Supporting Information

Cupriferous Silver Peroxysulfite Superpyramids as a Universal and Long-Lasting Agent to Eradicate Multidrug-Resistant Bacteria and Promote Wound Healing

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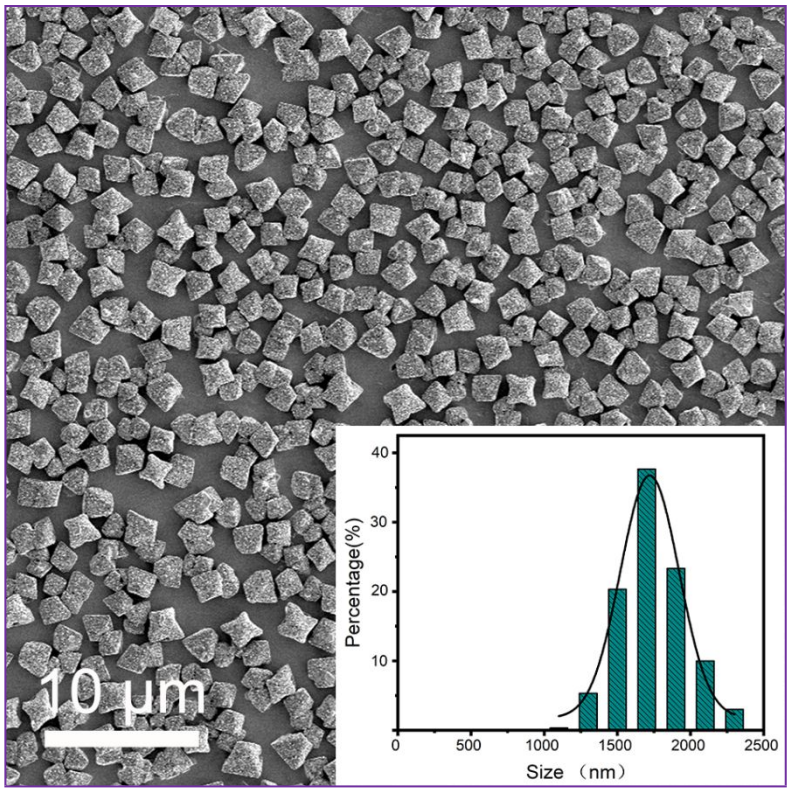

Figure S1. Scanning electron microscopy image of AOHS particles (Insert: Size distribution obtained from measuring 300 AOHS particles on the gold-coated wafer).

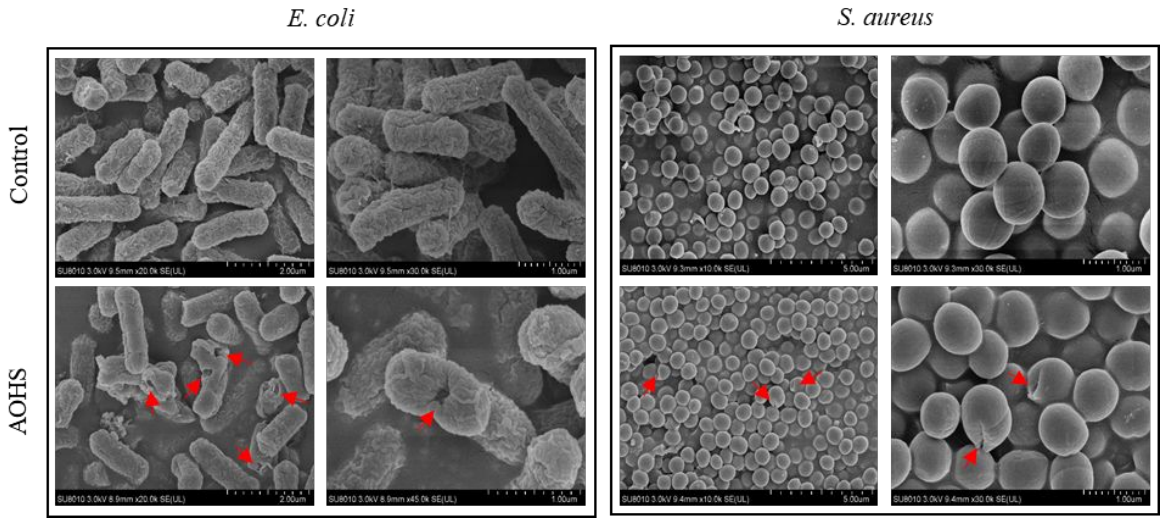

Figure S2. *E. coli* and *S. aureus* treated with AOHS observed by SEM (damaged parts marked with red arrows) proved that the AOHS could destroy the membranes of bacteria.

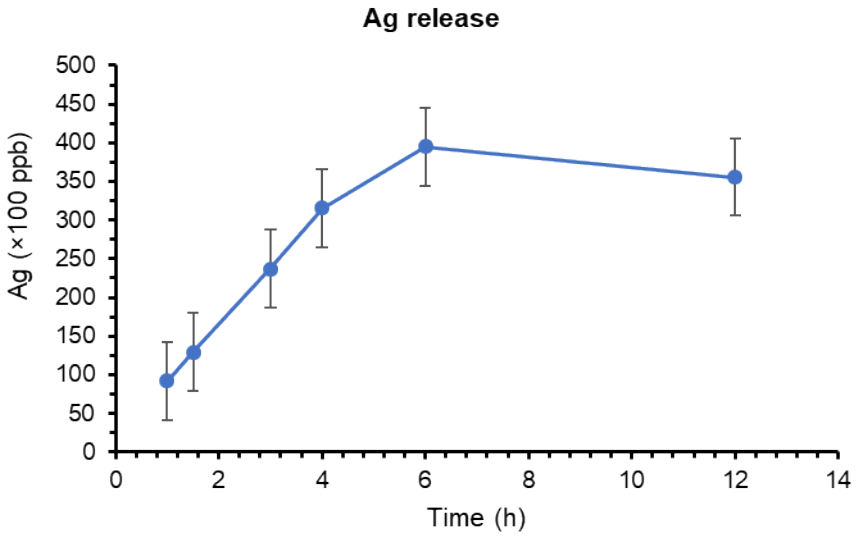

Figure S3. Ag released by the AOHS pyramids in water with time increasing detected by ICP-MS.

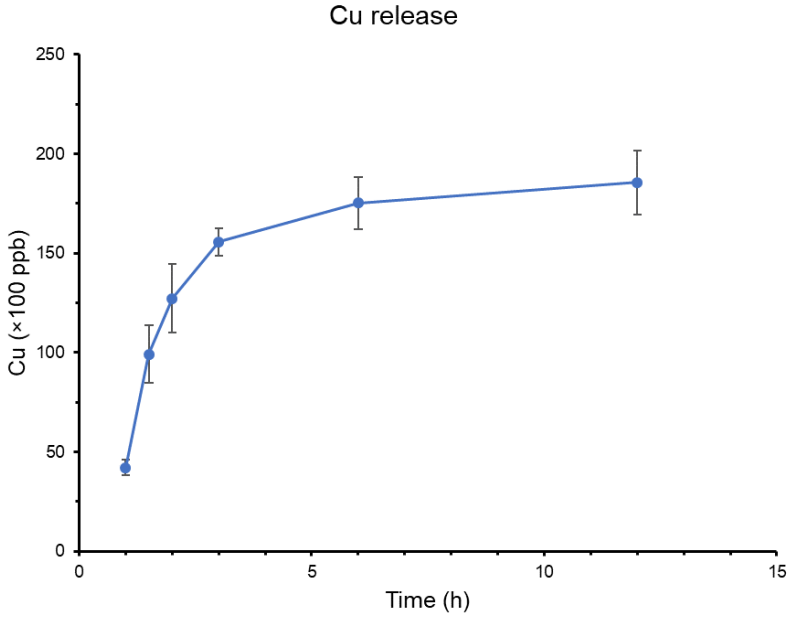

Figure S4. Cu released by the cupriferous AOHS pyramids in water with time increasing detected by ICP-MS.

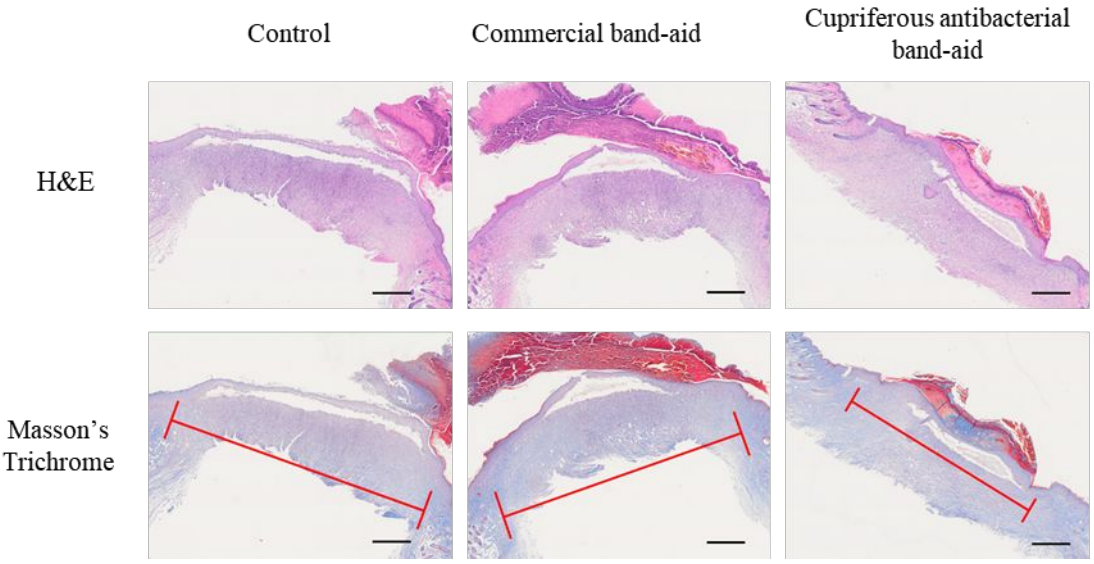

Figure S5. H&E and Masson's trichrome staining of wound tissues after various treatments. Red lines mark the collage gap of the wound area. Bar = 200 μm

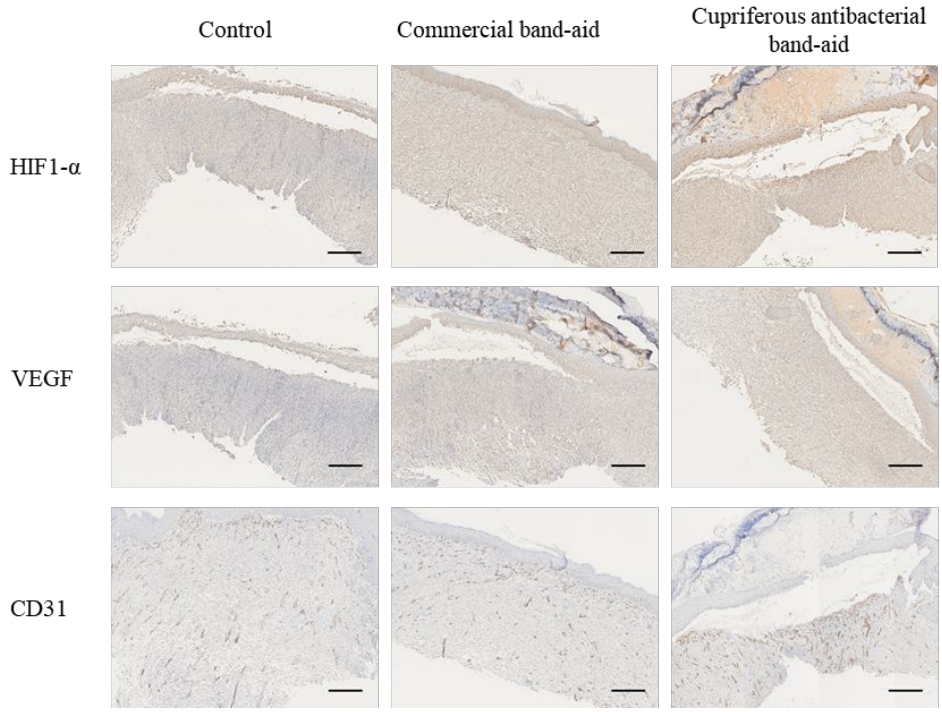

Figure S6. The immunohistological analysis of the mice wounds. Bar = 200 μm

Figure S7. H&E staining of skin slices around wounds. The cupriferous antibacterial band-aid treated tissue should no difference with the commercial band-aid and the control group, indicating that the cupriferous antibacterial band-aid was biocompatible for wound healing.

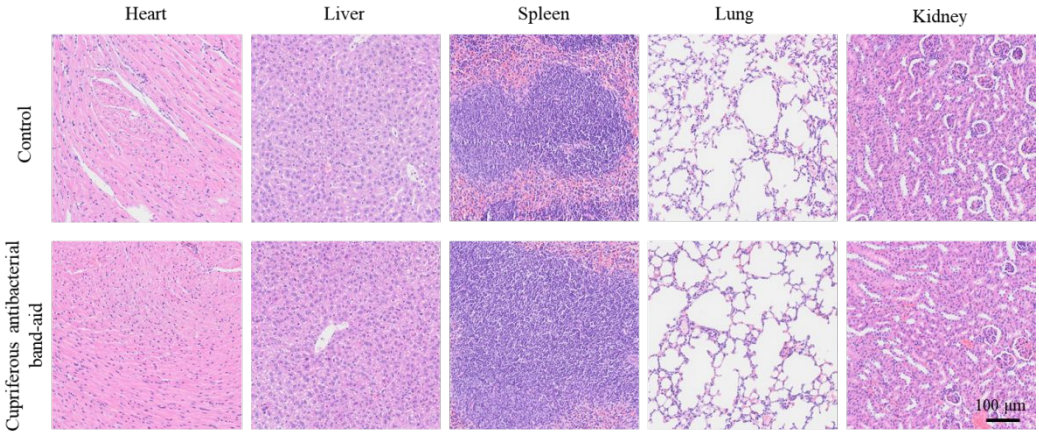

Figure S8. Pilot Toxicity Study of major organs in the MRSA infected model. H&E staining images of the major organs' slices showed no difference between the cupriferous antibacterial band-aid treated group and the untreated control group. Scale bar = 100 μm.