

# Photocatalytic activity of nanostructured titania coatings on aluminum substrates

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**Keywords:** Titania coatings containing crystalline titania particles 10 to 20 and 100 to 300 nm in size or a combination of such particles have been produced by a sol–gel process on the surface of aluminum substrates. According to X-ray diffraction characterization results, the coatings consist predominantly of crystalline titania in the form of anatase. The decomposition of an organic test dye (Rhodamine B) in an aqueous solution under irradiation with UV light demonstrates that the highest photocatalytic activity is offered by the coatings containing both nanometer- and submicron-sized titania particles.

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