

Article

# A Photoelectrochemical Study of Bioinspired 2-Styryl-1-Benzopyrylium Cations on TiO<sub>2</sub> Nanoparticle Layer for Application in Dye-Sensitized Solar Cells

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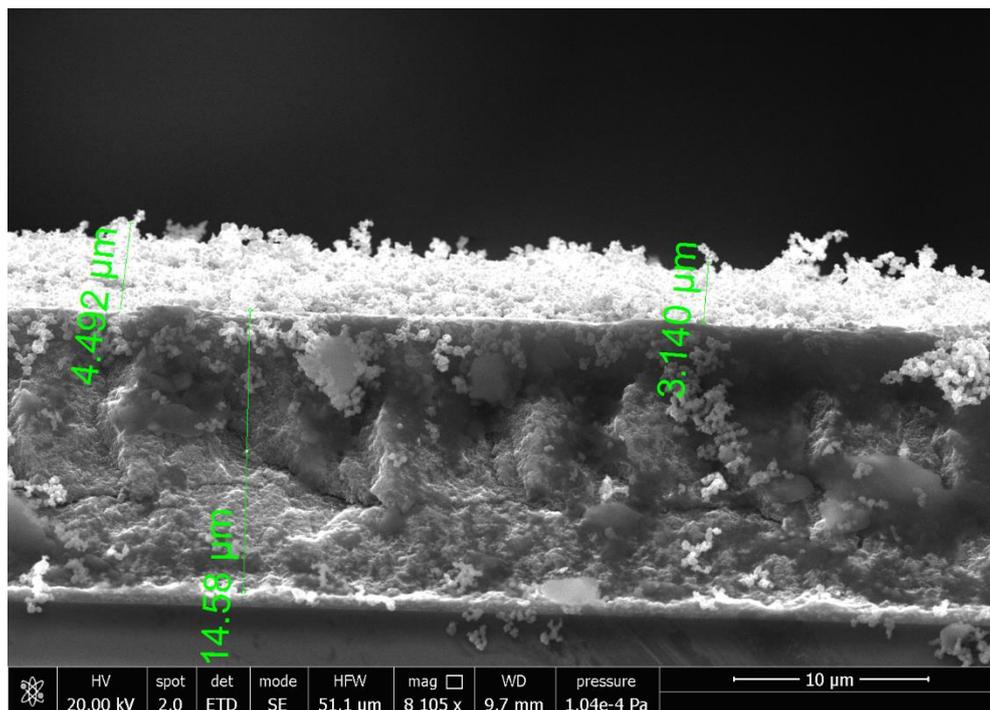
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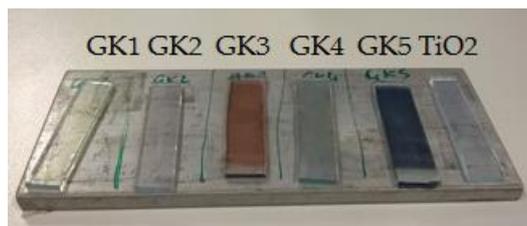
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**Figure S1.** SEM cross-sectional image for the anode

In the picture of Figure S1 are showed the SEM cross sectional image (captured by a SEM QUANTA FEG 450) of the TiO<sub>2</sub> anode used for the DSSC and can be see two zones: the former constituted by the transparent layer of commercial TiO<sub>2</sub> nanoparticles (diameter 10–15 nm) with a thickness of around 14,5 μm, and the latter, on the top, constituted by the scattering layer of commercial TiO<sub>2</sub> nanoparticles (diameter 150–200 nm) with a thickness of around 4 μm, depending of the irregularity due to the large TiO<sub>2</sub> nanoparticles of 150–200 nm.



**Figure S2.** – Photoanodes for absorption spectra sensitized by ethanol acidified solution (pH 1.5)

In Figure S2 are reported the images of the photoanodes for the five dyes and a TiO<sub>2</sub> anode used for UV-Vis spectra, unfortunately for GK1 GK2 and GK4 the sensitization was very low and we cannot reproduce absorption spectra for them because of very low signal and of the background.