

## Supporting Information

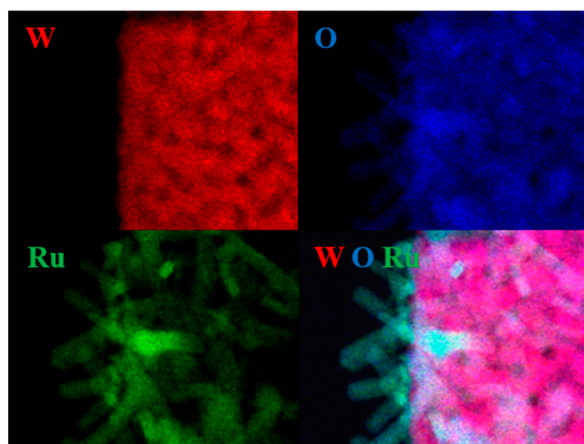
# **An efficient electrochemical sensor driven by hierarchical hetero-nanostructures consisting of RuO<sub>2</sub> nanorods on WO<sub>3</sub> nanofibers for detecting biologically relevant molecules**

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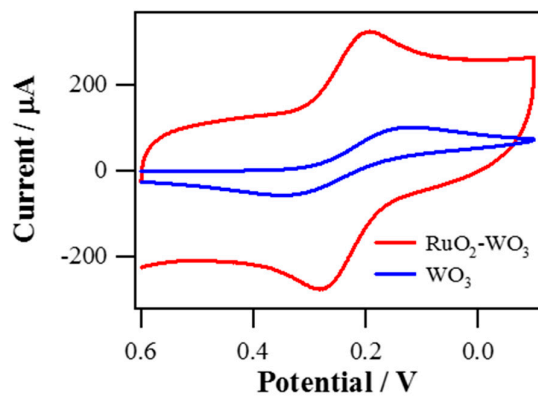
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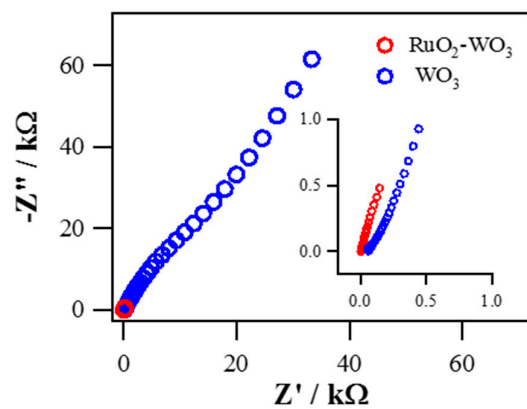
† Authors contribute this work equally.



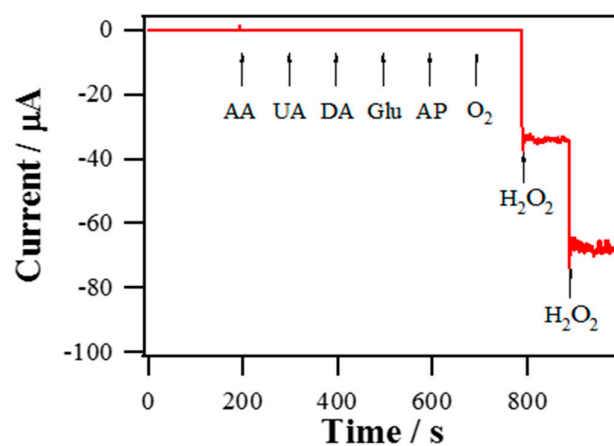
**Figure S1.** EDS elemental mappings for RuO<sub>2</sub> NRs-WO<sub>3</sub> NFs.



**Figure S2.** Cyclic voltammograms of RuO<sub>2</sub> NRs-WO<sub>3</sub> NFs and WO<sub>3</sub> NFs in 10 mM [Fe(CN)<sub>6</sub>]<sup>3-</sup> aqueous solution containing 1 M KCl at a scan rate 100 mV s<sup>-1</sup>.



**Figure S3.** Nyquist plots of RuO<sub>2</sub> NRs-WO<sub>3</sub> NFs and WO<sub>3</sub> NFs in 1 M H<sub>2</sub>SO<sub>4</sub> solution with a frequency range of 0.1 Hz – 1000 kHz at 0.5 V (vs. S.C.E.).



**Figure S4.** Amperometric response of  $\text{RuO}_2$  NRs- $\text{WO}_3$  NFs to sequential additions of 0.1 mM AA, 0.1 mM UA, 0.1  $\mu\text{M}$  DA, 5 mM glucose, 0.1 mM AP, 30  $\mu\text{M}$   $\text{O}_2$ , 0.5 mM  $\text{H}_2\text{O}_2$  and 1 mM  $\text{H}_2\text{O}_2$  to 0.1 M PBS (pH 7.4) with  $E_{\text{app}} = -0.2$  V (vs. S.C.E.).