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(54) Title: BIODEGRADABLE POLYION COMPLEX NANOPARTICLES OF CATIONIC ANTIMICROBIALS FOR ACTIVATABLE ANTIBACTERIAL THERAPY

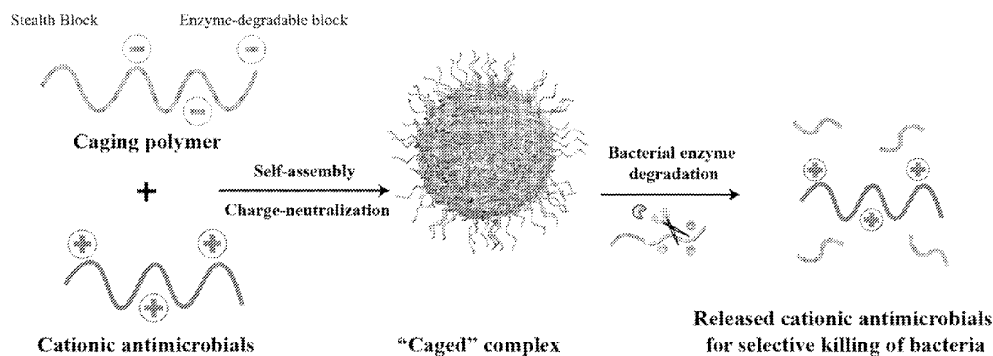


FIG. 1

(57) Abstract: The current invention relates to an antimicrobial composite material comprising a cationic antimicrobial compound, and a bacterial-enzyme-degradable anionic copolymer, wherein the bacterial-enzyme-degradable anionic copolymer and the cationic antimicrobial compound are attached to one another through electrostatic interaction. The current invention also relates to a pharmaceutical composition comprising the antimicrobial composite material, a method of treating a subject suffering from a microbial and/or fungal infection comprising the steps of administering to the subject a therapeutically effective amount of the antimicrobial composite material or the pharmaceutical composition, use of the antimicrobial composite material in the manufacture of a medicament to treat a microbial and/or fungal infection in a subject in need thereof, the antimicrobial composite material or the pharmaceutical composition for use in the treatment of a microbial and/or fungal infection, and a method of manufacture of the antimicrobial composite material.

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