

Supplementary Materials

In-situ polymerization of antibacterial modification polyamide 66 with Au@Cu₂O-ZnO ternary heterojunction

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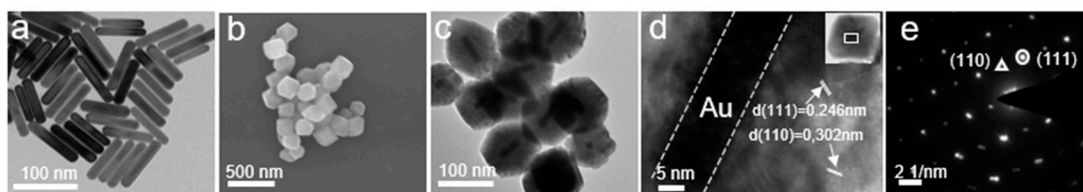


Fig. S1. Morphology analysis of Au@Cu₂O:(a) TEM image of Au. (b)SEM image of Au@Cu₂O.

(c) TEM image of Au@Cu₂O. (d,e) HRTEM and SAED image of Au@Cu₂O.

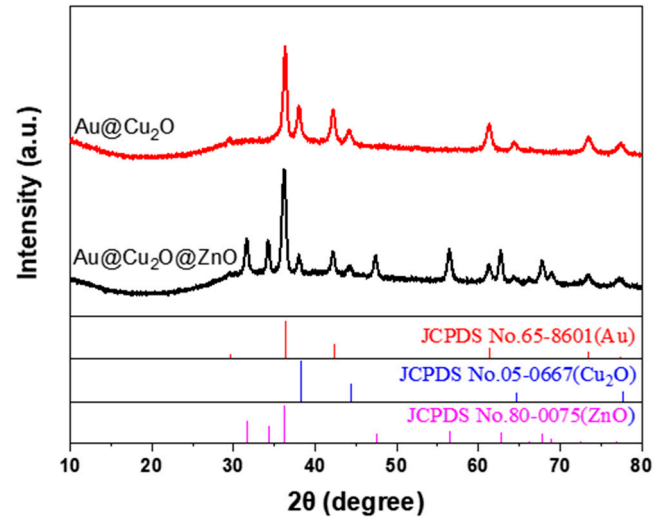


Fig. S2. XRD patterns of $\text{Au@Cu}_2\text{O@ZnO}$.

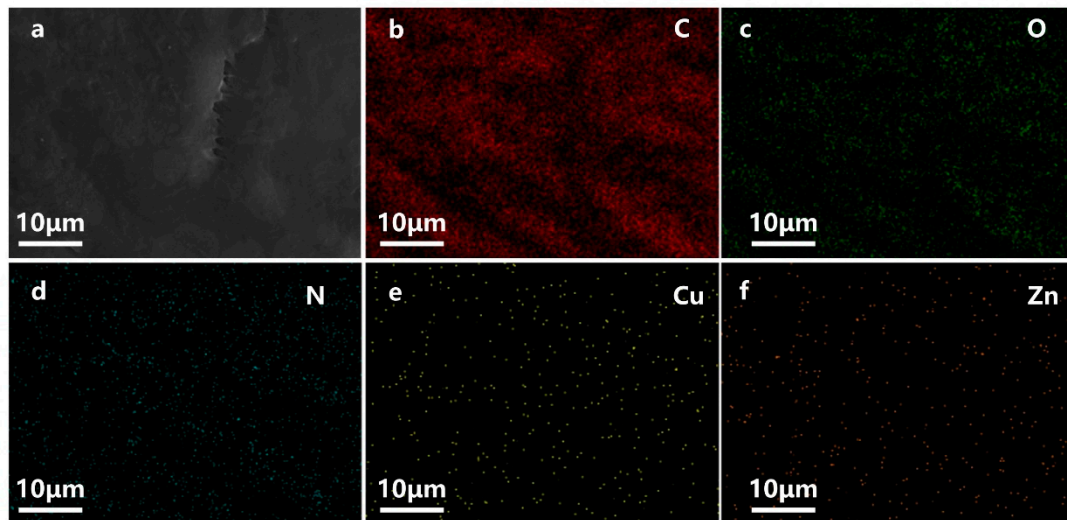


Figure S3. SEM images of fracture sections: (a) PA66/ $\text{Au@Cu}_2\text{O-ZnO}$; (b–e) Elemental mapping images of (b) C, (c) O, (d) N, (e) Cu, and (f) Zn

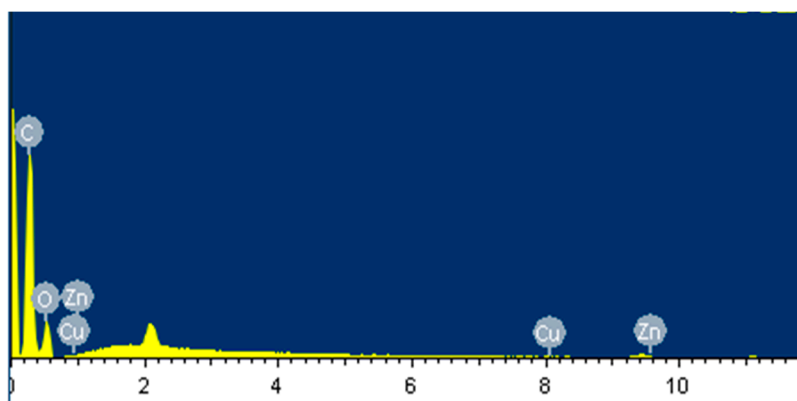


Figure S4. EDS spectra of fracture sections

Table S1 Element content of fracture sections

Element	Weight, %	Atom, %
C	66.35	72.79
O	32.84	27.05
Cu	0.19	0.04
Zn	0.62	0.12
Total	100.00	

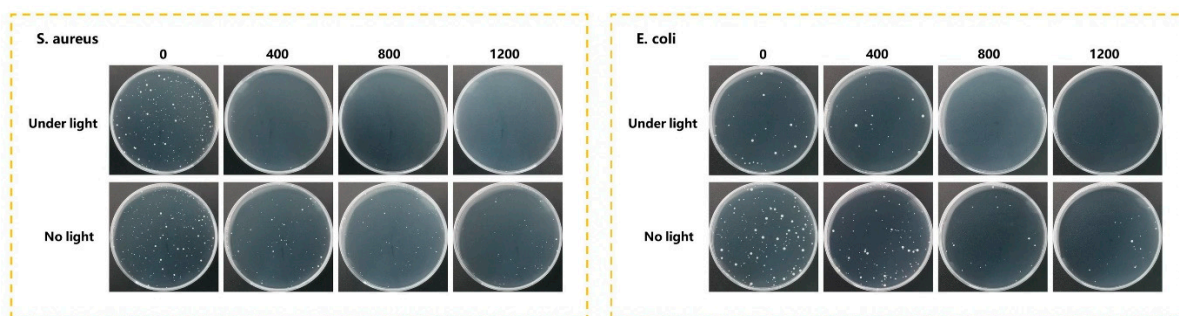


Fig. S5. The antibacterial test against Escherichia coli and Staphylococcus aureus of different samples.