

Supplementary Information

Solution-processed $\text{TiO}_2/\text{CuBi}_2\text{O}_4$ heterojunction for self-powered photodetection with robust environmental resilience.

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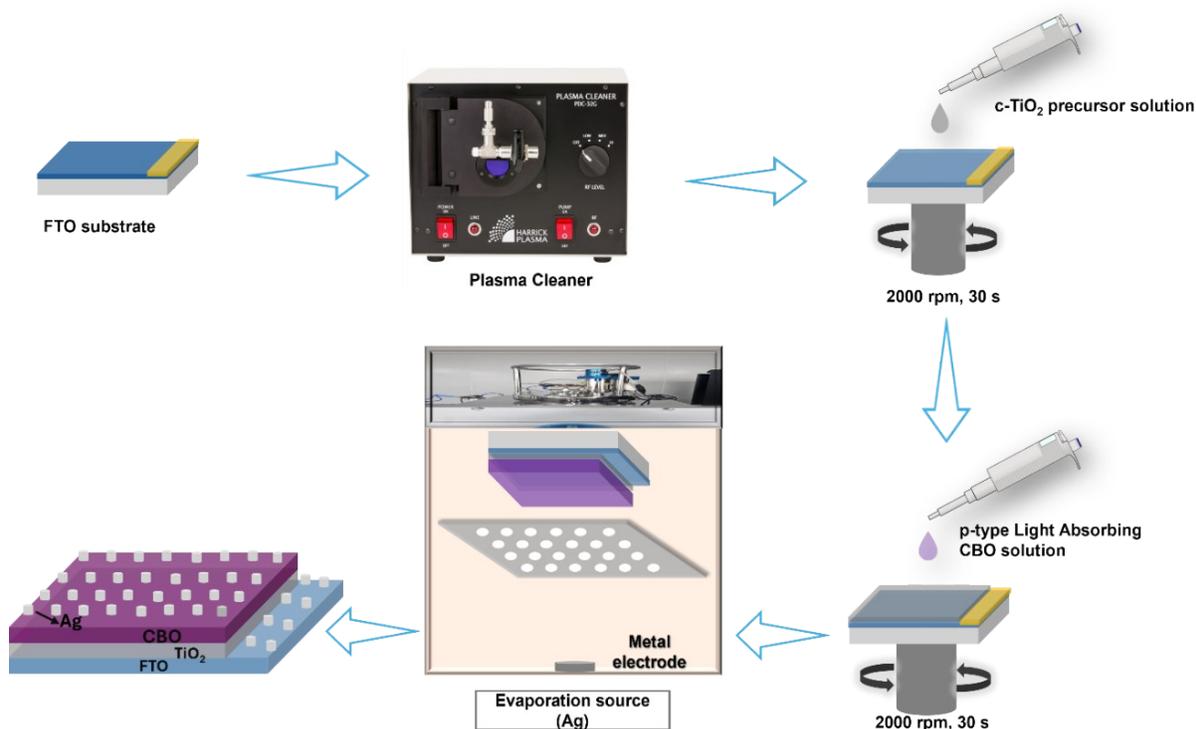


Fig. S1. Schematic of preparing the TiO_2/CBO heterojunction.

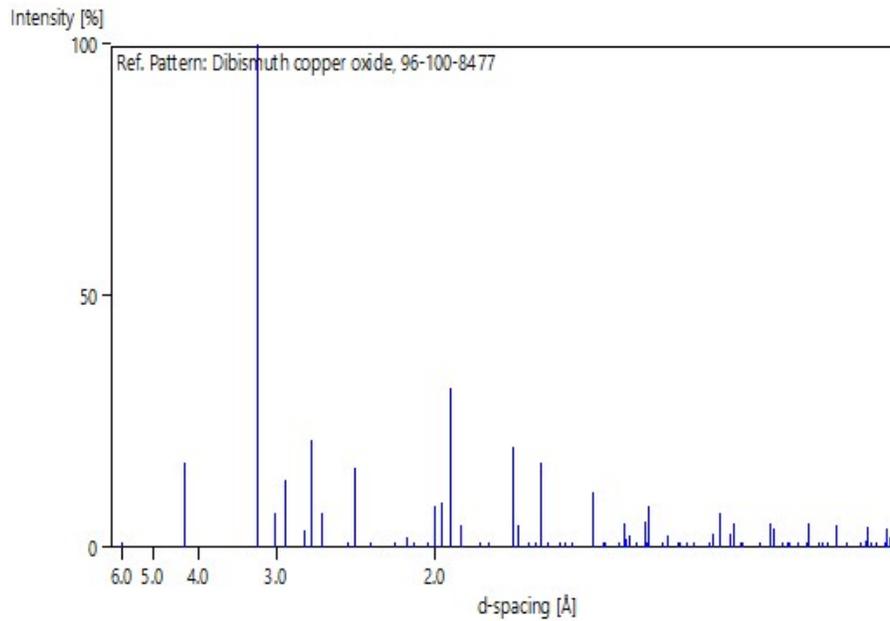


Fig. S2. Reference X-ray Diffraction pattern of CuBi_2O_4 from the ICDD PDF database (PDF No. 96-100-8477)

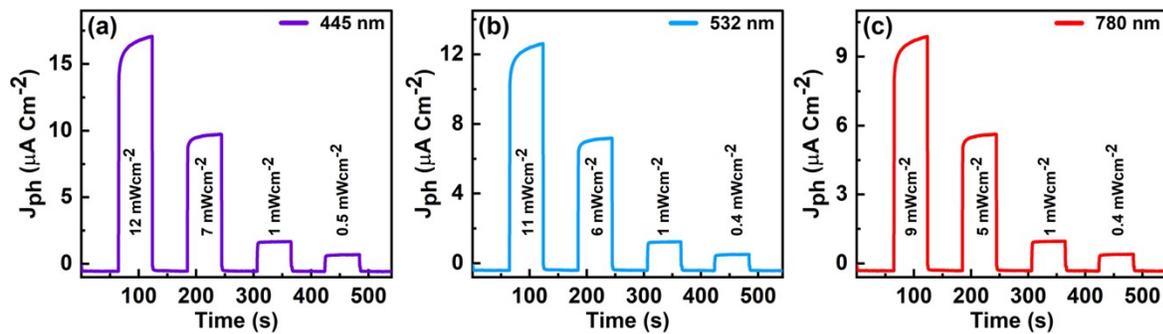


Fig. S3. (a) $J-V$ characteristics under 445 nm laser at various intensities, (b) $J-V$ characteristics under 532 nm laser at various intensities, and (c) $J-V$ characteristics under 780 nm illumination.

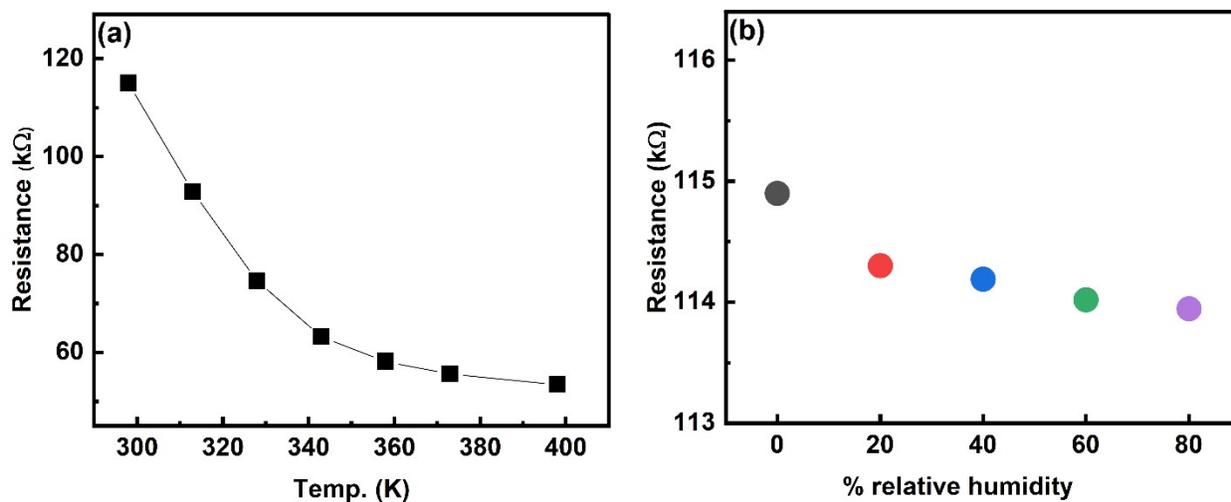


Fig. S4. (a) Resistance vs. temperature at 0.1 V. (b) Resistance vs. percent relative humidity at 0.1 V.

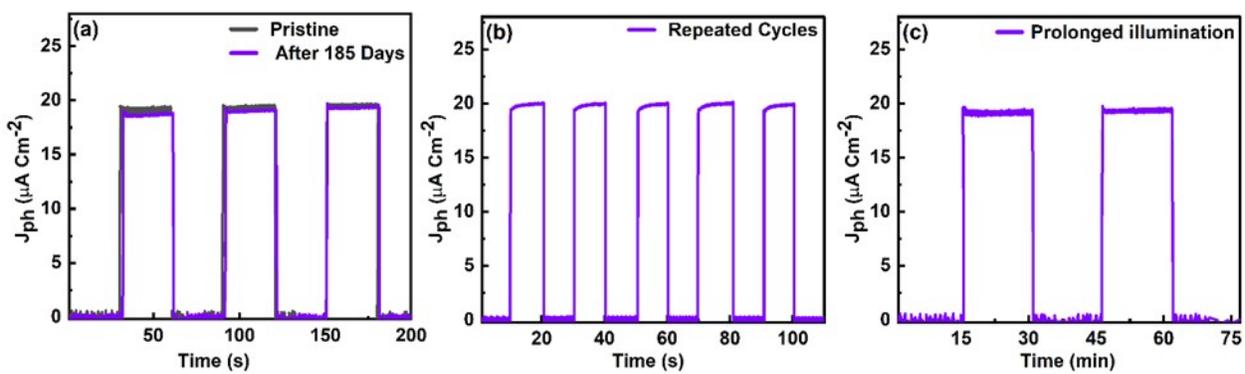


Fig. S5. (a) Transient photo response in a pristine state and after 185 days. (b) Transient photo response under accelerated conditions. (c) Transient photo response in prolonged illumination of approx. 15 minutes.