

Photocatalytic Inactivation of Co-Culture of *E. coli* and *S. epidermidis* using APTES-Modified TiO₂

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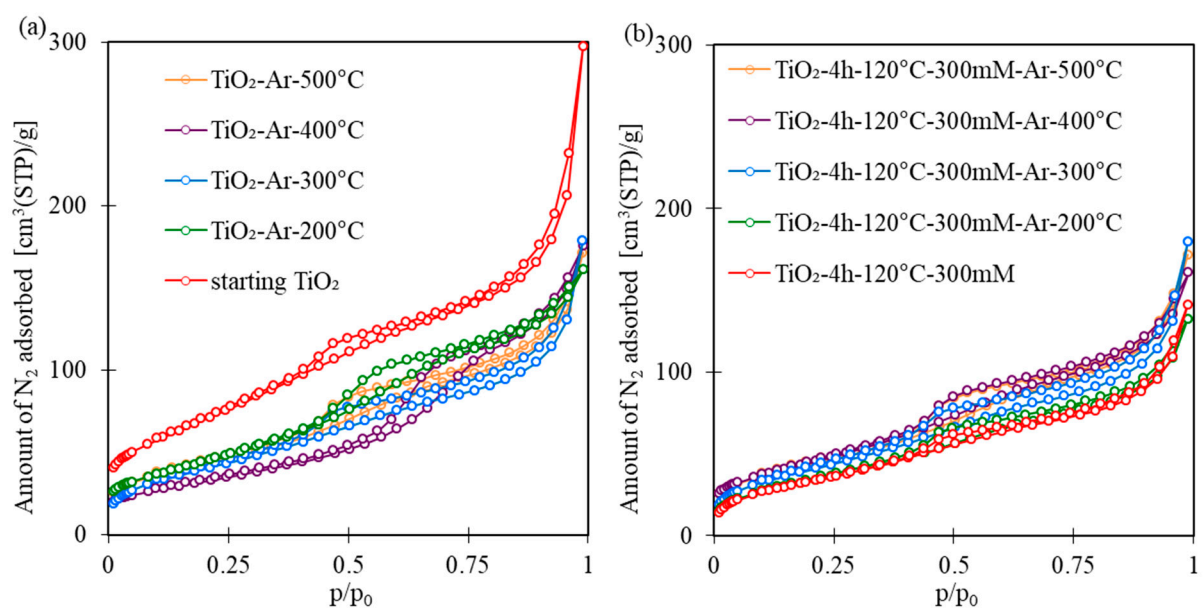
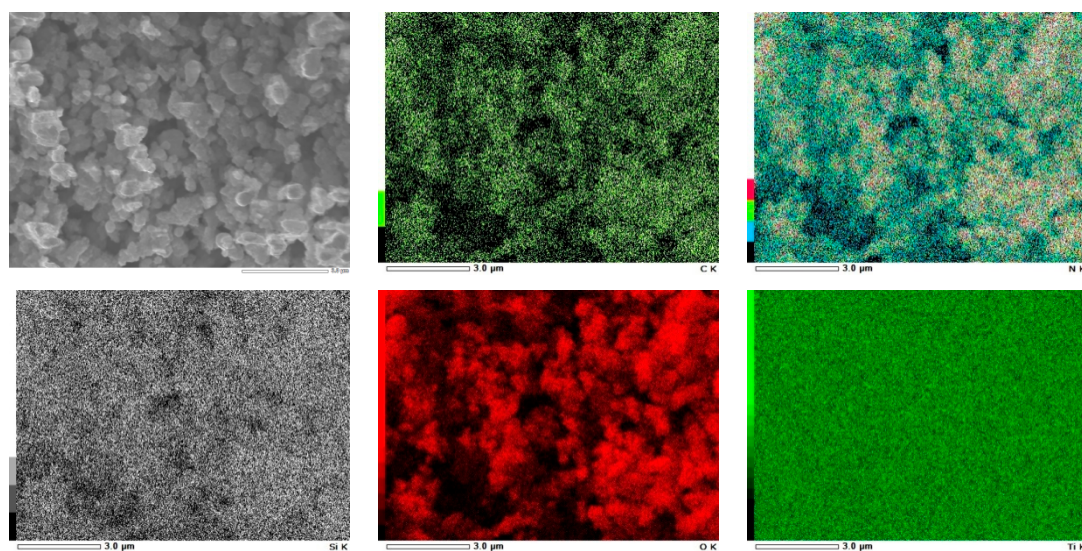


Figure S1. Adsorption-desorption isotherms of starting TiO₂, reference calcined photocatalysts (a), and APTES/TiO₂ nanomaterials (b).

(a)



(b)

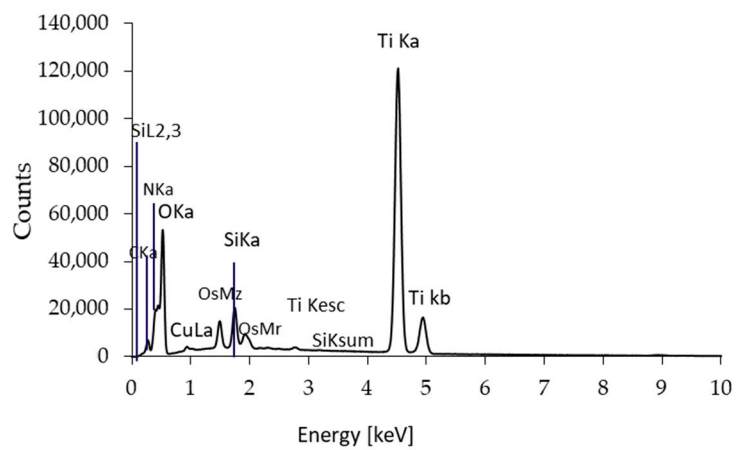
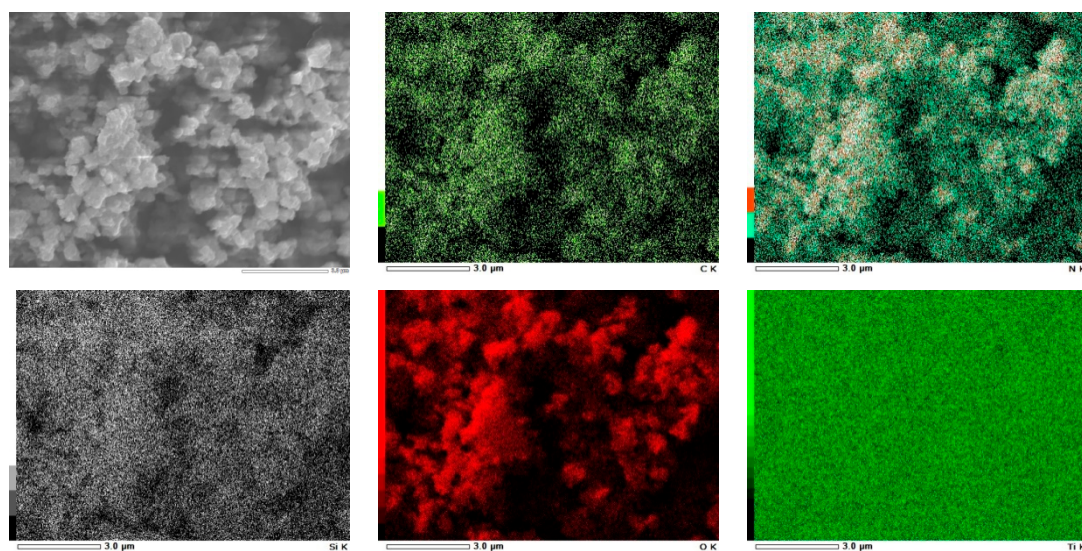


Figure S2. EDS mapping (a) and EDS spectrum (b) of TiO_2 -4 h-120°C-300 mM

(a)



(b)

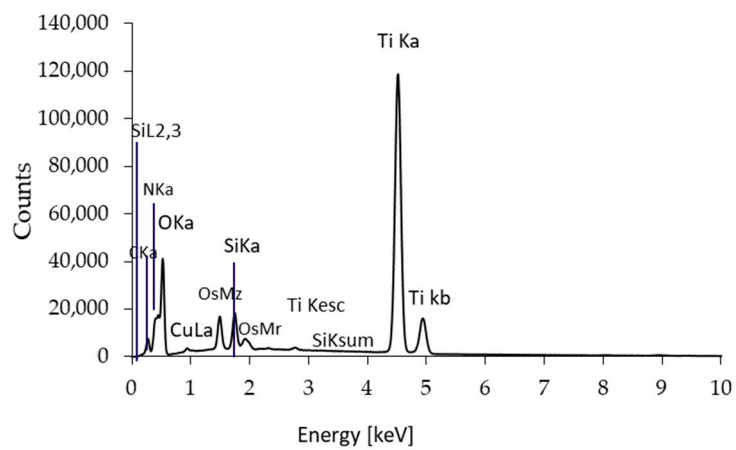
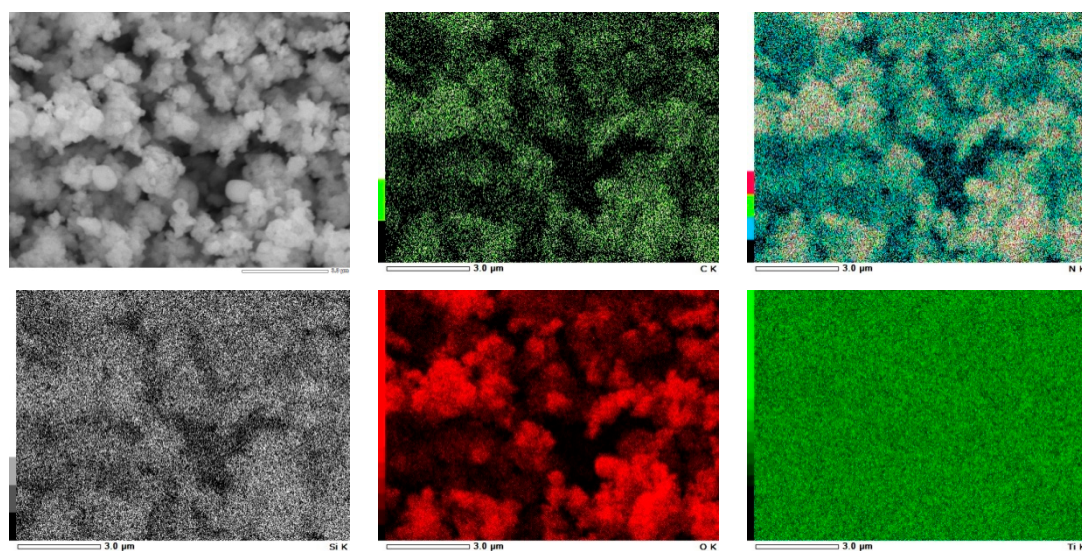


Figure S3. EDS mapping (a) and EDS spectrum (b) of TiO₂-4 h-120°C-300 mM-Ar-200 °C.

(a)



(b)

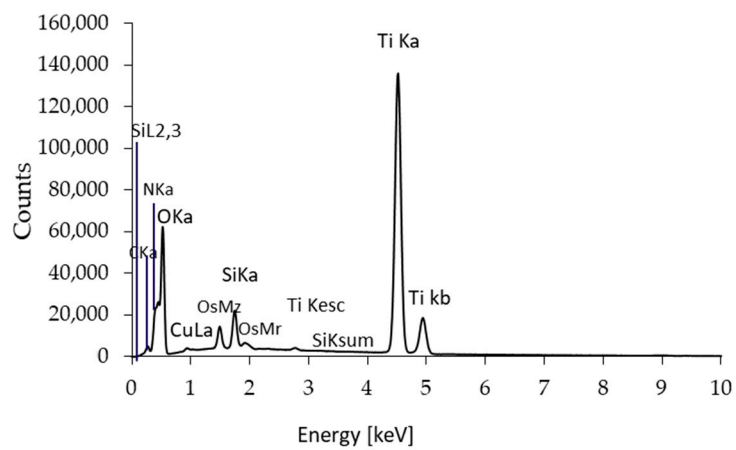
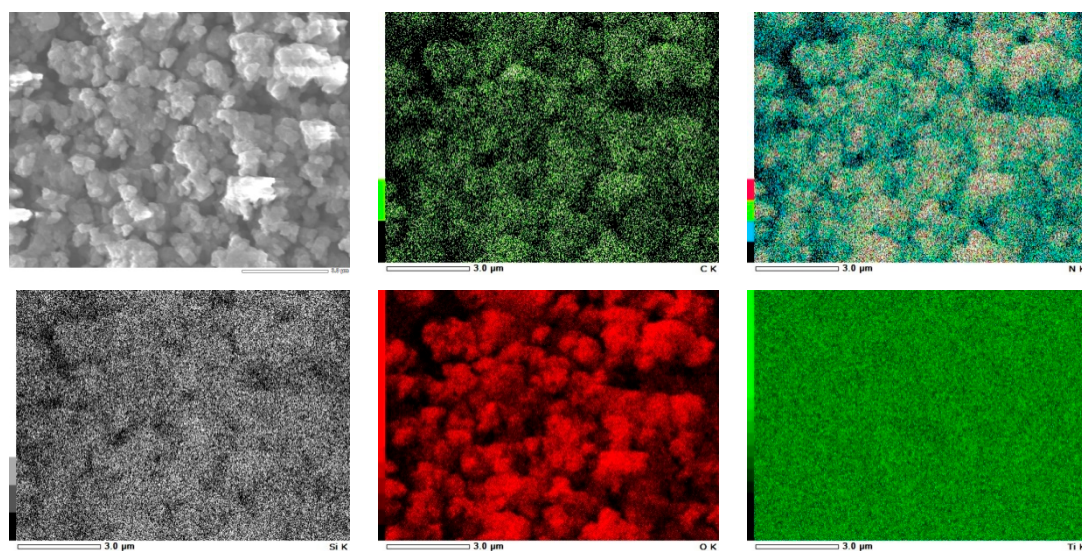


Figure S4. EDS mapping (a) and EDS spectrum (b) of TiO_2 -4 h-120°C-300 mM-Ar-400 °C.

(a)



(b)

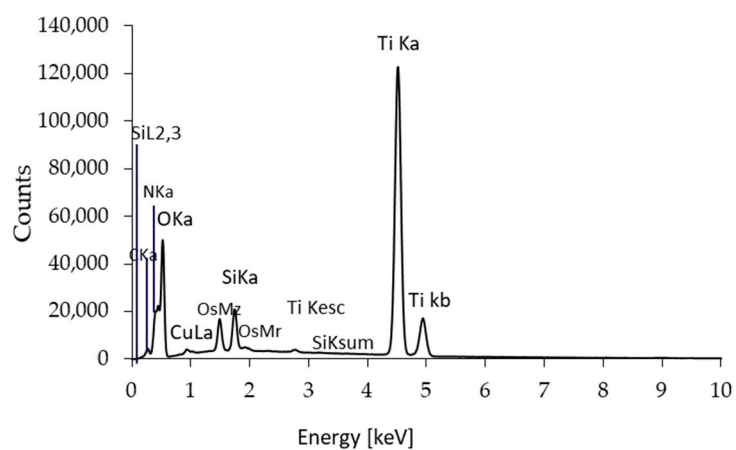


Figure S5. EDS mapping (a) and EDS spectrum (b) of TiO₂-4 h-120°C-300 mM-Ar-500 °C.

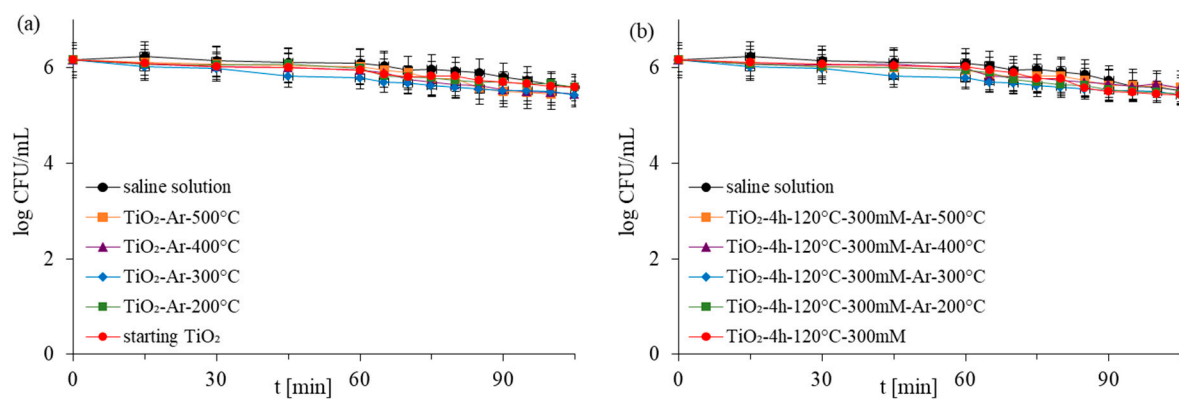


Figure S6. Inactivation of monoculture of *E. coli* in the presence of starting TiO_2 , reference calcined photocatalysts (a) and APTES/ TiO_2 samples (b) under dark conditions.

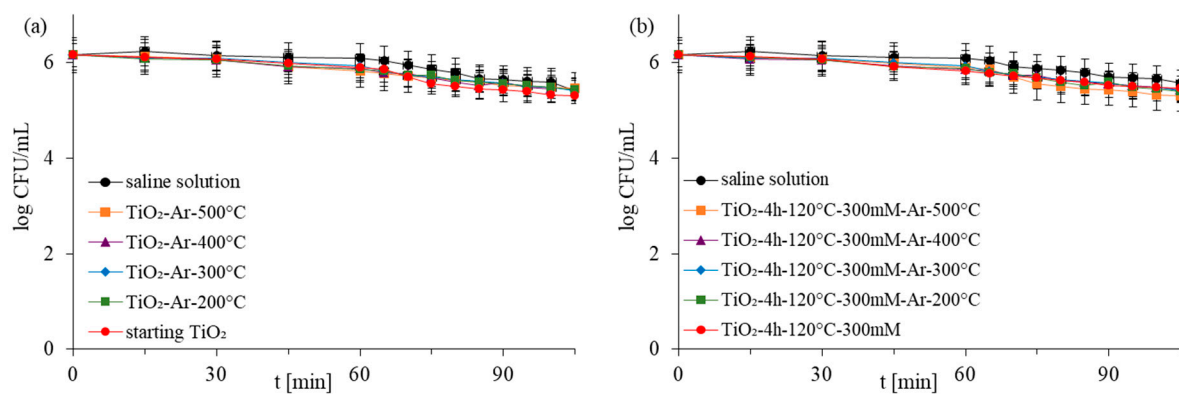


Figure S 7. Inactivation of monoculture of *S. epidermidis* in the presence of starting TiO_2 , reference calcined photocatalysts (a) and APTES/ TiO_2 (b) samples under dark conditions.

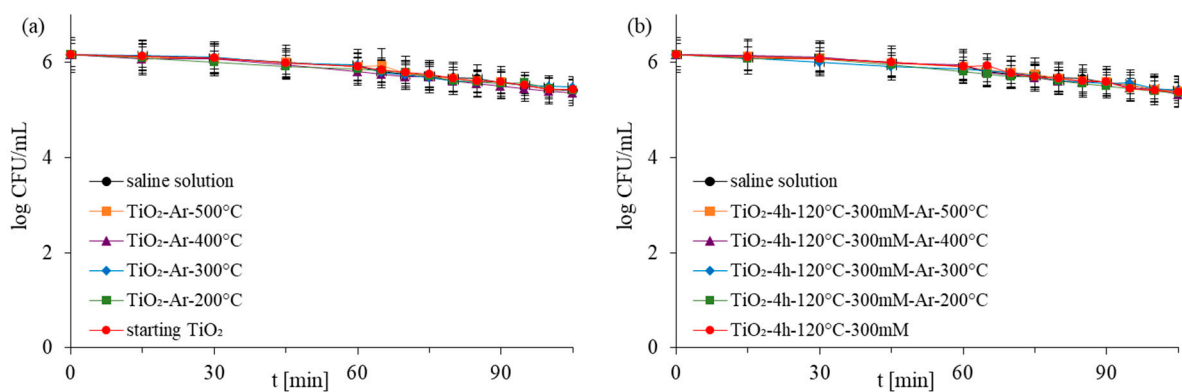


Figure S8. Inactivation of *E. coli* in co-culture bacteria in the presence of starting TiO_2 , reference photocatalysts (a) and APTES/ TiO_2 (b) samples under dark conditions.

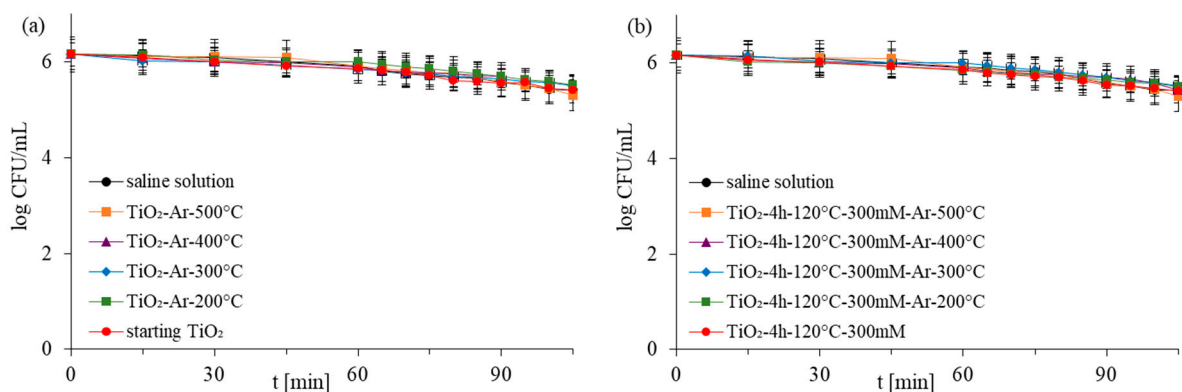


Figure S9. Inactivation of *S. epidermidis* in co-culture of bacteria in the presence of starting TiO_2 , reference photocatalysts (a) and APTES/ TiO_2 samples (b) under dark conditions.

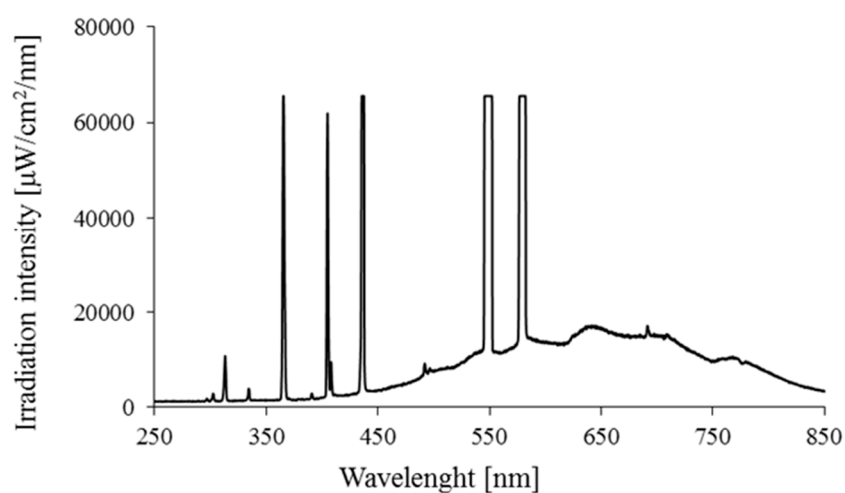


Figure S10. Emission spectra of artificial solar light (ASL).

The employed ASL source comprised a 300 W light bulb (OSRAM Ultra Vitalux, OSRAM GmbH, Munich, Germany) with a radiation intensity of 9.0 W/m^2 in the spectral range from 300 to 2800 nm and 258.1 W/m^2 in the spectral range from 280 to 380 nm.