ADVANCED MATERIALS

Supporting Information

for

Advanced Materials, adma.200600588

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Supplementary Material.

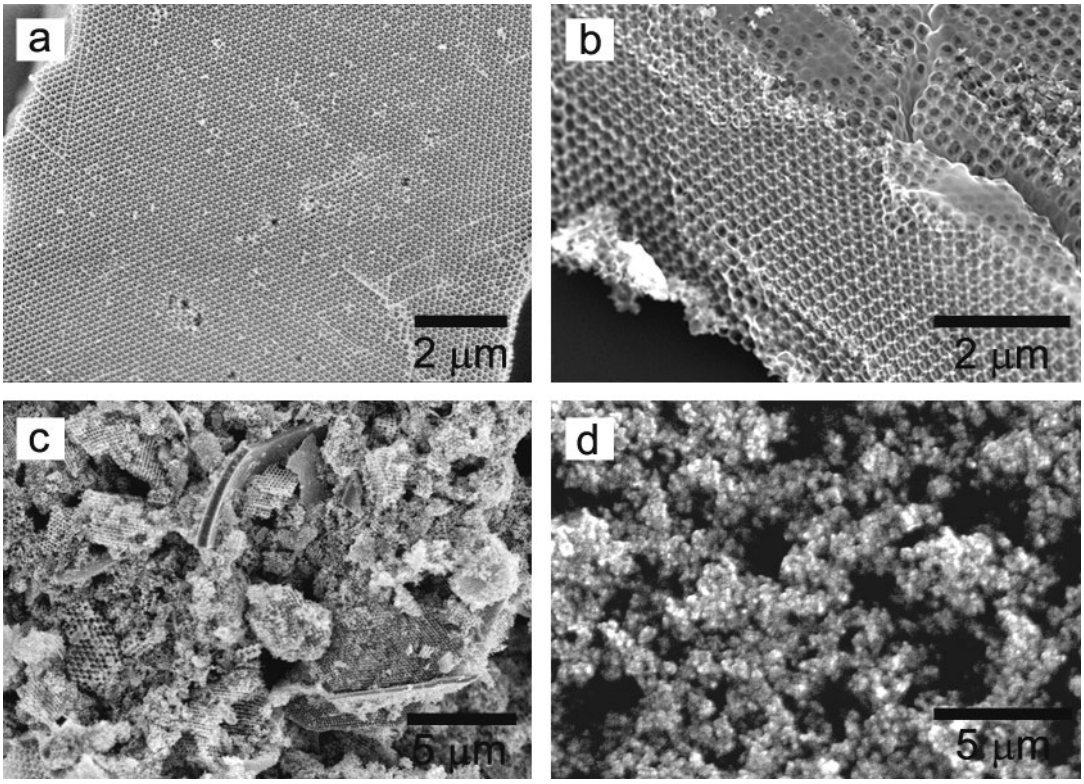

Figure S1. Scanning electron micrographs of TiO_2 inverse opals obtained from 150 nm (a) and 300 nm (b) polystyrene spheres as templates, crushed i-nc-TiO_2-o film (c) and nc-TiO_2 (d).

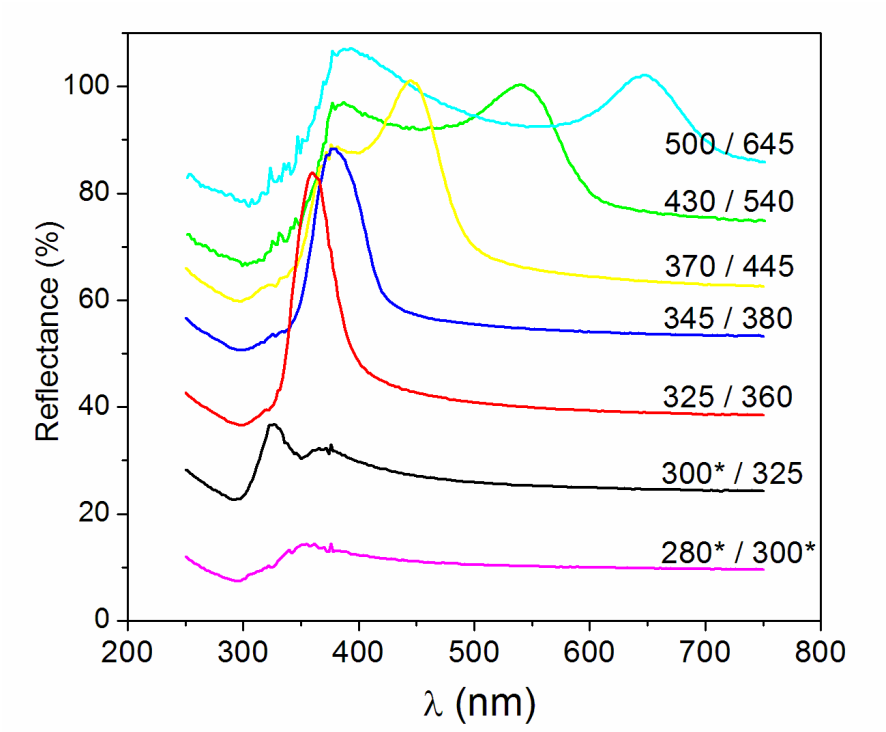

Figure S2. Reflectance spectra of i-nc-TiO_2-o in water. The stop-band positions in air (first number) and in water (second number) are indicated for each sample. The stop-band positions of 300 and 280 nm are interpolated (as indicated by the asterisks). Spectra are displaced vertically for clarity.

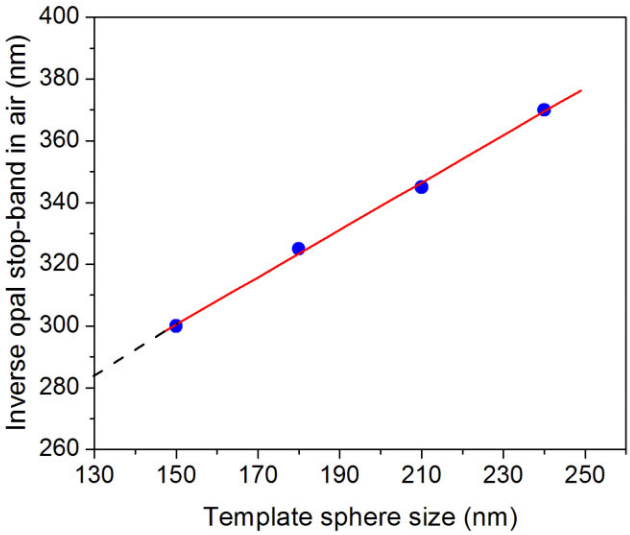

Figure S3. Stop-band position in air plotted as a function of template sphere size. A linear relationship is observed for stop-band maxima in the range between 300 and 370 nm.

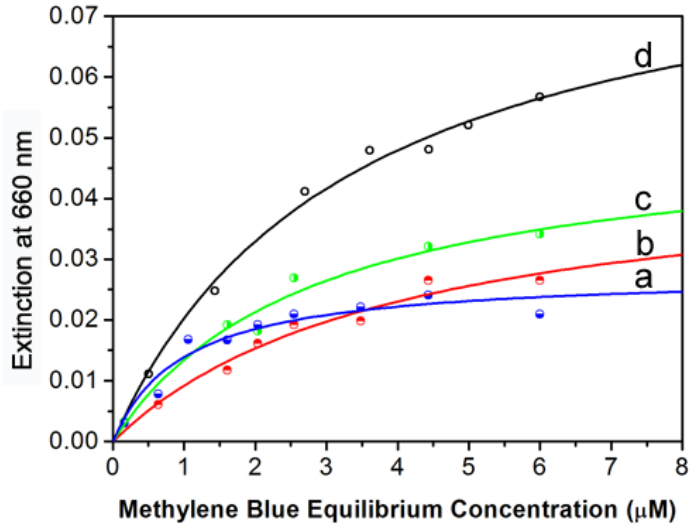

Figure S4. Adsorption behavior of methylene blue on TiO_2 films plotted as Langmuir isotherms for nanocrystalline TiO_2 (a), and inverse opals with photonic stop-band at 345 nm (b), 370 nm (c) and 500 nm (d). All films approach saturation coverage at dye equilibrium concentration of 7 μM.

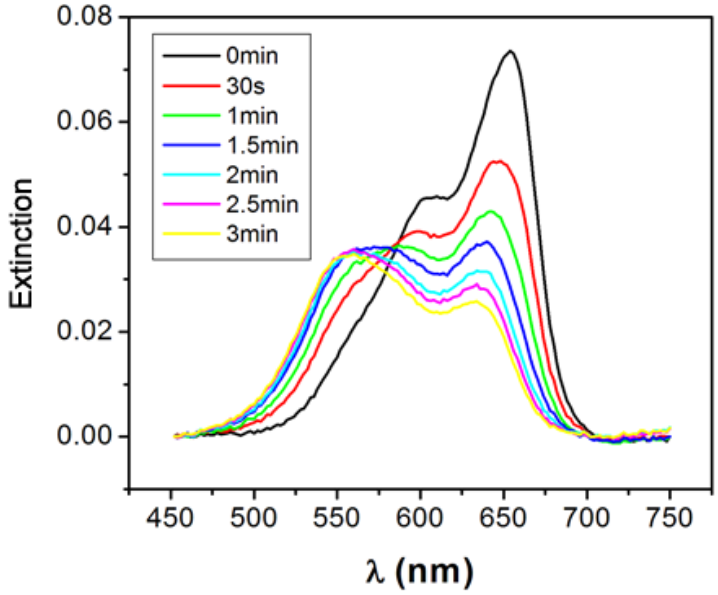

Figure S5. Typical extinction spectra of methylene blue during photo-degradation under white light irradiation.