

## Supporting Information:

### **Hierarchically assembled 1-dimensional hetero-nanostructures: single crystalline RuO<sub>2</sub> nanowires on electrospun IrO<sub>2</sub> nanofibres**

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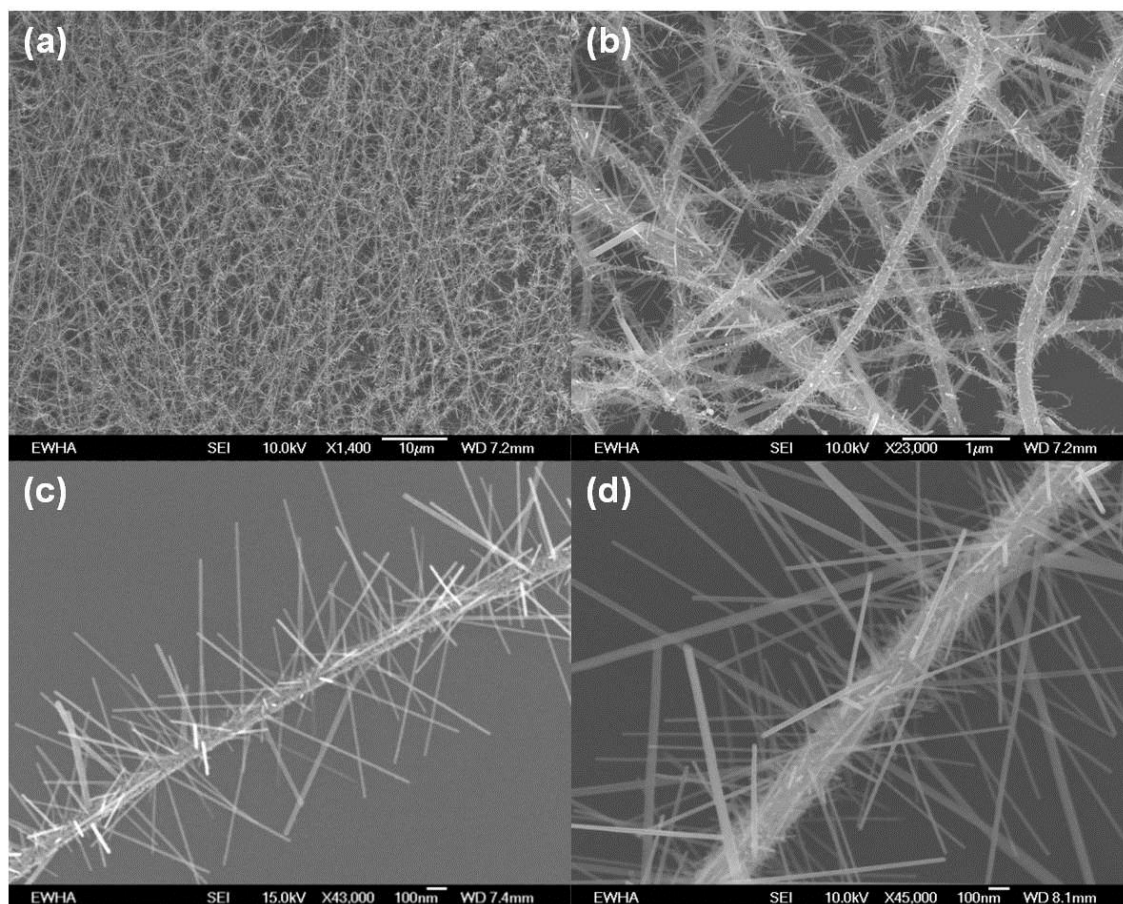
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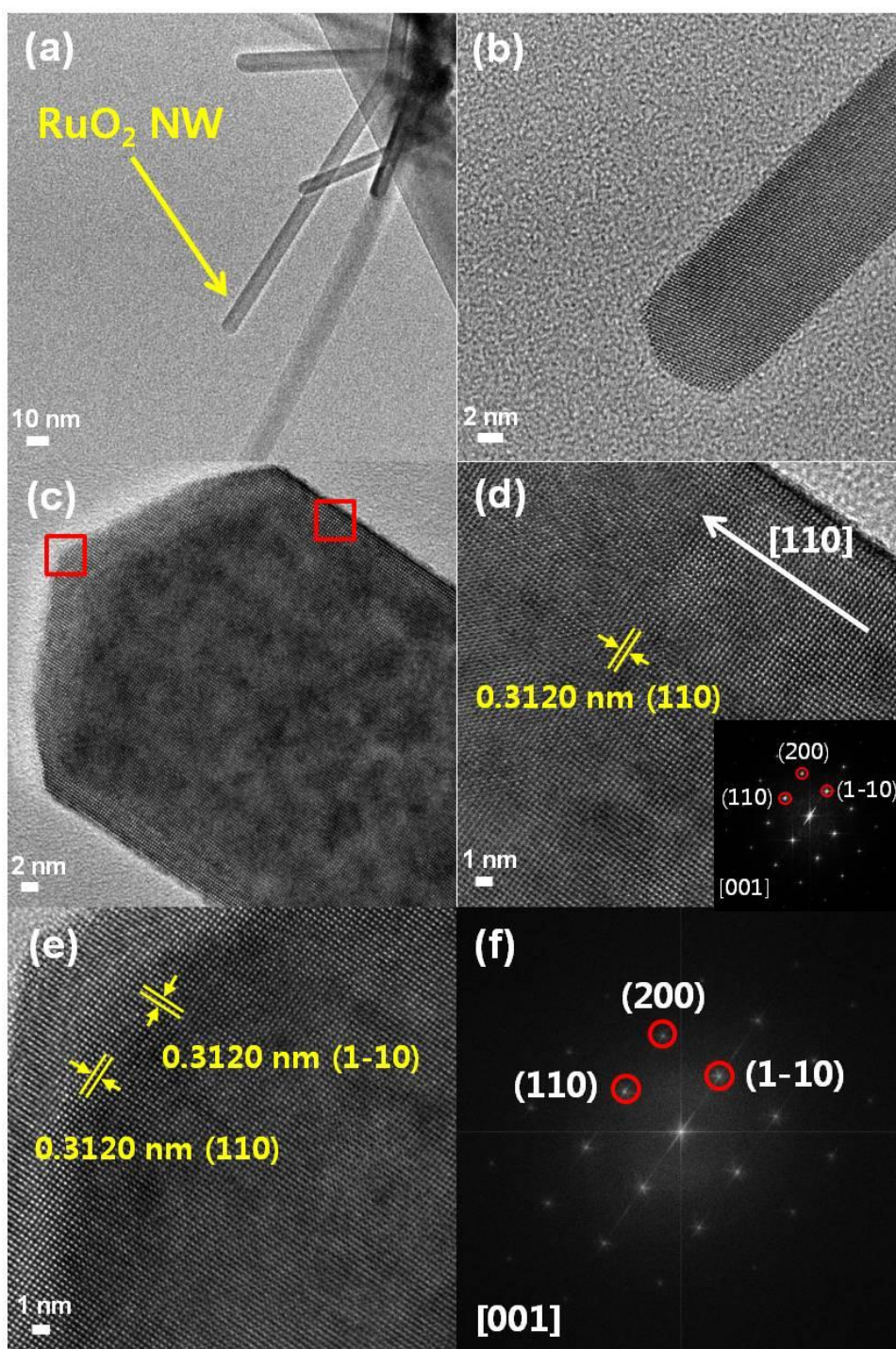
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**Fig. S1** Additional SEM images of RuO<sub>2</sub> nanowires grown on electrospun IrO<sub>2</sub> nanofibres.



**Fig. S2** Additional low and high magnification TEM images of a representative RuO<sub>2</sub> nanowire grown on electrospun fibre and the fast Fourier transform (FFT) of the lattice-resolved image.



**Fig. S3** (a) High angle angular dark field (HAADF) STEM image and (b)-(e) EDS-elemental mapping analysis for Ru(L), Ir(M) and O(K) atoms of RuO<sub>2</sub> nanowires on electrospun IrO<sub>2</sub> nanofibres.

