

Supporting Information

Self-Cleaning Cotton by Porphyrin-sensitized Visible-Light Photocatalysis

Shabana Afzal,^a Walid A. Daoud,^a and Steven J. Langford^b

^aSchool of Applied Sciences and Engineering, Monash University, Churchill, Victoria 3842, Australia

^bSchool of Chemistry, Monash University, Clayton, Victoria 3800, Australia

1. UV-Vis absorption spectroscopy of TCPP

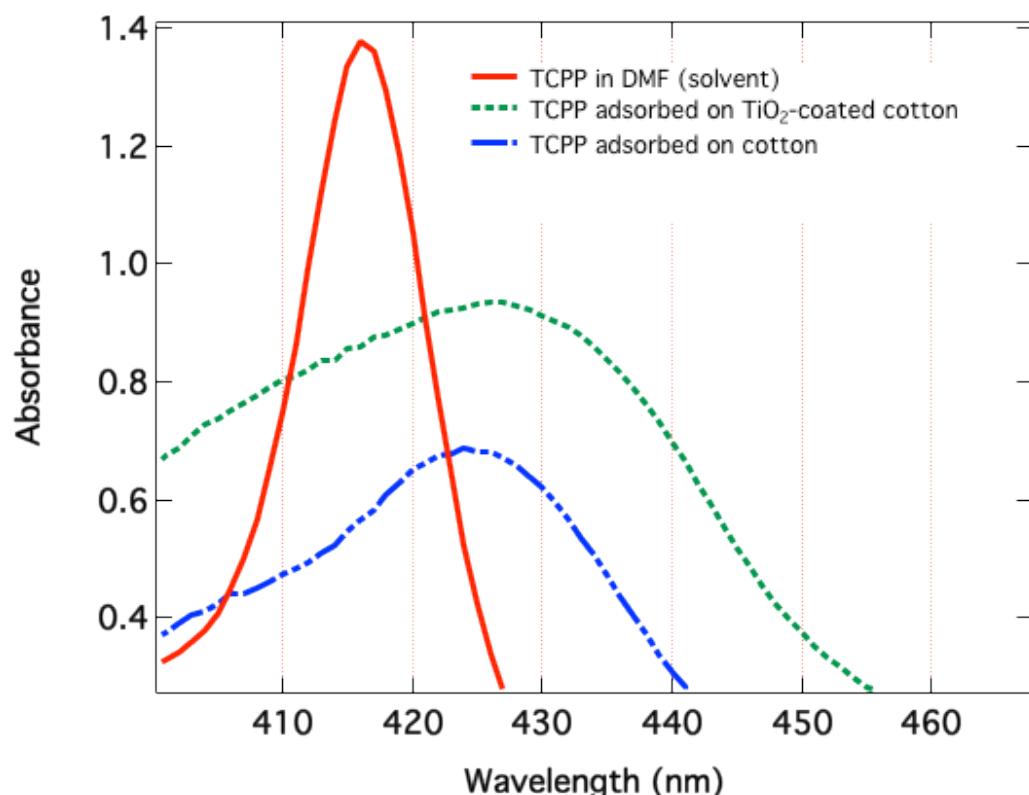


Fig. S1 UV-Vis spectra of TCPP for Soret band

2. UV-Vis Spectroscopy for evaluation of coating stability

a. Detergent washing

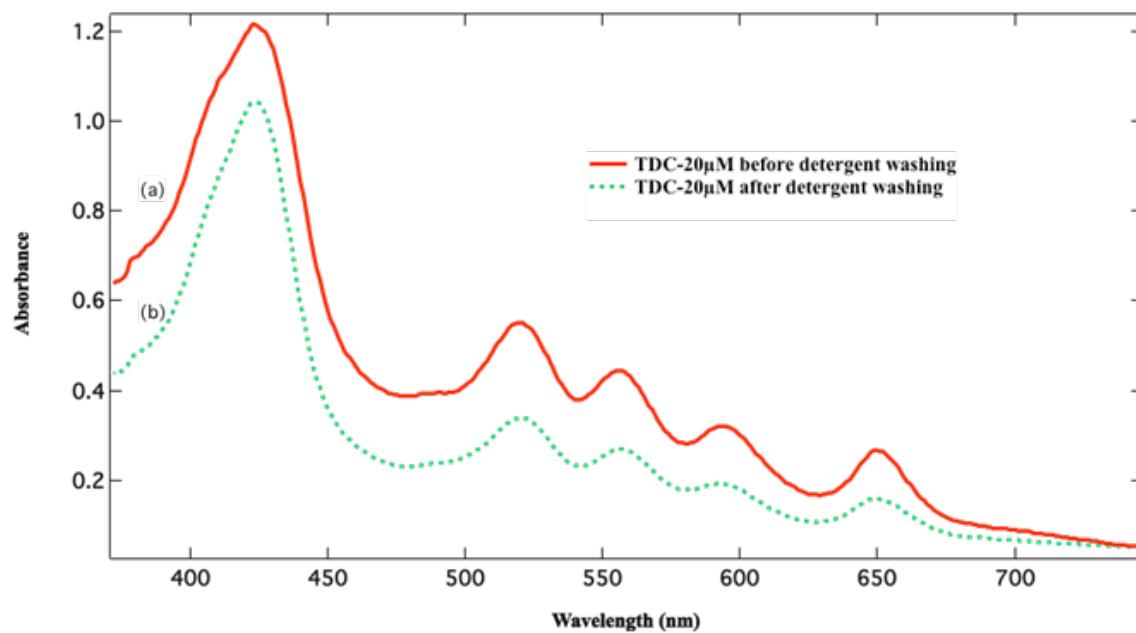


Fig. S2a UV-Vis spectra TiO₂/TCPP-coated cotton (a) before washing with detergent, (b) after washing with detergent for 45 min.

b. Petroleum ether washing

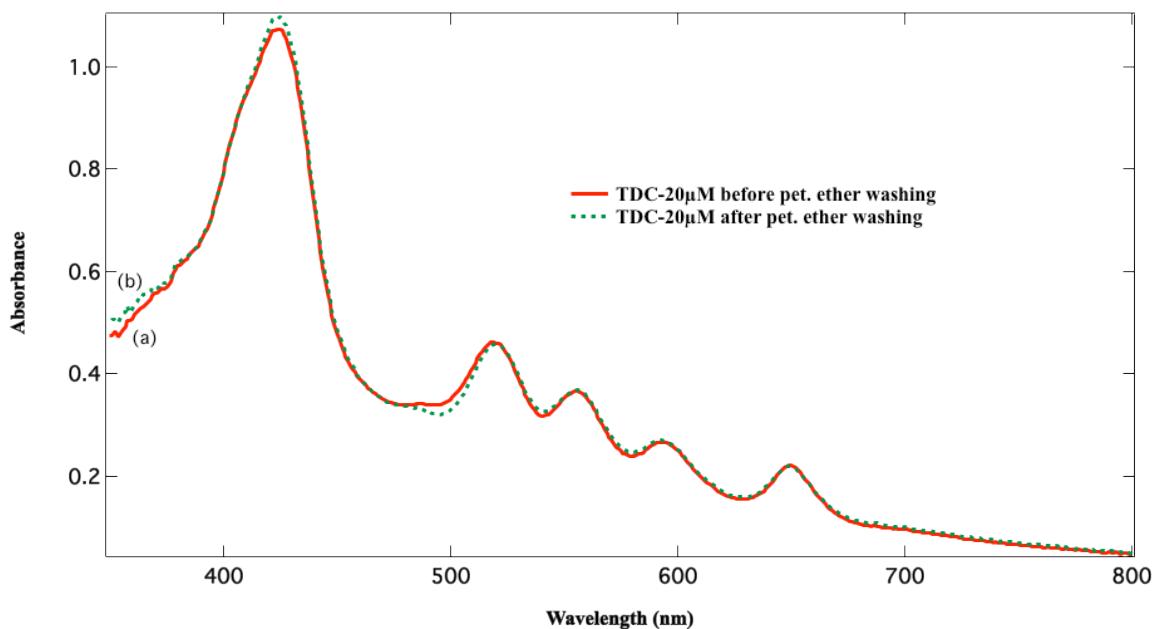


Fig. S2b UV-Vis spectra TiO₂/TCPP-coated cotton (a) before washing with petroleum ether, (b) after washing with petroleum ether for 45 min.

c. Water washing

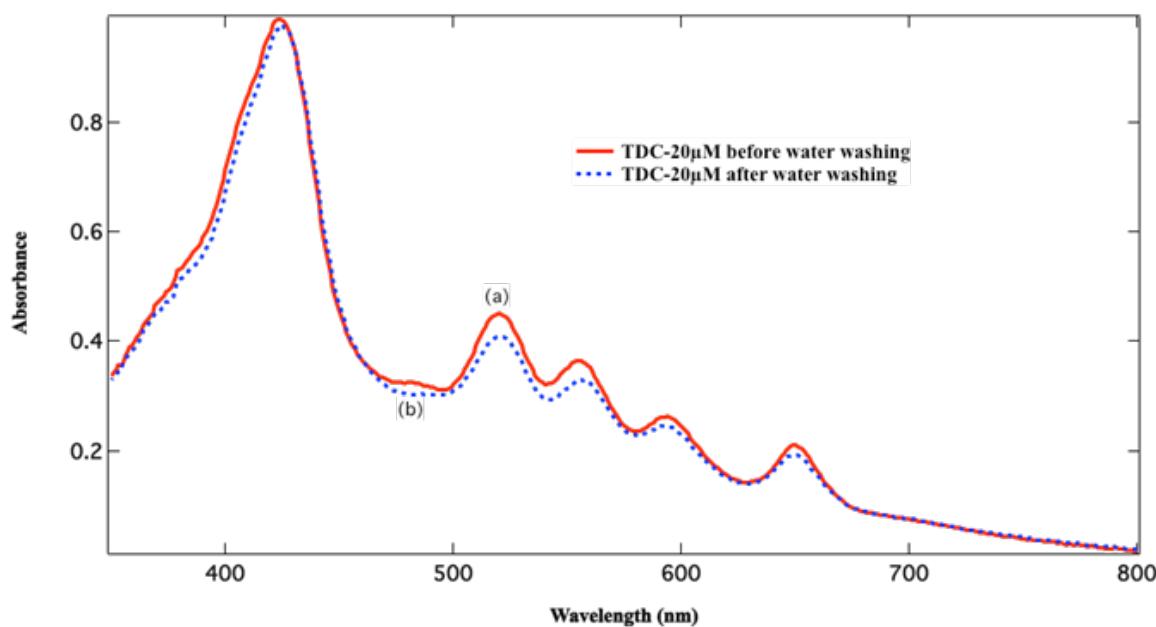


Fig. S2c UV-Vis spectra TiO₂/TCPP-coated cotton (a) before washing with water, (b) after washing with water for 45 min.

2. UV-Vis spectroscopy for evaluation of coating photostability

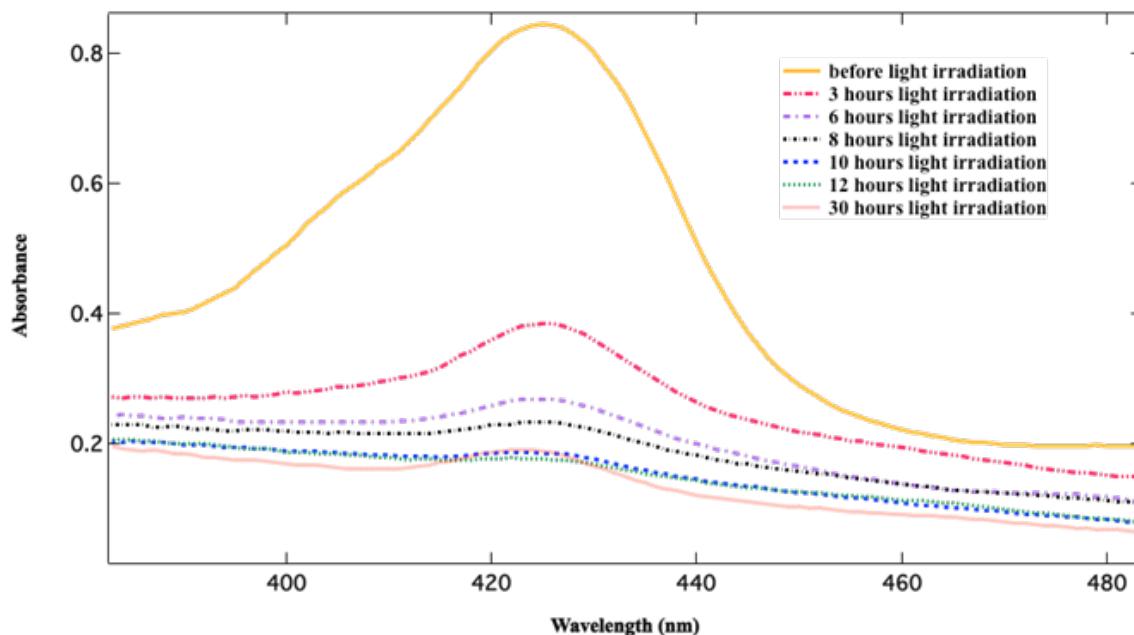


Fig. S3 UV-Vis spectra of TiO₂/TCPP-coated cotton before and after light irradiation at different time intervals.