

**Supporting information**

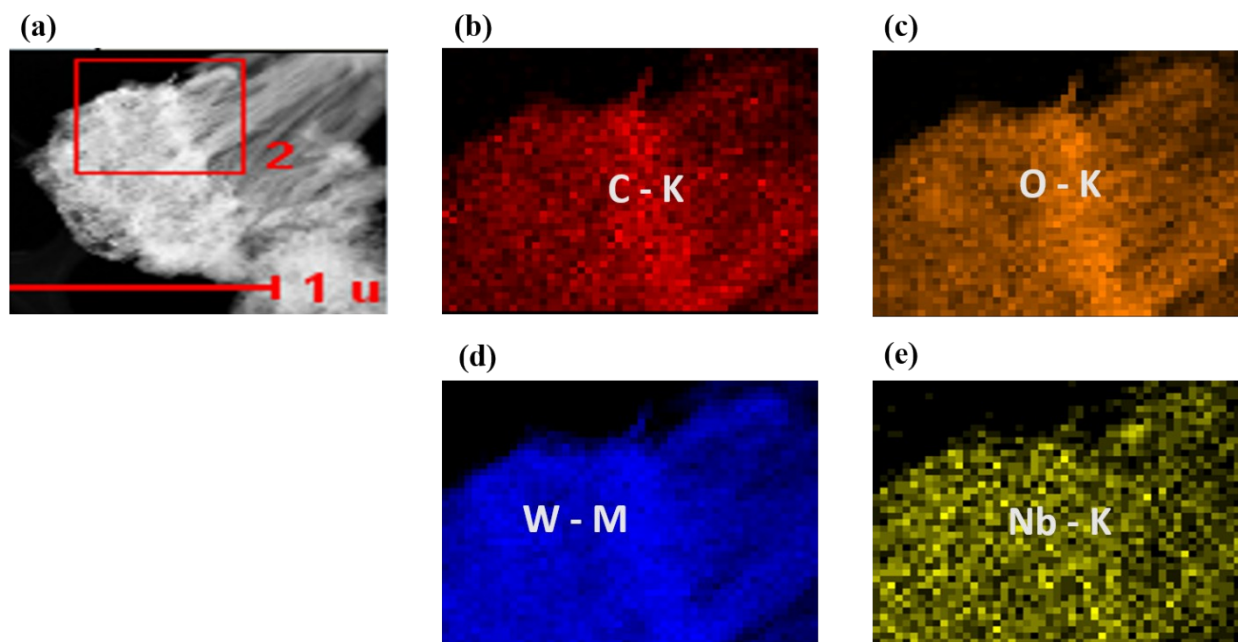
**Electrocatalytic Activity of Nb-Doped Hexagonal WO<sub>3</sub> Nanowires-Modified Graphite Felt as a  
Positive Electrode for Vanadium Redox Flow Battery**

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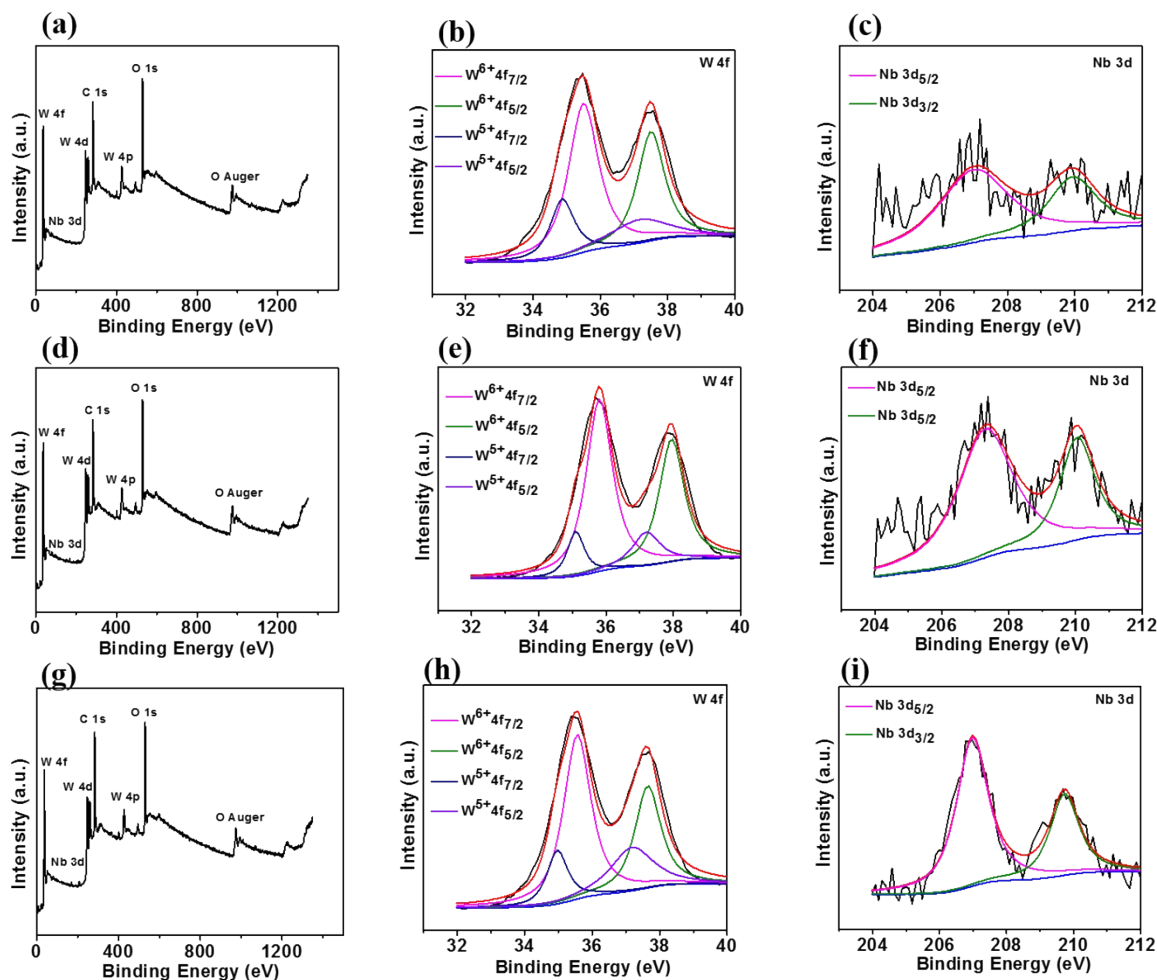
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**Figure S1.** (a) The high-angle annular dark-field (HAADF) STEM image of the Nb-doped  $h\text{-WO}_3$  NWs-modified GF ( $\text{Nb}/\text{W} = 0.03$ ), and the corresponding elemental mapping of (b) C, (c) O, (d) W, and (e) Nb.



**Figure S2.** XPS patterns of wide-scan survey spectrum for Nb-doped h-WO<sub>3</sub> NWs (a) Nb/W = 0.01, (d) Nb/W = 0.03, and (g) Nb/W = 0.06; (b), (e), and (h) Narrow-scan W 4f of Nb-doped h-WO<sub>3</sub> NWs with the atomic ratio of Nb/W is 0.01, 0.03, and 0.06, respectively; (c), (f), and (i) Narrow-scan Nb 3d of Nb-doped h-WO<sub>3</sub> NWs with the atomic ratio of Nb/W is 0.01, 0.03, and 0.06, respectively.