Biomimetic approaches toward the control of bacterial infections

Li, Yuanfeng

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1. Nature is a treasure-house from which we can learn new concepts and methods. (This thesis)

2. Experiences in tumor therapy can be applied in bacterial infection control. (This thesis)

3. Antimicrobial efficacy with a minimum of 99.9% to 99.99% reduction in bacterial viability of new antimicrobial materials is required for clinical relevance. (This thesis)

4. Cell membrane coating technology can convey the natural properties of cell membranes to the surface of nanoparticles. (This thesis)

5. Self-assembly of stimuli-responsive building blocks is an easy and convenient way to fabricate multi-functional biomaterials. (This thesis)

6. Reactive oxygen species are highly efficient in combating infectious biofilms without causing antimicrobial resistance. (This thesis)

7. The tailored design of cascade reaction containers enables production of reactive oxygen species inside a biofilm by consuming local substrate to enhance antimicrobial efficacy. (This thesis)

8. What doesn't kill you, makes you stronger. (Friedrich Nietzsche)

9. Coming together is a beginning, staying together is progress, working together is success.(Henry Ford)