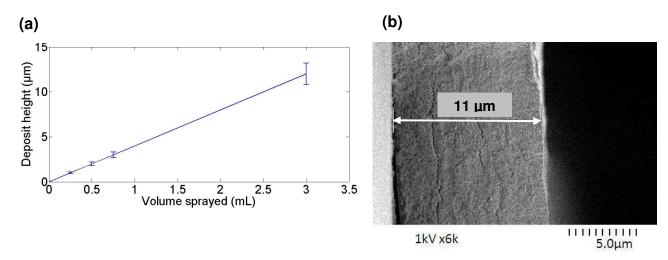
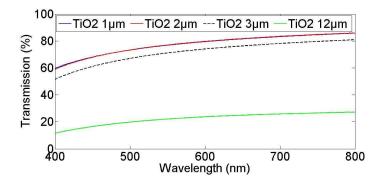
## **Supporting Information Available**

This information is available free of charge via the Internet: http://pubs.acs.org/



**Figure S1.** (a) Thickness of the deposit as a function of the amount of colloidal solution sprayed onto the substrate. (b) SEM cross-sectional view of  $TiO_2$  thick film spray deposited with cracks separated by  $\sim 3\mu m$ .



**Figure S2.** Transmission measurements on  $TiO_2$  films of various thicknesses (e=1-2-3-12  $\mu$ m). One and two micrometers thick  $TiO_2$  films have the same transmission properties (red and blue solid lines) whereas the three micron one (black dashed line) presents a lower one due to crack in the volume. By extension, the thicker one has more cracks and is more scattering (green solid line).