

Supporting Information

Synthesis of Bi₂S₃-Au dumbbelled heteronanostructures with enhanced photocatalytic and photoresponse properties

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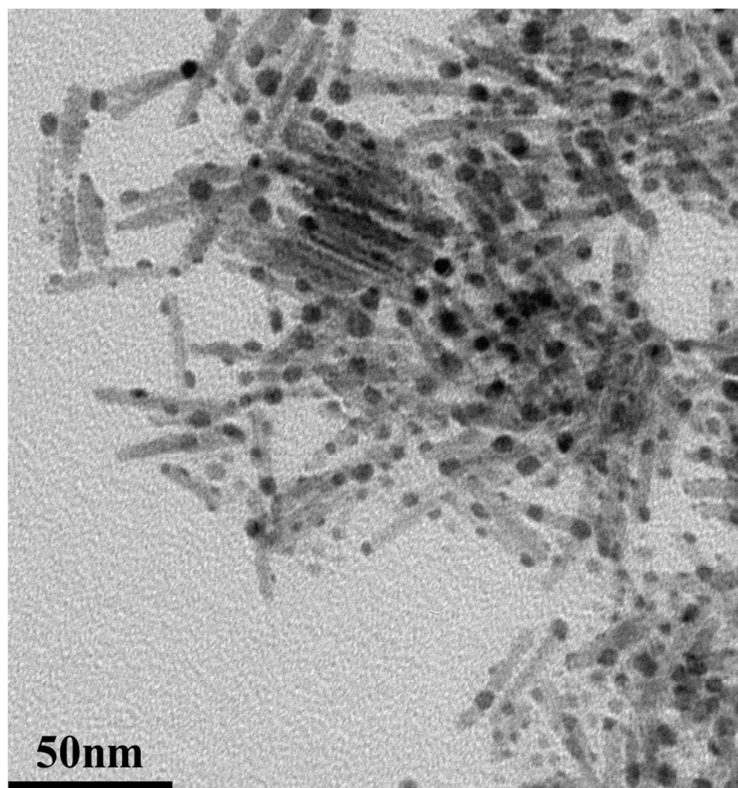


Figure S1. Bi_2S_3 -Au dumbbelled heterostructures with larger size of Au nanoparticles.

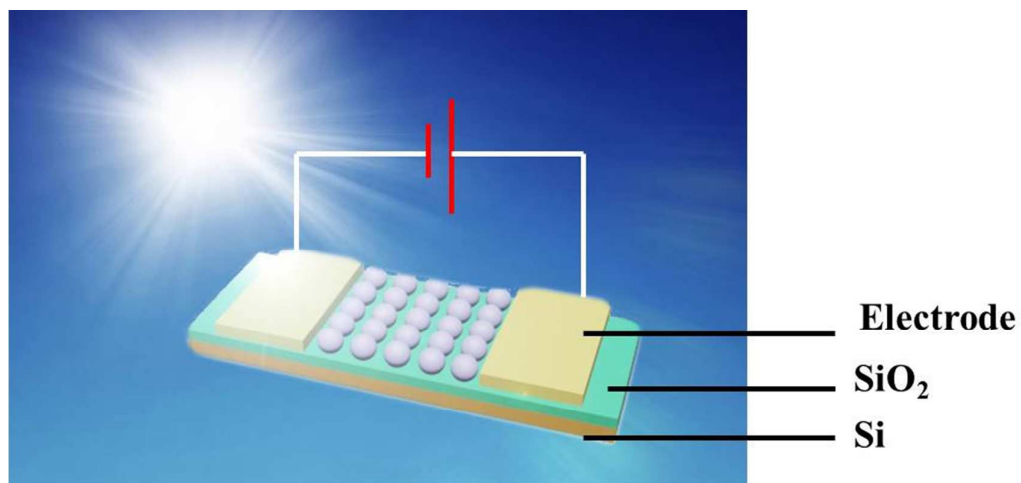


Figure S2. Schematic diagram of the device for photocurrent and photoreponse measurement.

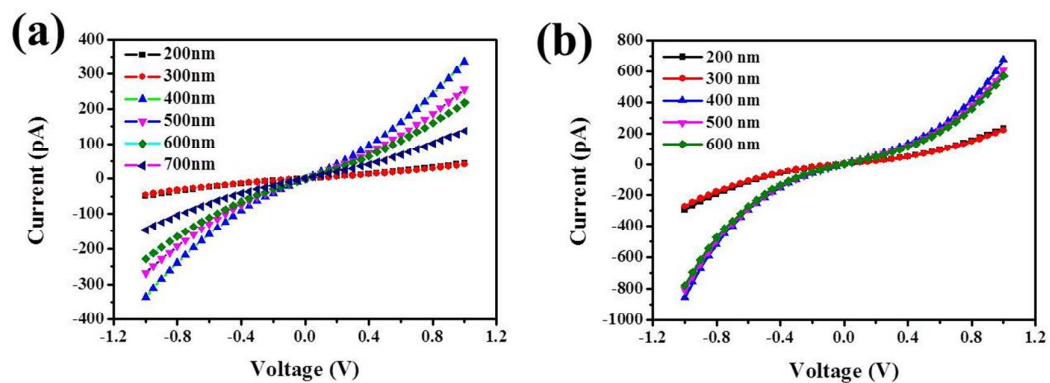


Figure S3. I-V characteristics of the Bi₂S₃-Au heterostructures under illumination with different wavelength. (a) Bi₂S₃-Au dumbbells and (b) Bi₂S₃-Au nanocorns.

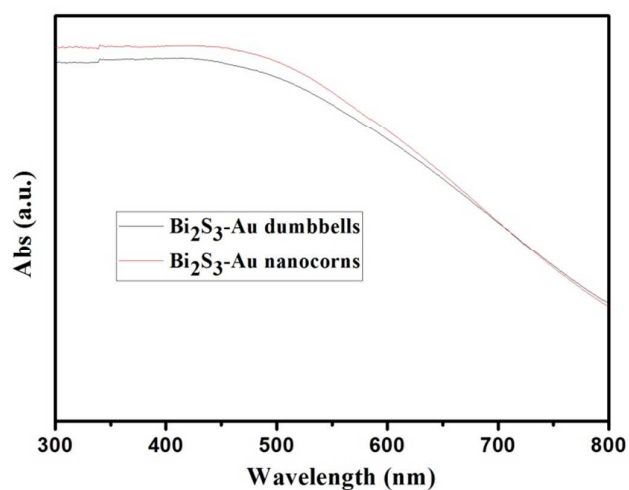


Figure S4. UV-vis spectra of Bi₂S₃-Au dumbbells and Bi₂S₃-Au nanocorns.

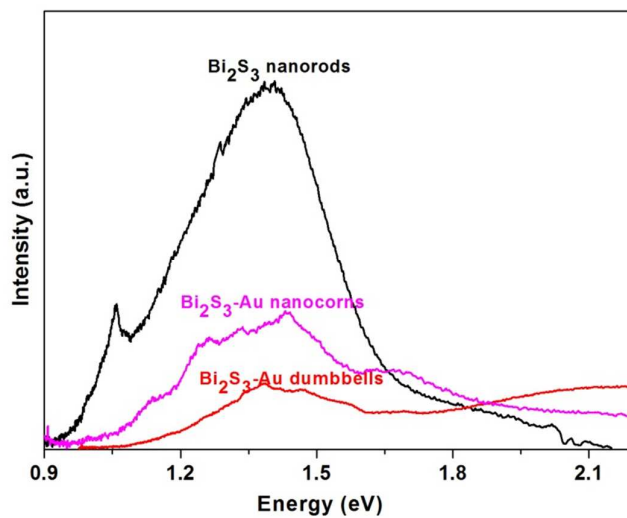


Figure S5. Photoluminescence spectra of Bi₂S₃, Bi₂S₃-Au dumbbells and Bi₂S₃-Au nanocorns.