

Electronic Supporting Information (ESI)

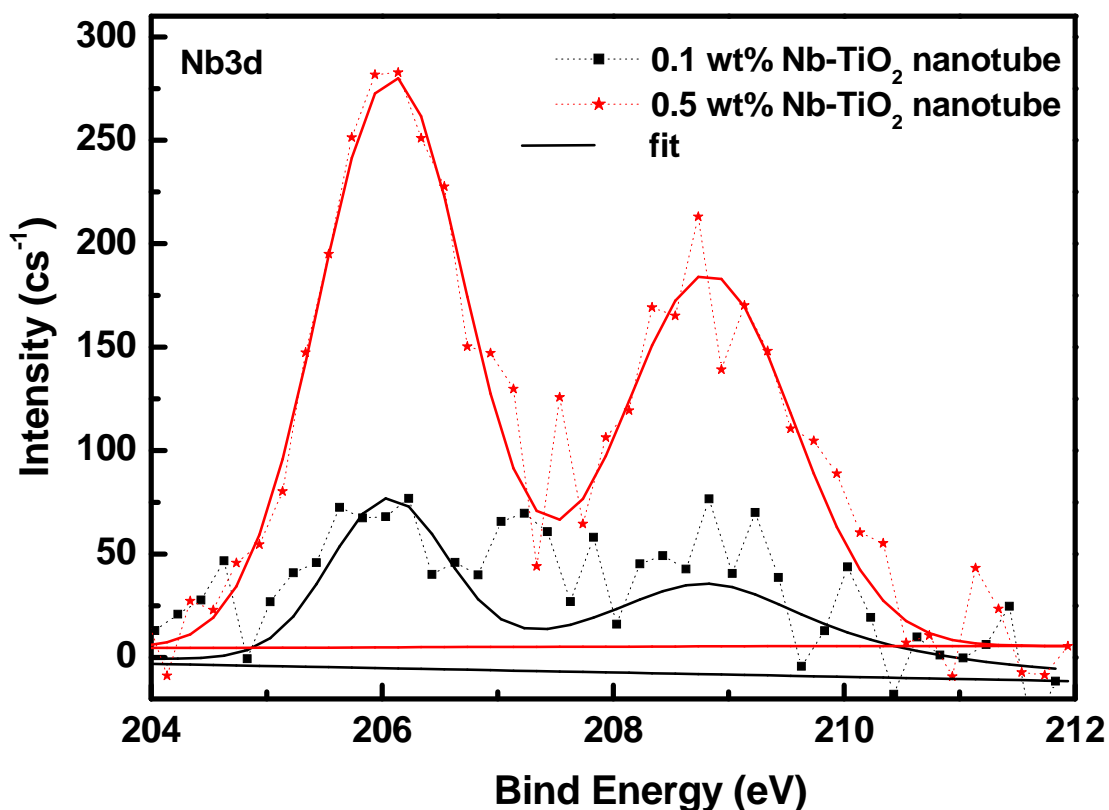
## Increased photocurrent response in Nb-doped TiO<sub>2</sub> nanotubes

Min Yang <sup>a,b</sup>, Himendra Jha <sup>a</sup>, Ning Liu <sup>a</sup> and Patrik Schmuki <sup>a\*</sup>

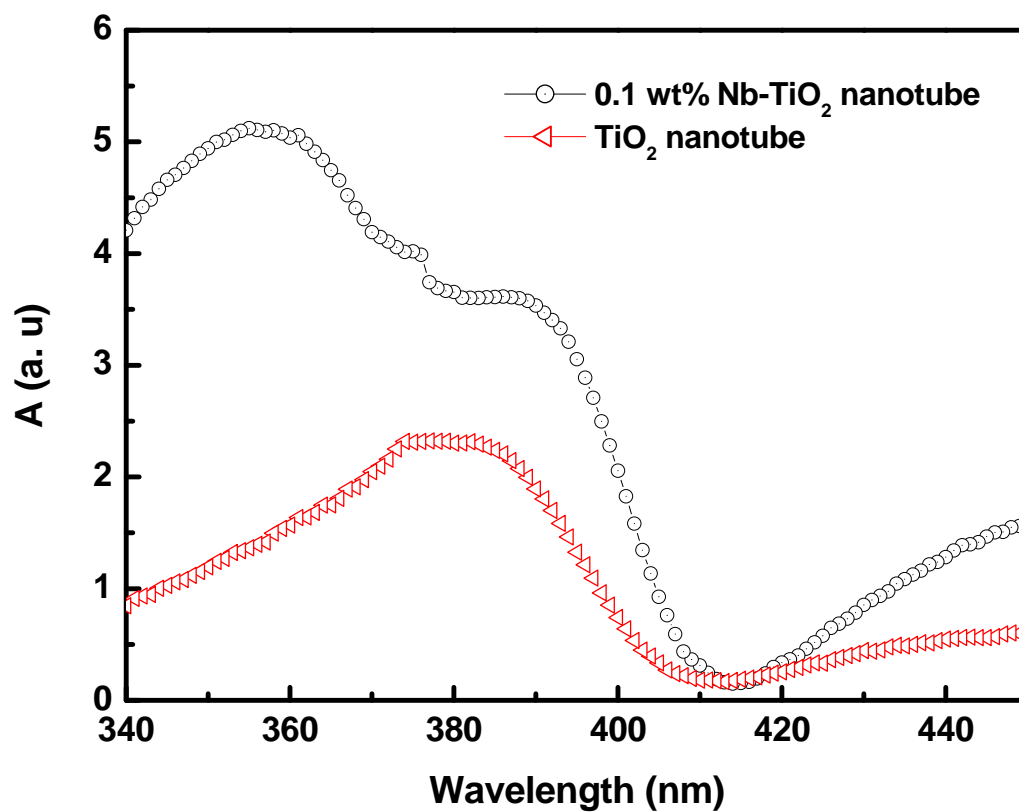
<sup>a</sup> Department of Materials Science, WW4-LKO, University of Erlangen-Nuremberg, Martensstrasse 7, D-91058 Erlangen, Germany

<sup>b</sup> Current address : Department of Catalysis Science and Engineering, School of Chemical Engineering and Technology, Harbin Institute of Technology, Harbin, 150001, PR China

Email: [schmuki@ww.uni-erlangen.de](mailto:schmuki@ww.uni-erlangen.de) (P. Schmuki).



**Fig. S1** XPS of Nb3d peaks in 0.1 wt% Nb-doped and 0.5 wt% Nb-doped TiO<sub>2</sub> nanotube layers. Quantitative evaluation shows the content in the oxide to be close to the nominal alloy composition (0.1 wt% Nb is however close to detective limit of XPS).



**Fig. S2** Light absorbance for pure TiO<sub>2</sub> and 0.1 wt% Nb-doped TiO<sub>2</sub> nanotube layers with 2 μm thickness annealed at 650 °C, acquired using diffuse reflectance measurements. It shows the absorbance of the Nb-doped material to be higher than for plain TiO<sub>2</sub>.