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Licensing Opportunity

TTO – Technology Transfer Office

Reloadable antimicrobial coating

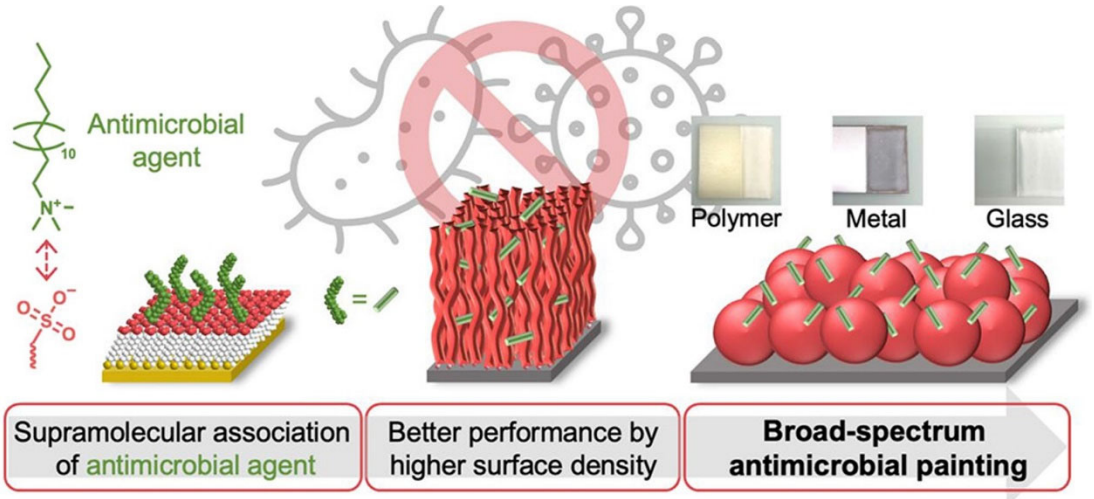

Figure depicting a representative embodiment of the technology Paint based waterborne latex particles supramolecularly associated with quaternary ammonium compounds (QACs). The QACs surface loading density is enhanced with polymer brushes.

Ref. Nr

6.2375

Keywords

Antimicrobial, antibacterial, virucidal, broad-spectrum

Intellectual Property

PCT/EP2024/062979

Publications

ACS Appl. Mater. Interfaces 2024, 16, 29867-29875

Date

31/10/2024

Description

The current strategies to produce antimicrobial surfaces rely on adhesion-prevention or contact-deactivation. These approaches are complex and limited to a few flat surfaces, whilst their durability remains unclear.

The technology is a new method for the preparation of reloadable broad-spectrum antimicrobial coatings based on a two-component paint that can be applied to polymers, metals, and glass surfaces. The paint relies on latex polymers and ionic agents with broad antimicrobial activity.

Advantages

The paint has a broad-spectrum antimicrobial action (bacterial and viruses) that withstands repeated washing, organic contamination, or surface aging. The antimicrobial action can be easily reloaded by applying the ionic agent by spraying or simple washing.

Applications

- Maintaining sterile environments
- Food industry, hospitals, clean rooms, drug manufacturing facilities, biotechnology laboratories.