

EFFICIENT ANTIMICROBIAL TEXTILE TO COMBAT INFECTIONS



INVENTION

An antimicrobial coated textile which includes a textile substrate made up of a plurality of textile fibers, and a coating disposed on a surface of the textile fibers. These textiles possess ability to inhibit or eliminate microbial growth.

MARKET SIZE AND GROWTH

The global market for antimicrobial fabric should grow from \$10.1 billion in 2021 to \$11.8 billion by 2026, at compound annual growth rate (CAGR) of 3.2% for the period of 2021-2026.

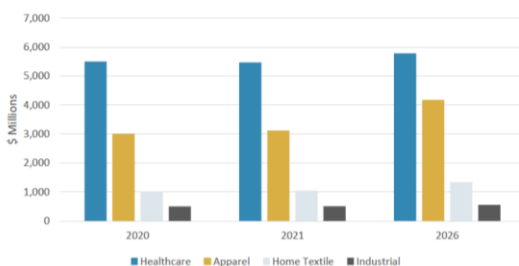


Figure 1. Global market for Antimicrobial Fabric, by Application, 2020-2026 (\$ Millions). Source: BCC Research

APPLICATIONS

Antimicrobial fabrics have a wide range of applications, including healthcare, apparel, home textiles, and furniture. These products are widely used in the healthcare industry, particularly after the pandemic brought to light their ability to provide continuous protection against pathogens.

ADVANTAGES

- ✓ Higher antipathogenic activity.
- ✓ Cheaper and long-lasting.
- ✓ Easy to clean by photocatalytic activity.

PROJECT STATUS

Cross-evaluation was performed at a third-party testing lab using certified method. All samples investigated in the study showed more than 99% antibacterial efficiency.

The research team is currently improving the invention through:

- Investigation of various combinations of nanomaterials & optimizing the conditions suitable to combat hot sun as well.
- Improving the durability of the coatings.
- Apply third party UPF certification

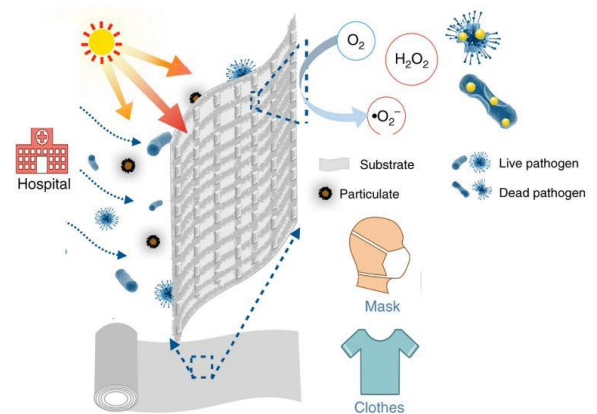


Figure 2. Schematics of the fabric and photocatalytic activity.

LOOKING FOR DEVELOPMENT PARTNER

The material needs to be tested for industrial usage. KFUPM seeks an industrial partner for its development and possible commercialization.

PATENT PROTECTION

A patent application 17722443 covering this technology was filed in US. The IP is owned by King Fahd University of Petroleum & Minerals (KFUPM).

ABOUT KFUPM

KFUPM was established in year 1963 and is located in Dhahran city of Saudi Arabia. KFUPM currently ranks at 160 in QS World University Rankings 2023. KFUPM's Innovation & Technology Transfer office strives for taking innovation from lab to market place.

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