
Titania-based Photocatalytic Nanocoating, First Line of Defense Against Coronavirus

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FN Nano Inc., a USA-based company specializing in photocatalytic intelligent multifunctional coatings and their environmental applications such as air purification and creation of sanitary environments, has developed a new photocatalytic nanocoating based on titanium dioxide, which can decompose and eliminate the organic compounds, bacteria, mold, and viruses on its surface when exposed to light. This nanocoating can significantly control the spread of the coronavirus if applied to the room surfaces in hospitals, government buildings, and public places.

A multifunctional photocatalytic nano-coating for ceilings, interior, and exterior walls, is becoming the most effective solution to stop the spread of the coronavirus.

The main component of the FN-NANO® photocatalytic coating is TiO₂ (Titanium Dioxide). Titanium dioxide, also known as Titania, is the naturally occurring oxide of titanium.

Approved as a food additive by the [United States](#) Food and Drug Administration (FDA), Titanium Dioxide is considered a safe substance and harmless to humans and animals.

Many studies have been published on the use of titanium dioxide as a photocatalyst for the decomposition of organic compounds, bacteria, mold and viruses by oxidative decomposition.

Oxidative decomposition means that if titanium dioxide is exposed to light, organic substances on its surface will be broken down by oxidation, eventually forming carbon dioxide and water.

This has applications in fields such as the elimination of airborne viruses, antibacterial action, deodorization, volatile organic compounds (VOCs), mold, and soiling.

MLK Hospital ER will be the first hospital in Southern California to apply FN-NANO® coating, providing its patients, visitors, and staff a clean environment, free of airborne viruses, bacteria, and odors. The coating will be applied by JT Construction Group, INC the first “Certified FN-NANO® photocatalytic nanotechnology applicator” in Southern California.

JT Construction will be leading in the State of California, by applying FN-NANO® technology on hospitals, government buildings, and private sectors.

Las Vegas International Airport is the first large airport utilizing FN-NANO® coating, the project has been granted to KOR Building Group, LLC, a “Certified FN-NANO photocatalytic nanotechnology applicator”, leading in Southern Nevada.

On April 4th 2018 North Las Vegas Airport, become the first airport that coated the ceilings, on the second floor. The improvement of the circulating air resulted in enhanced productivity by the staff, decreased absenteeism, and better-tasting food at the restaurant. FN-NANO® Photocatalytic Coating is manufactured in the State of Nevada, [USA](#).

[MACOMA Environmental Technologies](#) is part of a worldwide network ([FN NANO](#)) of scientists and researchers who are committed to the building of green and healthier cities around the world.

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