

Supporting Information for

Prompt and Synergistic Antibacterial Activity of Silver Nanoparticle-Decorated Silica Hybrid Particles on Air Filtration

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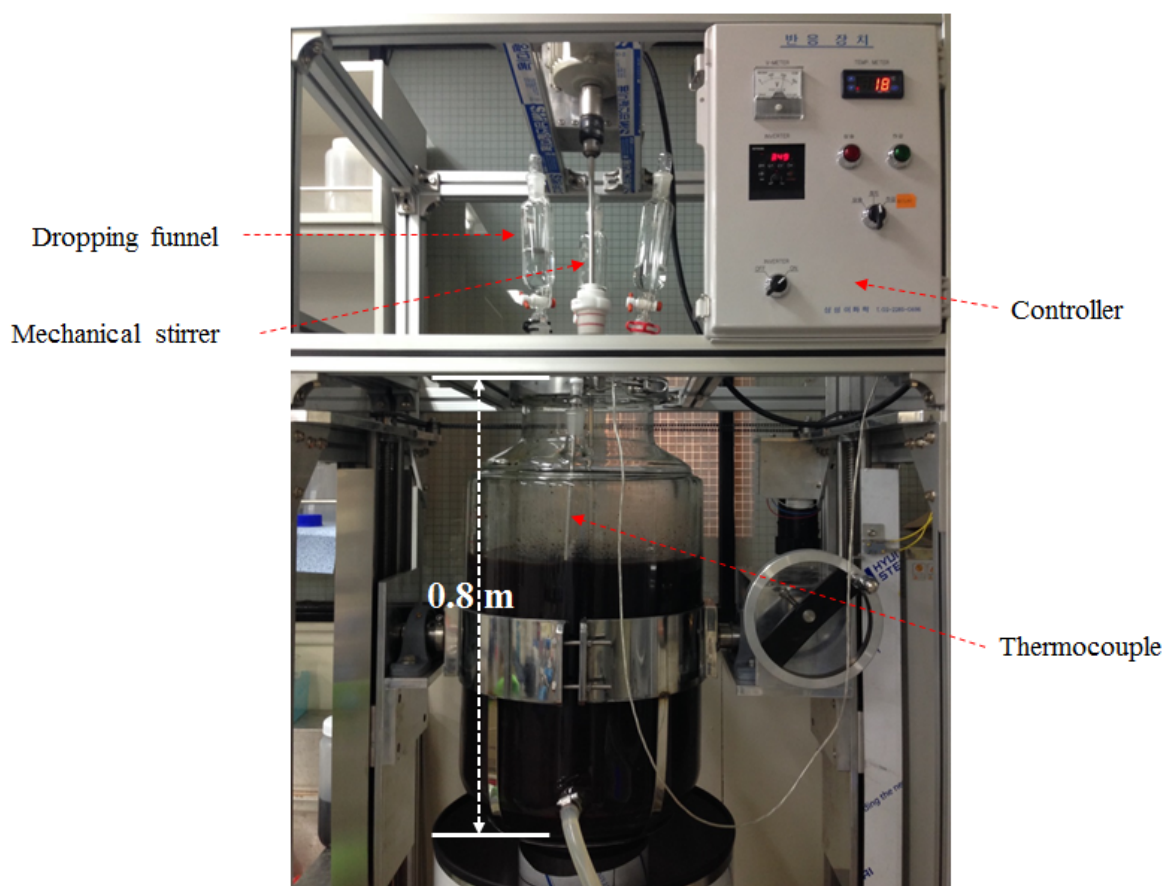


Fig. S1. Tailor-made 50 L reactor.

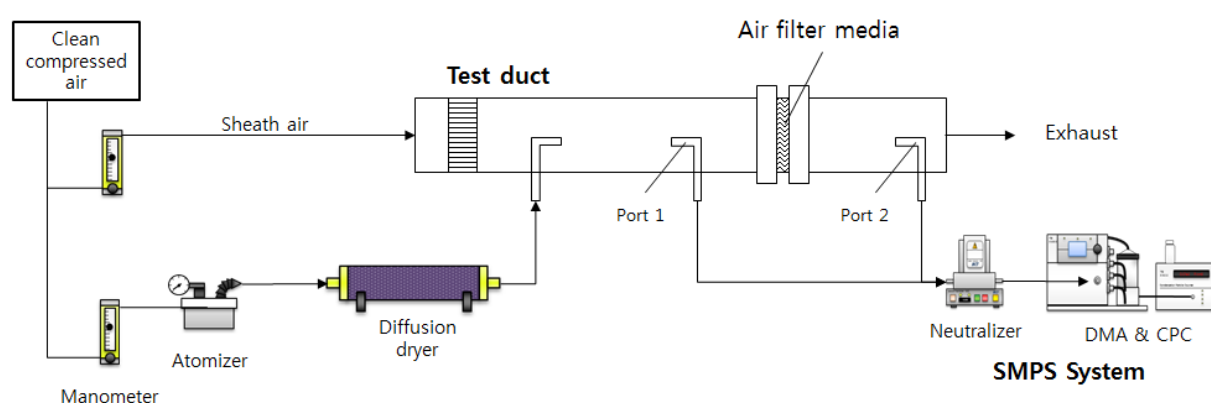


Fig. S2. Experimental setup for fabrication of antibacterial air filter.

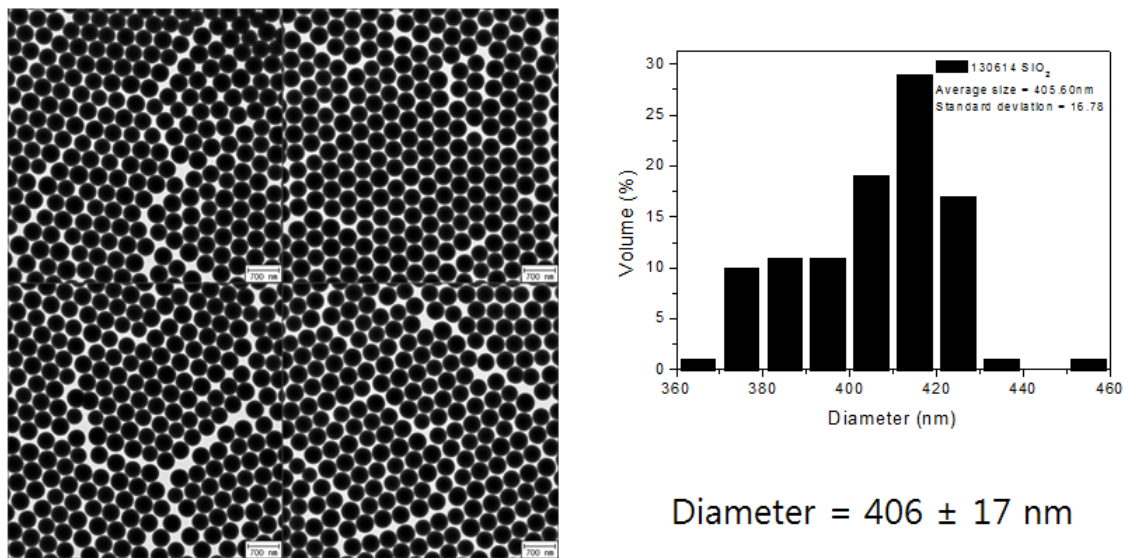


Fig. S3. TEM image and size distribution of $_{AP}SiO_2$ particles.

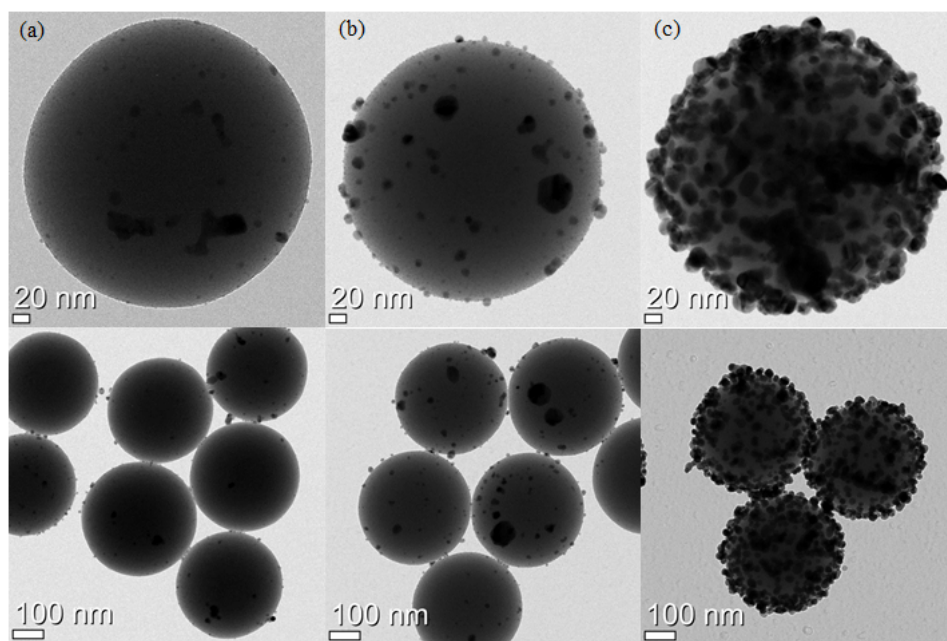


Fig. S4. TEM images of hybrid particles through fabrication process of AgNP@SiO₂: (a) after seeding; (b) after sorting-out; (c) after growing.

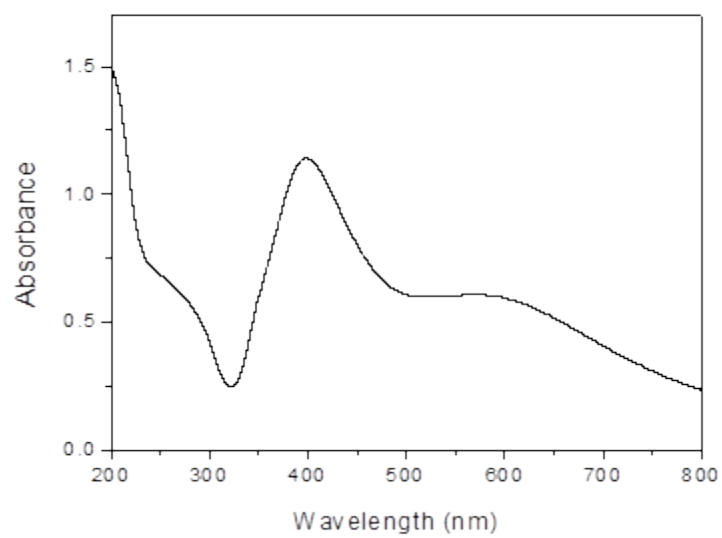


Fig. S5. Absorption spectrum of AgNP@SiO₂ colloidal solution.

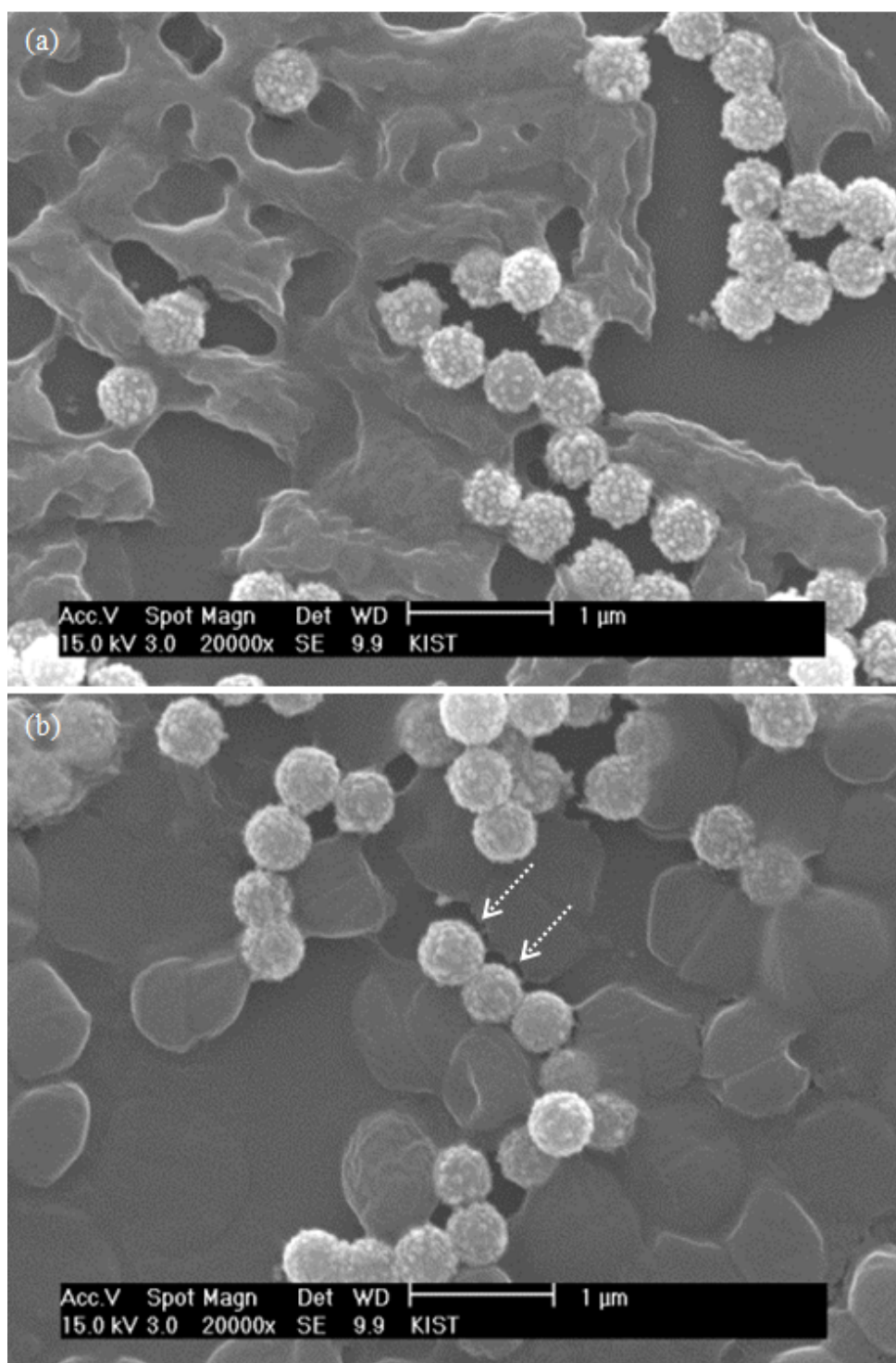


Fig. S6. SEM images of (a) *E. coli* and (b) *S. epidermidis* showing interaction with AgNP@SiO₂ hybrid colloids after incubation for 30 min.