

## Supporting Information

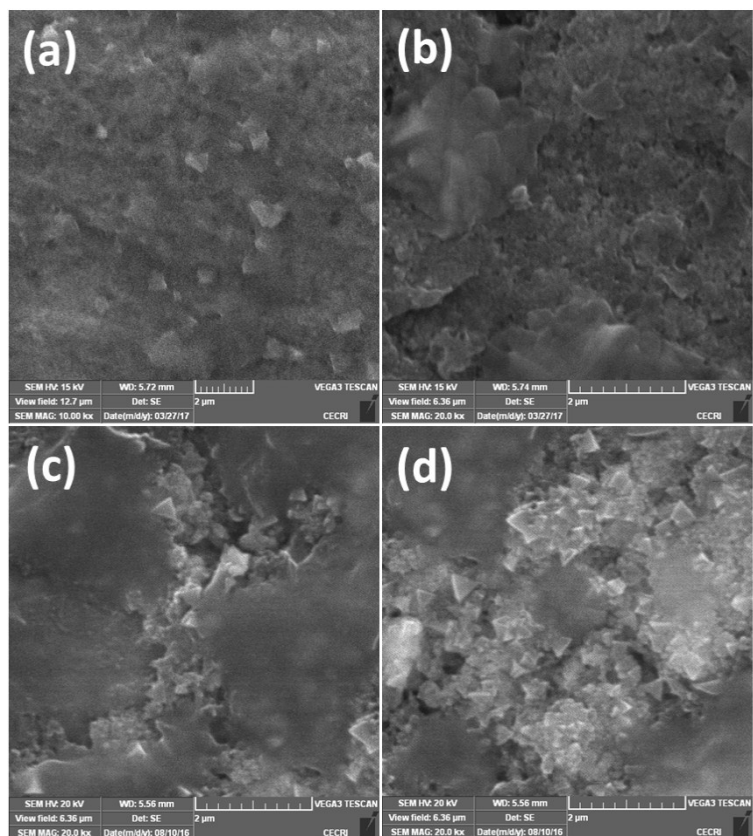
### **Custom Designed $\text{ZnMn}_2\text{O}_4$ /Nitrogen Doped Graphene Composite Anode Validated for Sodium ion Battery Application**

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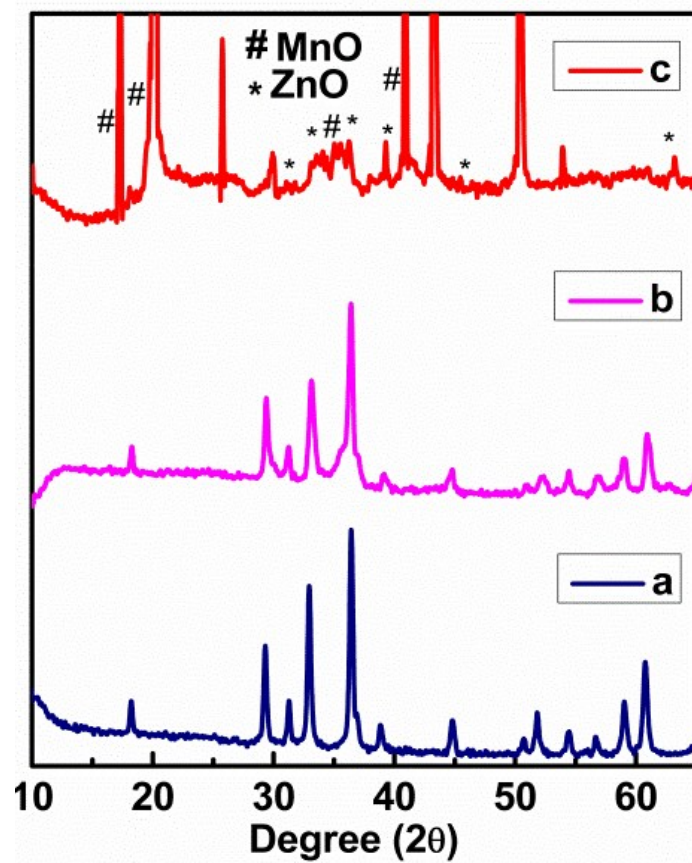
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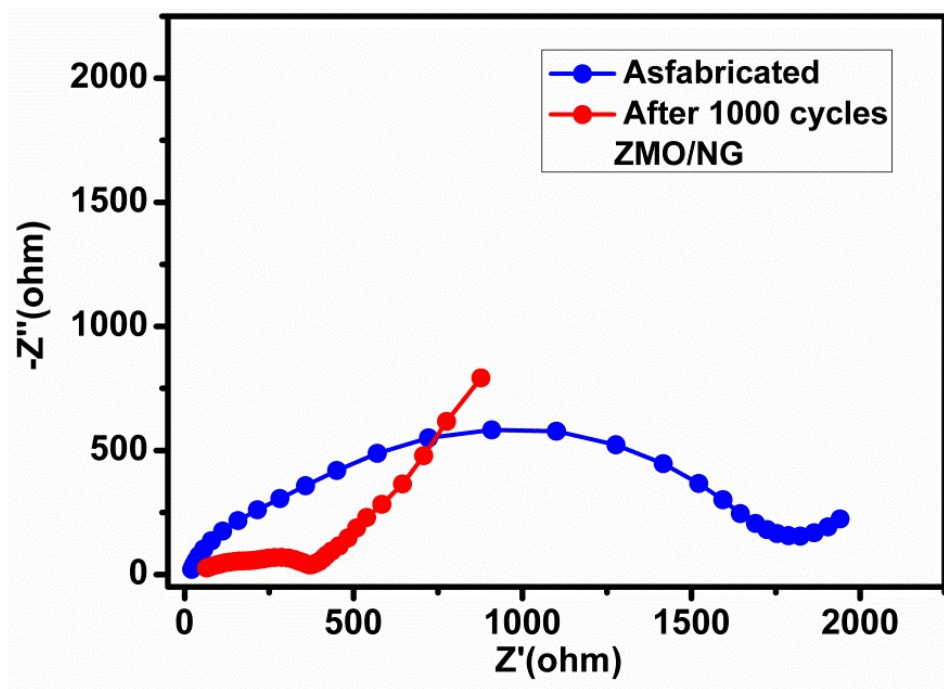
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**Figure S1.** Post cycling SEM images of (a-b) ZMO after 150 cycles and (c-d) ZMO/NG nanocomposite electrode after 1000 charge/discharge cycles at a current density of  $100 \text{ mA g}^{-1}$ .



**Figure S2.** XRD pattern of (a) pristine ZMO, (b) ZMO/NG nanocomposite electrode and (c) ZMO/NG nanocomposite electrode after 1000 charge/discharge cycles at a current density of 100 mA g<sup>-1</sup>.



**Figure S3.** Electrochemical impedance spectroscopy of the cell containing ZMO/NG nanocomposite anode recorded for conditions namely as fabricated cell and the cell after completing 1000 cycles