Supporting Information

Superhydrophobic and photocatalytic self-cleaning cotton

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1. Spectrum of fluorescent lamp used in the photodegradation experiments



Fig. S1: Spectrum of a typical fluorescent lamp (Source: http://en.wikipedia.org/wiki/File:Fluorescent lighting spectrum peaks labelled.svg)

2. Washing with water



Fig. S2: Water contact angles of OTMS/TCPP/TiO₂-coated cotton samples; (a) 156° before washing, (b) 155° after 2^{nd} wash cycle, (c) 152° after 4^{th} wash cycle, (d) 151° after 6^{th} wash cycle, (e) 150° after 8^{th} wash cycle, (f) 149° after 10^{th} wash cycle.

3. Washing with petroleum ether



Fig. S3: Water contact angles of OTMS/TCPP/TiO₂-coated cotton samples; (a) 156° before washing, (b) 156° after 2^{nd} wash cycle, (c) 154° after 4^{th} wash cycle, (d) 150° after 6^{th} wash cycle, (e) 150° after 8^{th} wash cycle, (f) 148° after 10^{th} wash cycle

4. Washing with detergent



Fig. S4: Water contact angles of OTMS/TCPP/TiO₂-coated cotton samples; (a) 156° before washing, (b) 154° after 2^{nd} wash cycle, (c) 154° after 4^{th} wash cycle, (d) 153° after 6^{th} wash cycle, (e) 149° after 8^{th} wash cycle, (f) 146° after 10^{th} wash cycle