High-Surface Silicate Nanoplatelets Enabling Quorum Quenching Biofunctions of Anti-MRSA, Anti-Flu, Nanocarrier, and SERS

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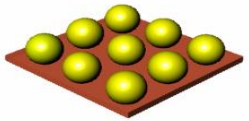


—— (press release 2009)——

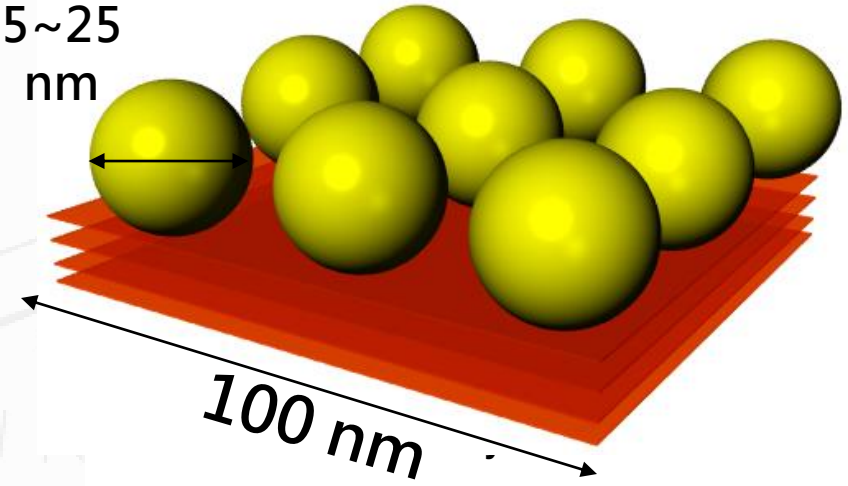
Antimicrobial
Low-Toxic Silver Nanoparticles (NSP-supported Ag)

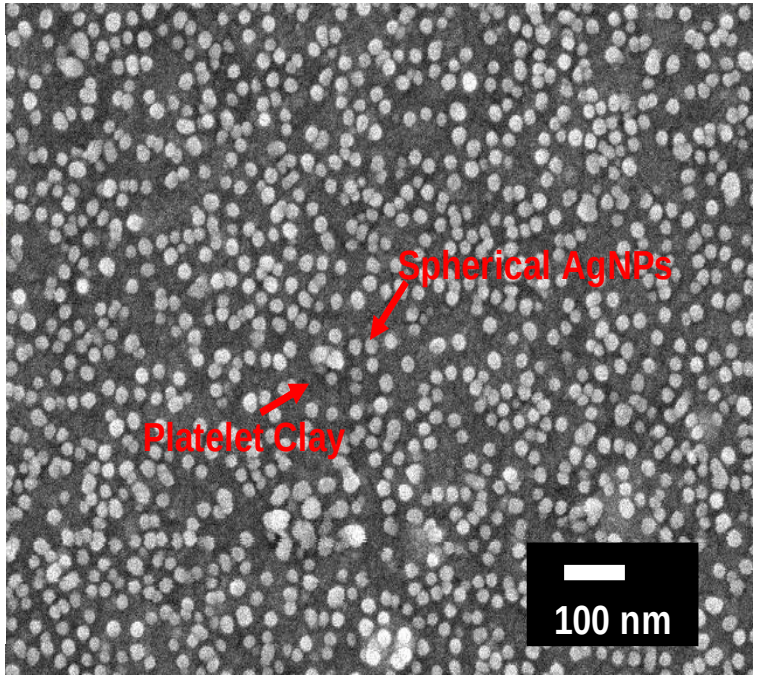
— antimicrobial coating /anti-MRSA /anti-biofilm /
other medical uses —
A New Ag Species with High Antimicrobial Efficacy and Safety

NSP-Ag conceptual diagram and SEM observation

NSP-Ag

Geometric association (TAg)





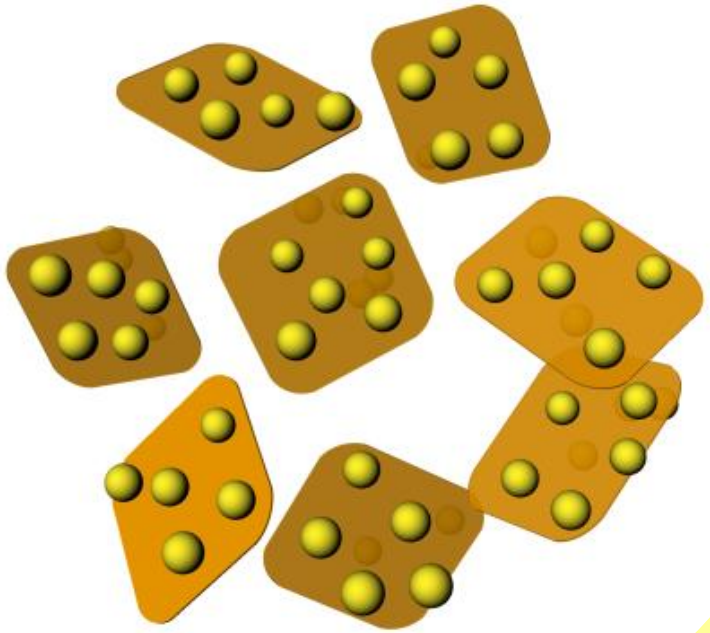
Silicate Supported Ag Nanoparticles

TAg – silver nanoparticle/NSP hybrids

Tailoring Ag size

Antimicrobial

5 – 30 nm diameter



Stability

a myriad of applications

Low Toxicity

Trend of Safety: (TAg) > (ZnO) > (CuO) >> (conventional AgNP) > > (Ag-ions in Silver sulfadiazine)(trade name, Silvadene or SS)

銀彈900 – TAg
Antimicrobial and Deodorant Spray

Master Batch of Ag/PET, Ag/PP and its Fibers for surface antimicrobial fabrics and textiles

Ag/PET Pellets

Ag/PP Pellets

Nano-carriers for Cancer Therapy

(patent allowed)

(antimicrobial)(wound dressings)(Anti-itch mosquito bites)

(de-odorant) (blood-clotting/hemostatic applications)

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