

TITAN-OXIDE NANOPARTICLES - ANTIMICROBIAL OR ANTIADHESIVE?

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Abstract

Stably deposited titan-oxide nanotubes are used to protect plastic surfaces against bacteria colonization. The effect has been proven under illumination of ordinary fluorescent bulbs used in production halls, offices and hospitals, making the system ideal for real application. Although it is known that photoactivation is responsible for radical production that makes this material antibacterial, the FMS experiments were employed to answer whether such action is actually antiadhesive or antibacterial.

Keywords: Antimicrobial nanomaterials, antiadhesive

Author did not supply full text of the paper/poster.