Supporting information

Title Single-step preparation of large area TiO₂ photoelectrodes for water splitting

Silvia Franz*, Hamed Arab, Gian Luca Chiarello, Massimiliano Bestetti, and Elena Selli

E-mail: silvia.franz@polimi.it



Figure S1. SEM surface images of TiO₂ films: (a) A-60, (b) A-900, (c) A-30, (d) A-300, (e) C-10, and (f) C-90.



Figure S2. XRD pattern of TiO₂ electrodes obtained at different cell voltages and anodization times: (a) 100 V, (b) 150 V, and (c) 180 V. $\bullet \blacktriangle$ Symbols mark the reflection of anatase, rutile, and of the Ti substrate, respectively.



Figure S3. UV-Vis-NIR diffuse reflectance spectra (DRS) for some representative TiO_2 samples as Tauc-plots of the Kubelka–Munk transform.



Figure S4. Photocurrent density vs. irradiation wavelength curves measured with TiO_2 electrodes obtained at (a,b) 100 V, (c,d) 150 V and (e,f) 180 V cell voltages and the anodization times indicated in the panels, (a,c,e) in the absence of applied bias and (b,d,f) under 0.6 V vs. SCE.