Supplementary

**Large interlayer spacing vanadium oxide nanotubes as cathodes for high performance sodium ion batteries**

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Table S1. The Fe:V ratio of the Fe-VNTs from ICP analysis

<table>
<thead>
<tr>
<th>Sample</th>
<th>Fe (wt%)</th>
<th>V (wt%)</th>
<th>Fe/V (atomic ratio)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fe-VNTs</td>
<td>16.98</td>
<td>28.39</td>
<td>0.053</td>
</tr>
</tbody>
</table>

Fig. S1. High magnifications TEM images of VNTs

Fig. S2. Galvanostatic charge-discharge profiles of first cycle of V$_2$O$_5$
Fig. S3. Cycling performance of $\text{V}_2\text{O}_5$ at 50 mA g$^{-1}$

Fig. S4. Cyclic voltammograms of VNTs at scan rate of 0.5 mV s$^{-1}$
Fig. S5. Nyquist plots of V$_2$O$_5$