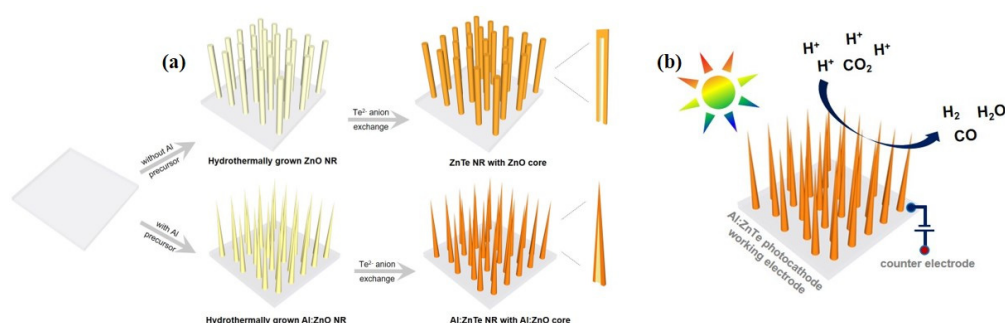


Supplementary Materials

Solar-Driven Syngas Production Using Al-Doped ZnTe Nanorod Photocathodes

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Scheme S1. Schematic diagram for (a) ZnTe NR and Al:ZnTe NR film synthesis and (b) photoelectrochemical syngas production set-up.

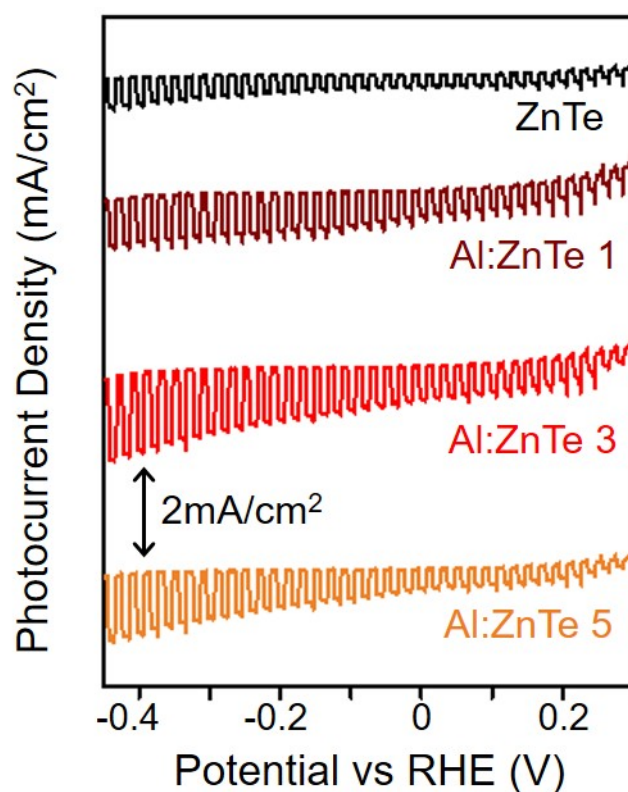


Figure S1. J-V curves for ZnTe and Al:ZnTe X photocathodes where X indicates molar concentration of Al dopants of 1, 3, and 5 %. All PEC measurements were performed in a CO_2 saturated KHCO_3 under chopped simulated solar light irradiation (AM 1.5G, $100\text{mW}/\text{cm}^2$).

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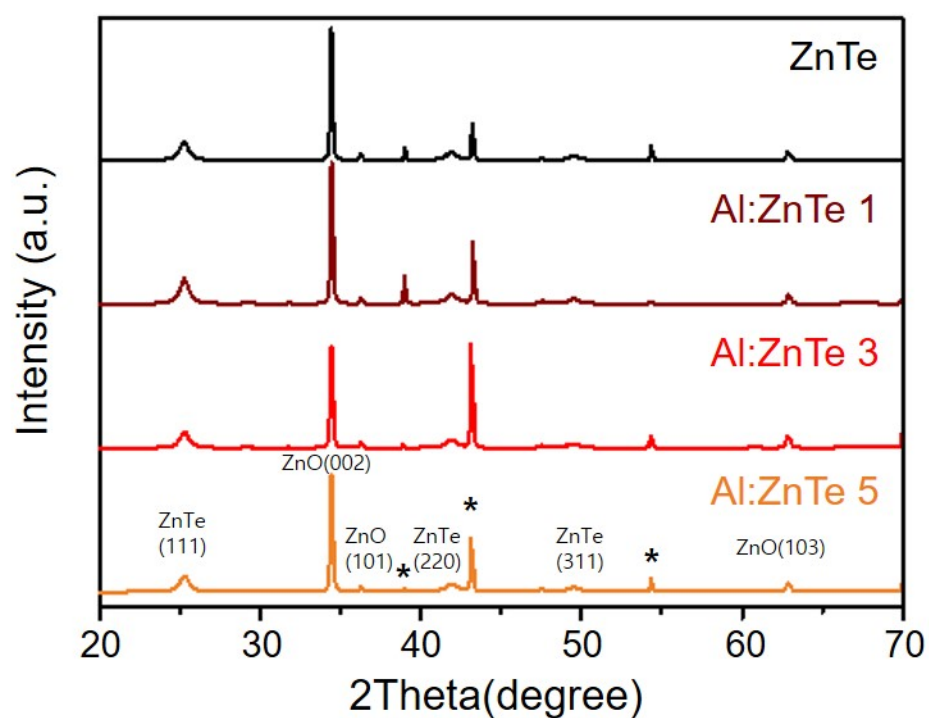


Figure S2. XRD patterns for ZnTe and Al:ZnTe X, where X indicates molar concentration of Al dopants of 1, 3, and 5 %. The symbol of * indicates XRD patterns for FTO substrate

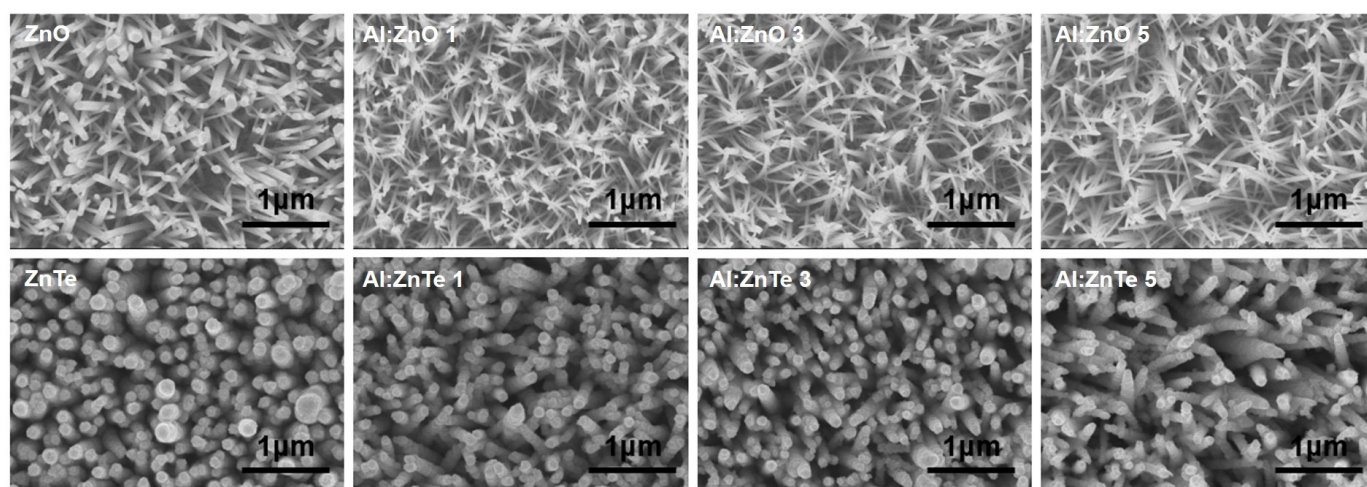


Figure S3. SEM images for ZnO, ZnTe, Al:ZnO X and Al:ZnTe X, where X indicates molar concentration of Al dopants of 1, 3, and 5 %.