

Supporting information

# **Effect of the deposition of vanadium-oxide on the photocatalytic activity of TiO<sub>2</sub> nanotubes and its photodiode performance interfaced with CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> single crystal**

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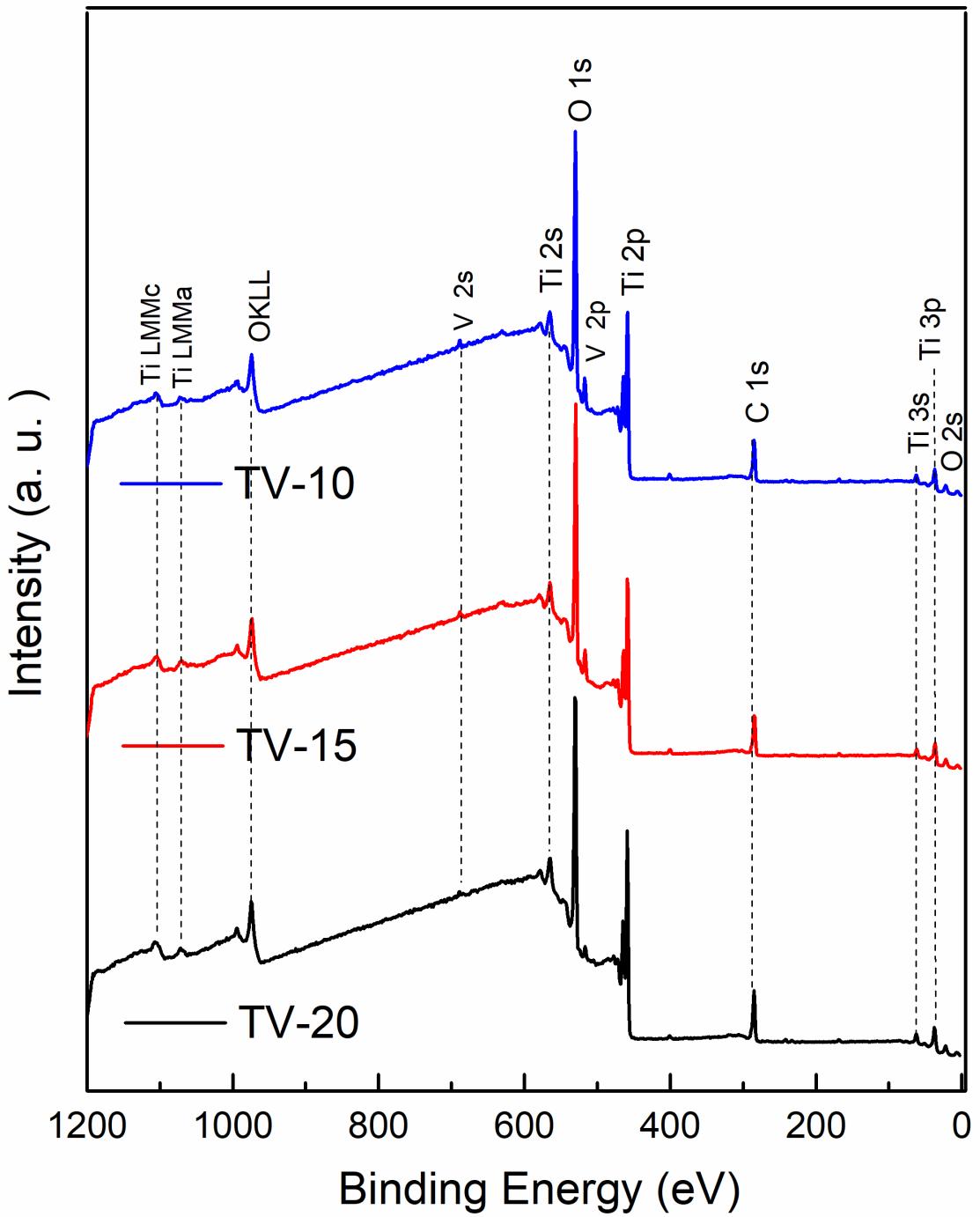
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**Figure S1.** Survey XPS spectra of  $\text{TiO}_2$  nanotubes after vanadium oxide deposition.

**Table S1.** Band gaps of the samples with and without vanadium oxide deposition.

<b>Samples</b>	<b>T-10</b>	<b>T-15</b>	<b>T-20</b>	<b>TV-10</b>	<b>TV-15</b>	<b>TV-20</b>
<b>Band gap, eV</b>	3.44	3.40	3.20	3.27	3.38	3.08