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Photocatalytic Properties of Thermally Annealed Films of Titanium Butoxide*

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We show that titanium dioxide particles capable of Reactive oxygen species generation can be produced in titanium butoxide films by annealing them at 500°C. Optimal conditions for the films deposition by a modified Langmuir-Blodgett technique were selected basing on the film uniformity examined by optical and electron microscopy. The photocatalytic activity of the annealed film was tested using RNO sensor bleaching.

Keywords: reactive oxygen species, bacterial infections, titanium dioxide, UV radiation.

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