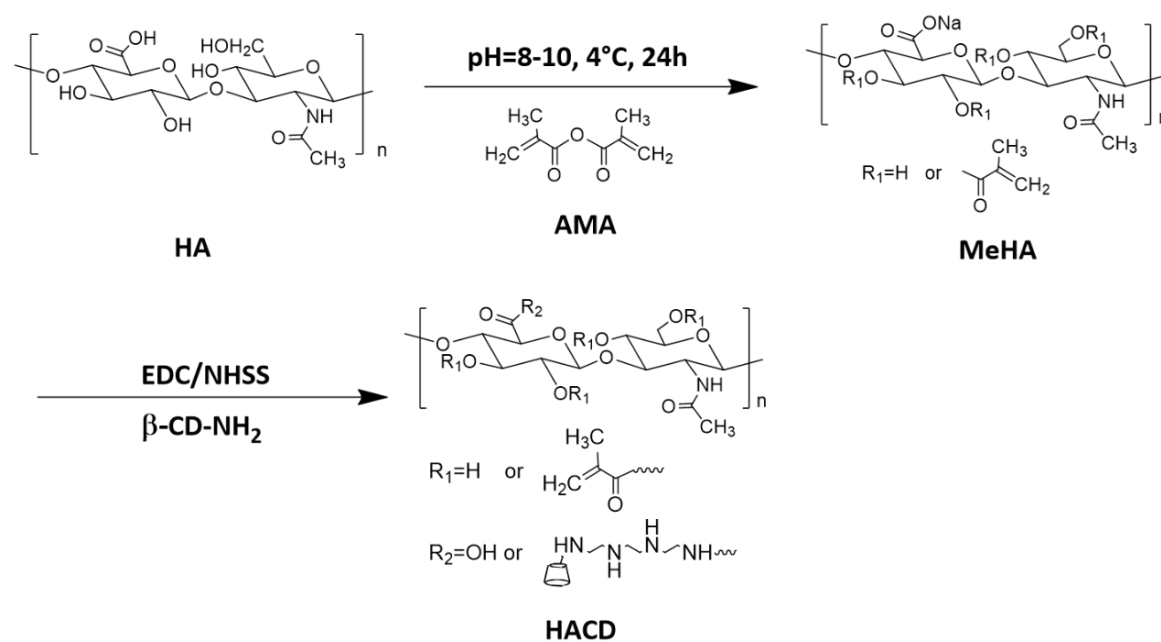


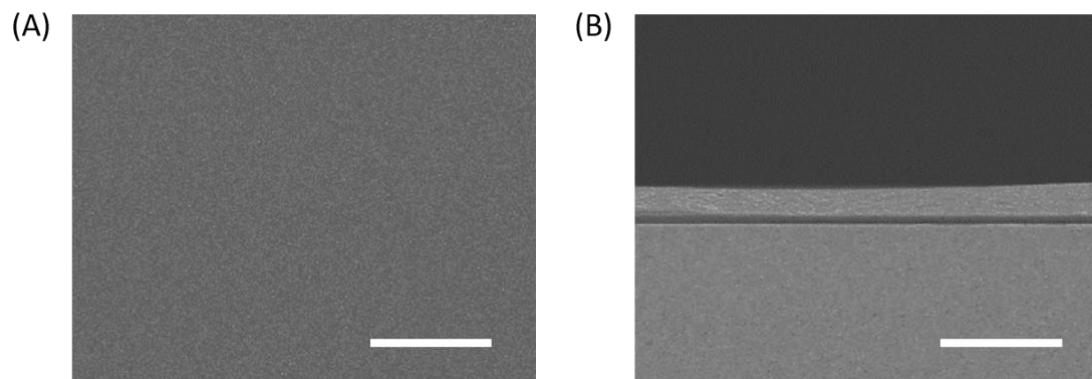
## Supporting Information

### Spraying photodynamic antibacterial coating based on the host-guest immobilization of photosensitizer

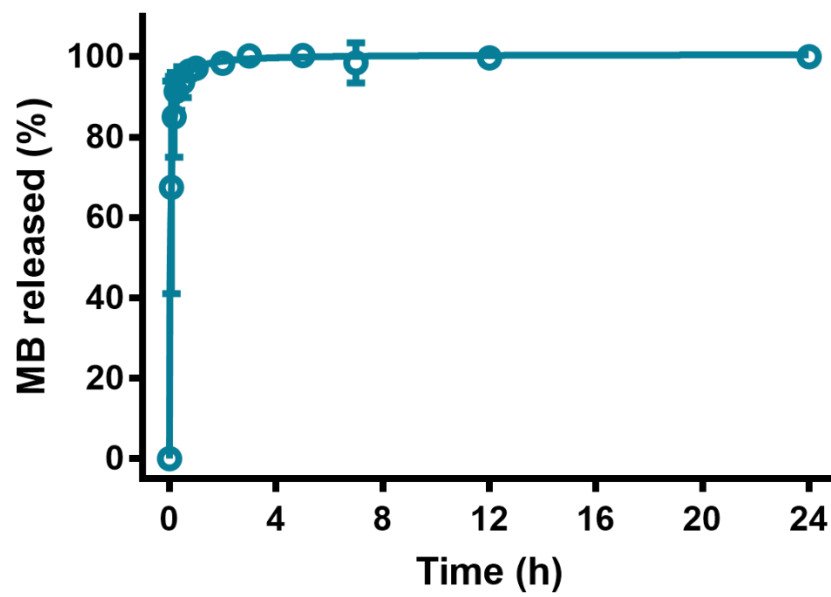
Tiantian Yao, Jing Wang, Yunfan Xue, Weijiang Yu, Qiang Gao, Lino Ferreira, Ke-Feng Ren\* and Jian Ji\*



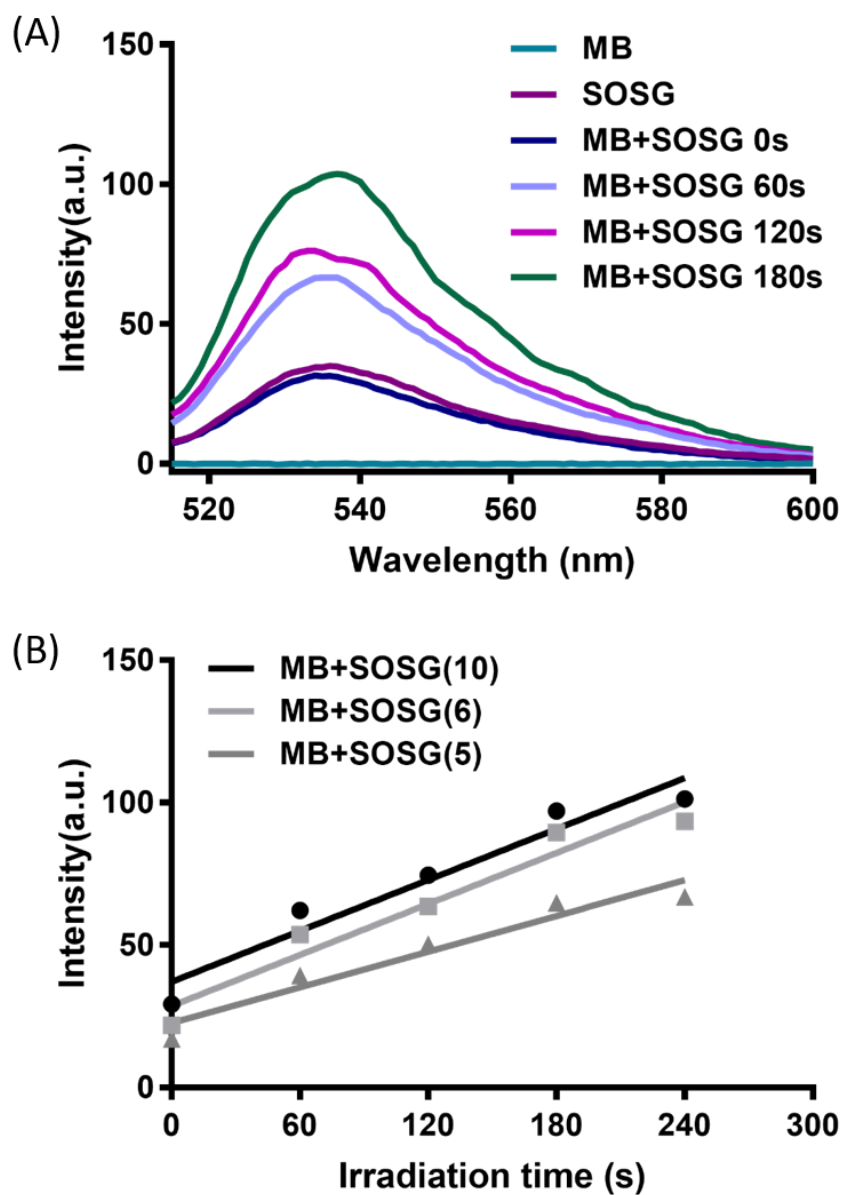
Scheme 1. Synthetic route for the MeHA and HACD.



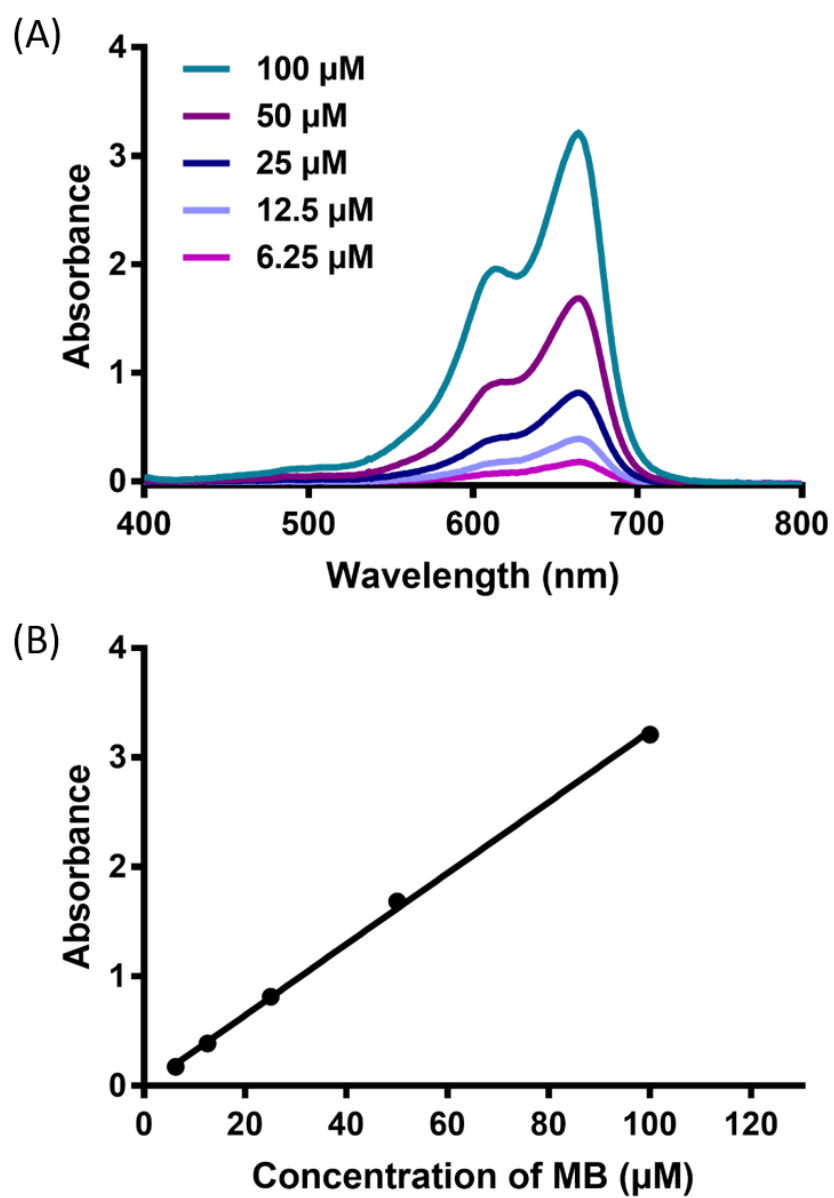
**Figure S1.** SEM (A) surface and (B) cross sectional images of HACD coating. The scale bar is 3  $\mu\text{m}$ .



**Figure S2.** The Release profile of MB from coating which was dipped into MB solution without washing step in PBS solution (1 mL) within 24 h.



**Figure S3.** (A) The fluorescence emission spectra of solutions under different irradiation time. (B) Time-dependent fluorescence intensity curves at 531 nm, [SOSG]=5, 6, 10  $\mu\text{M}$ , [MB]=10  $\mu\text{M}$ .



**Figure S4.** (A) The UV/vis spectra of MB aqueous solution (6.25-100  $\mu\text{M}$ ) and (B) standard curve at 664 nm.