

Supporting Information

A Bias-free CuBi_2O_4 - CuWO_4 Tandem Cell for Solar-Driven Water Splitting

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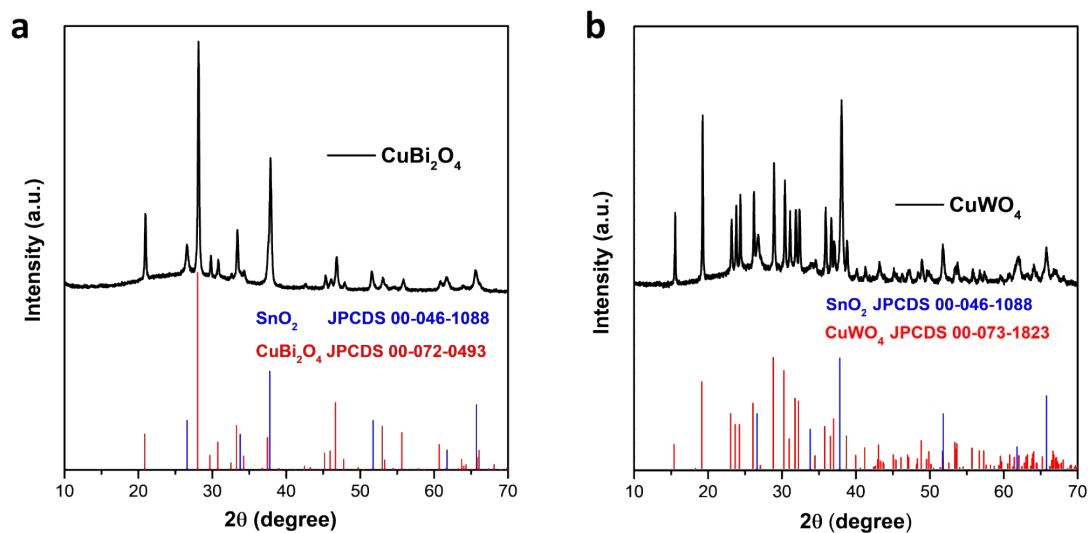


Figure S1 XRD pattern of CuBi₂O₄ and CuWO₄ film on FTO substrate, standard patterns are also included for comparisons. No impurity phase is detected except signals from FTO substrate, i.e. SnO₂.

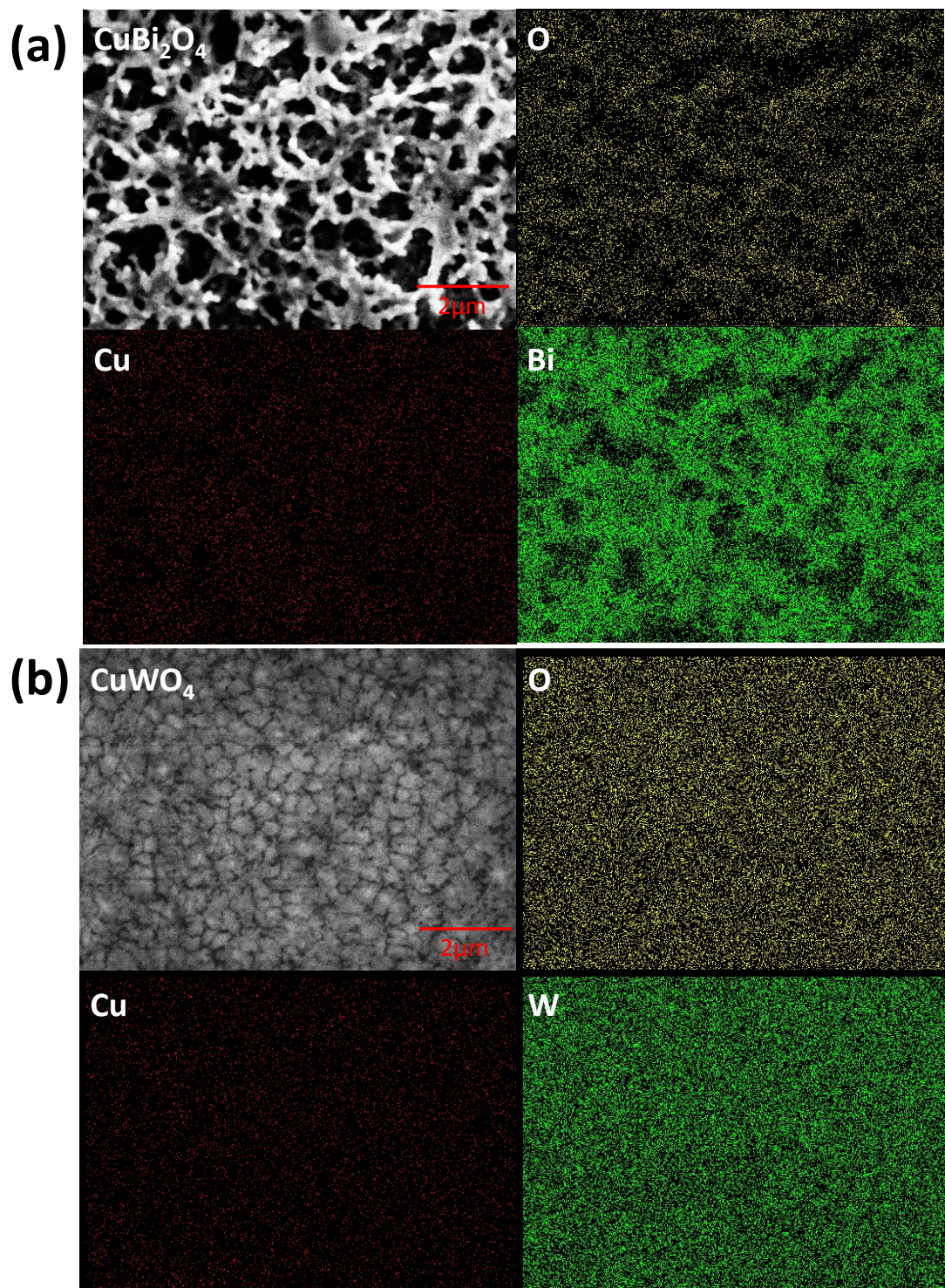


Figure S2 SEM-EDS mapping of CuBi_2O_4 (a) and CuWO_4 (b) film on FTO substrate

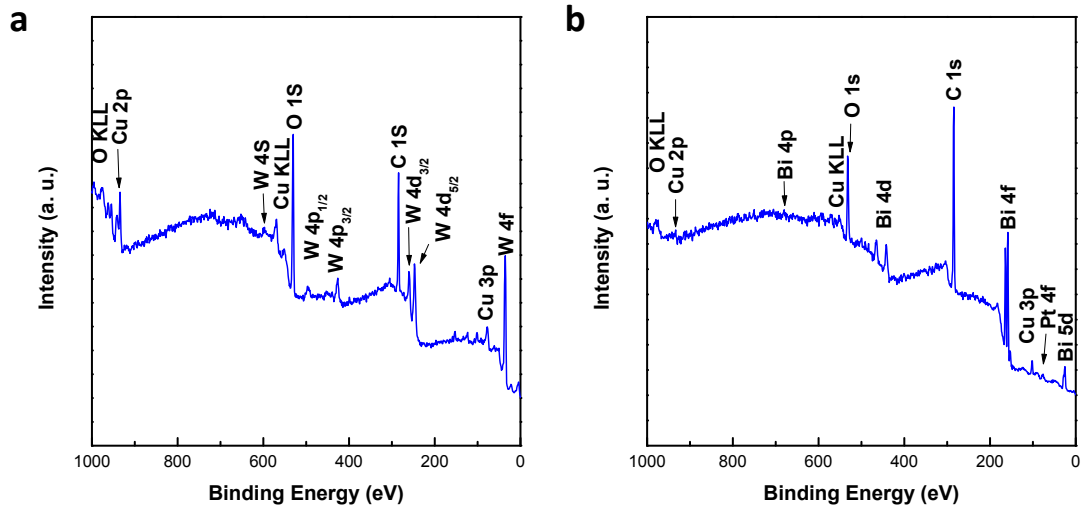


Figure S3 XPS survey spectra of (a) CuWO₄ film and (b) CuBi₂O₄ film

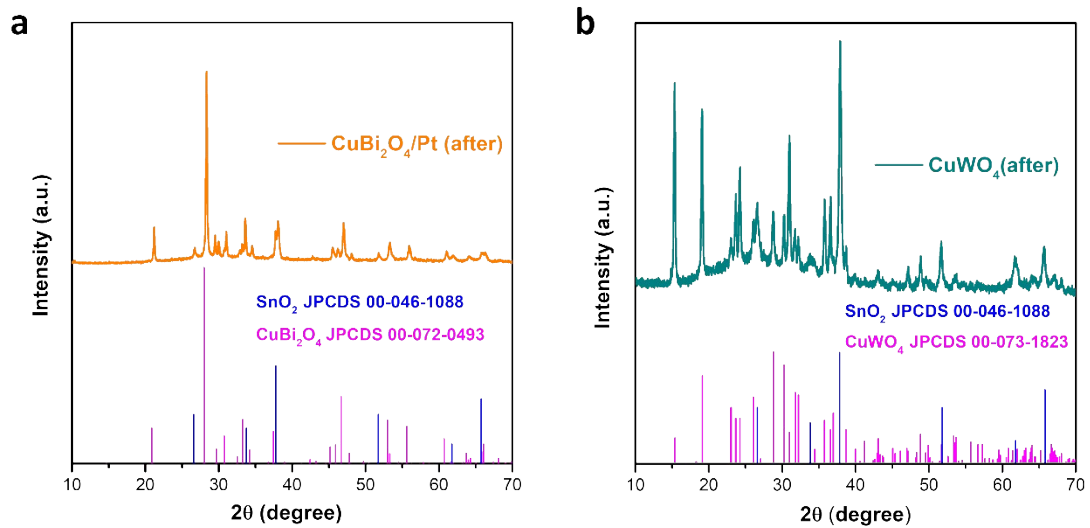


Figure S4 XRD patterns of CuWO_4 film (a) and CuBi_2O_4 film (b) after PEC measurement

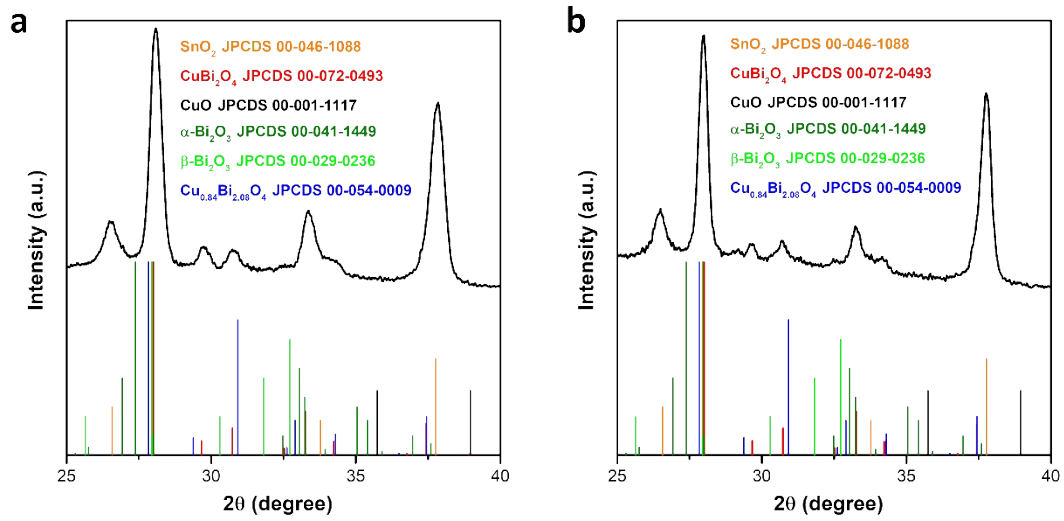


Figure S5 XRD patterns of CuBi₂O₄ film before (a) and after (b) PEC measurement

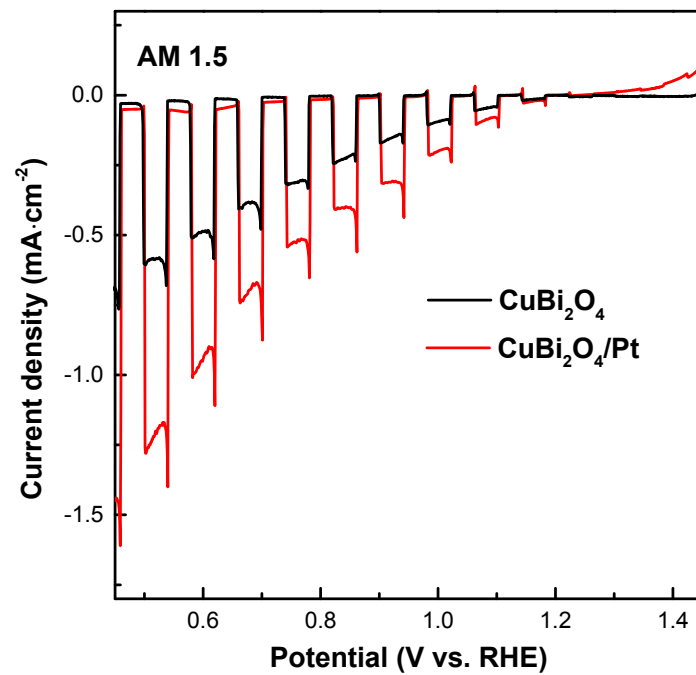


Figure S6 LSV of CuBi₂O₄ film under chopped AM 1.5 illumination with and without Pt deposited

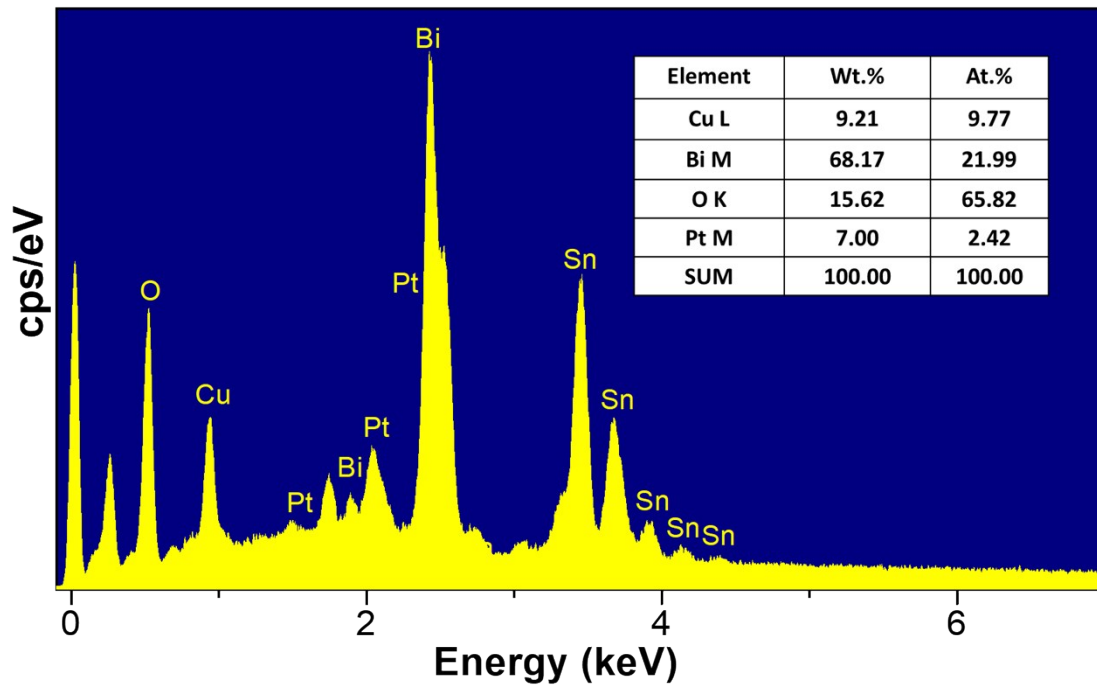


Figure S7 SEM-EDS element analysis of $\text{CuBi}_2\text{O}_4/\text{Pt}$

Table S1 XPS data on the peak fitting analysis

Element state	Position (eV)	FWHM (eV)	Area
Bi ³⁺	164.0	1.30	11431.2
W ⁶⁺	37.2	1.21	39182.1
O ²⁻ (CBO)	529.6	1.16	59289.5
O ²⁻ (CWO)	530.3	1.42	59356.5