

Electronic Supplementary Information

Oxalic acid photooxidation on rutile nanowire electrodes

Thomas Berger^{1,2}, Antonio Rodes¹, and Roberto Gómez^{1,*}

*¹Departament de Química Física i Institut Universitari d'Electroquímica, Universitat d'Alacant,
Apartat 99, E-03080 Alacant, Spain*

*²Departamento de Sistemas Físicos, Químicos y Naturales, Área de Química Física, Universidad
Pablo de Olavide, Ctra. Utrera, km 1, E-41013 Sevilla, Spain*

*Corresponding author. E-mail: Roberto.Gomez@ua.es.

Fax: +34 965903537. Tel. +34 965903748

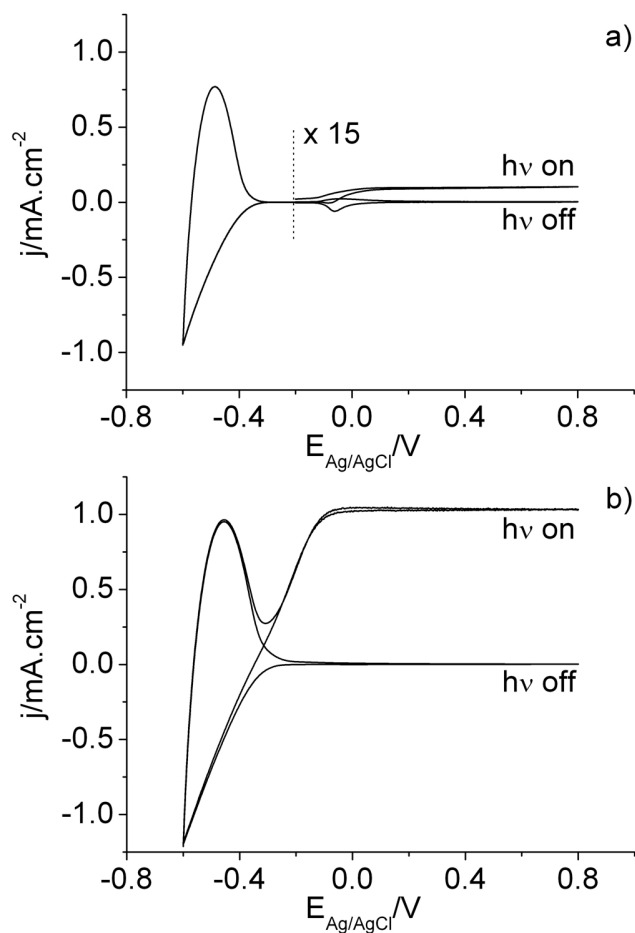


Figure S1. Voltammograms of a NW-TiO₂@FTO electrode in a 100 mM HClO₄ aqueous solution (a) and in a 50 mM H₂C₂O₄ + 100 mM HClO₄ aqueous solution (b) in the dark and during UV/Vis exposure. Polychromatic EE illumination; 300 W Xe lamp; $I(E < 6.2 \text{ eV}) = 500 \text{ mW}\cdot\text{cm}^{-2}$; scan rate: $20 \text{ mV}\cdot\text{s}^{-1}$; film thickness: $d(\text{TiO}_2) = 360 \text{ nm}$.

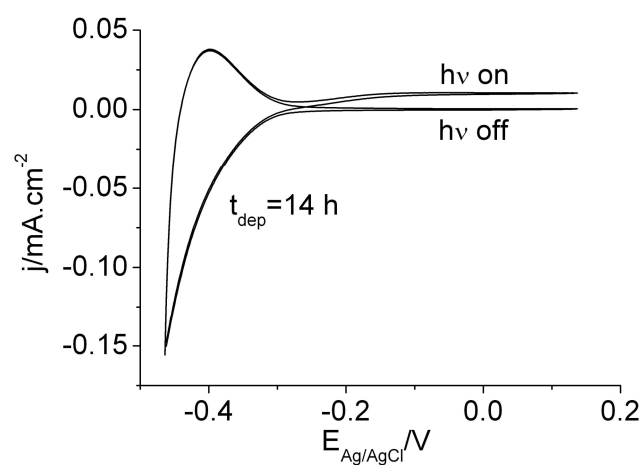


Figure S2. Voltammograms of a NW-TiO₂@Au@Si thin film (oxide deposition time: 14 h) in 10 mM H₂C₂O₄ + 100 mM HClO₄ aqueous solution in the dark and during UV/Vis exposure; polychromatic EE illumination; 50 W medium-pressure Hg lamp, $I = 10 \text{ mW}\cdot\text{cm}^{-2}$; scan rate: $20 \text{ mV}\cdot\text{s}^{-1}$.