kr (S. Myung)

Tel: 82 2 2220 0524, Fax: 82 2 2282 7329, e-mail: yksun@hanyang.ac.kr (Y. Sun)