

Supplementary Information

**vacancy engineering modulates spin polarization to enhance
charge dynamics of CuIn₅S₈ for photocatalytic sterilization**

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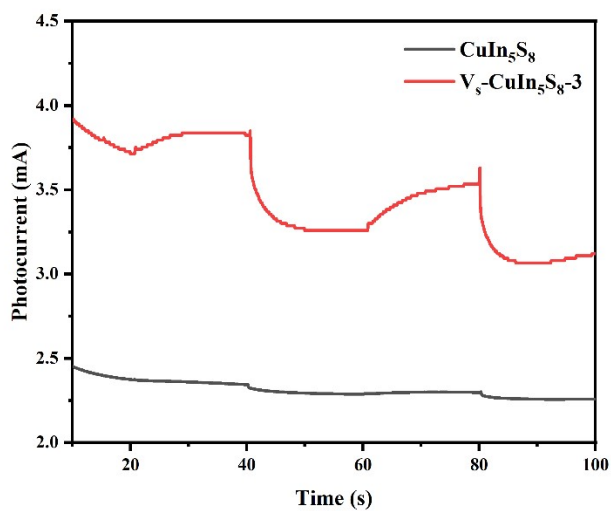


Fig. S1. photocurrent test of CuIn₅S₈ and V₅-CuIn₅S₈-3

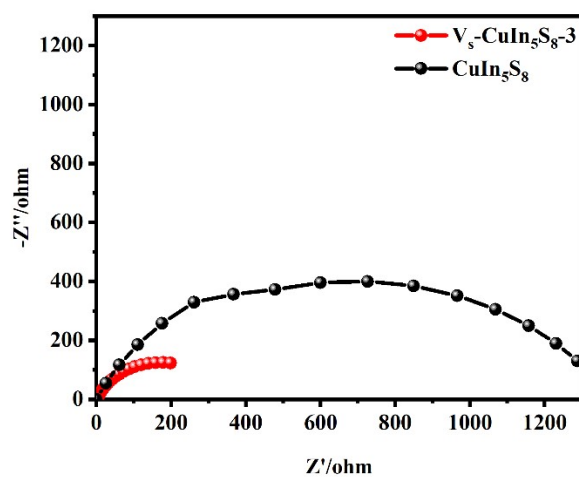


Fig. S2. EIS of CuIn₅S₈ and V₅-CuIn₅S₈-3

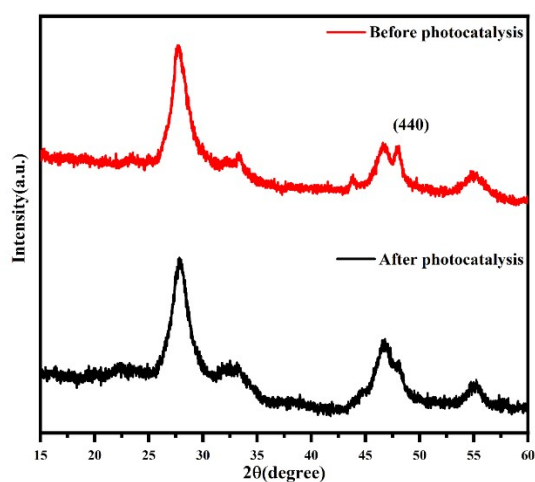


Fig. S3. XRD of before and after photocatalysis

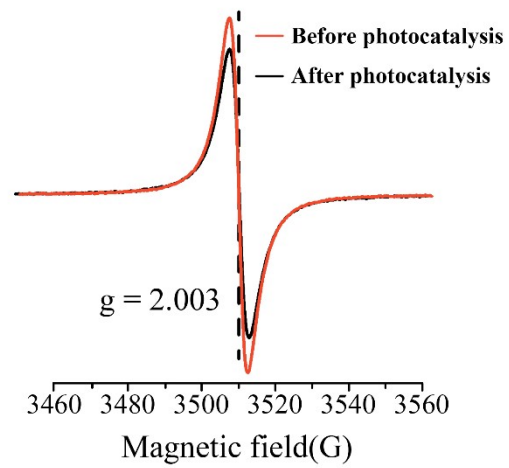


Fig. S4. ESR of before and after photocatalysis