materials

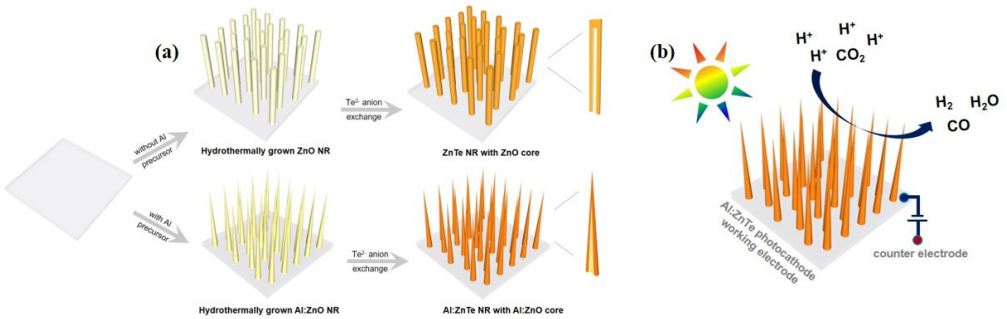
MDPI

Supplementary Materials

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

Youn Jeong Jang *, Chohee Lee, Yong Hyun Moon and Seokwoo Choe

Department of Chemical Engineering, Hanyang University, Seongdong-gu, Seoul 04763, Korea; chgml9612@hanyang.ac.kr (C.L.); myh4791@hanyang.ac.kr (Y.H.M.); choe5192@hanyang.ac.kr (S.C.)
* Correspondence: yjang53@hanyang.ac.kr; Tel.: +82-2-2220-0526



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

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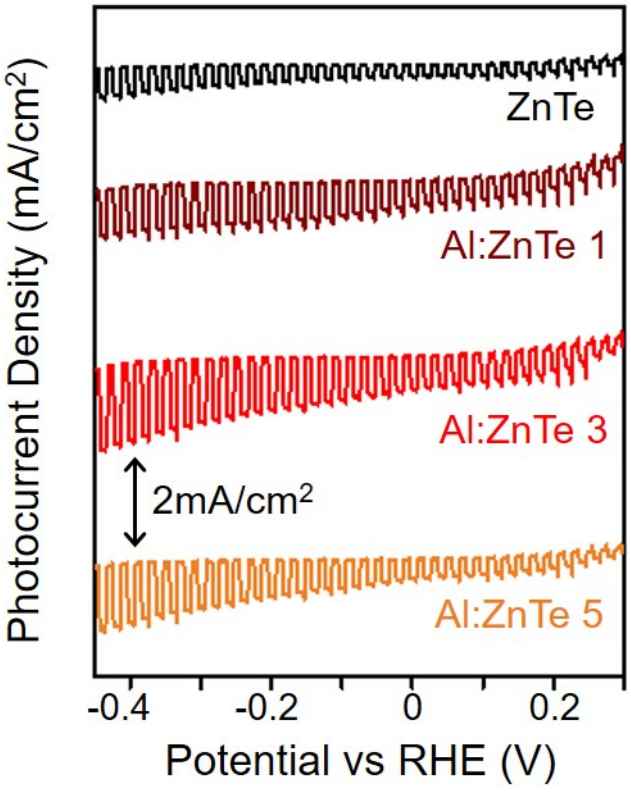

Figure S1. J-V curves for ZnTe and Al:ZnTe X photocathodes where X indicates molar concentration of Al dopants of 1, 3, and 5 %. All PEC measurements were performed in a CO_2 saturated $KHCO_3$ under chopped simulated solar light irradiation (AM 1.5G, 100mW/cm^2).

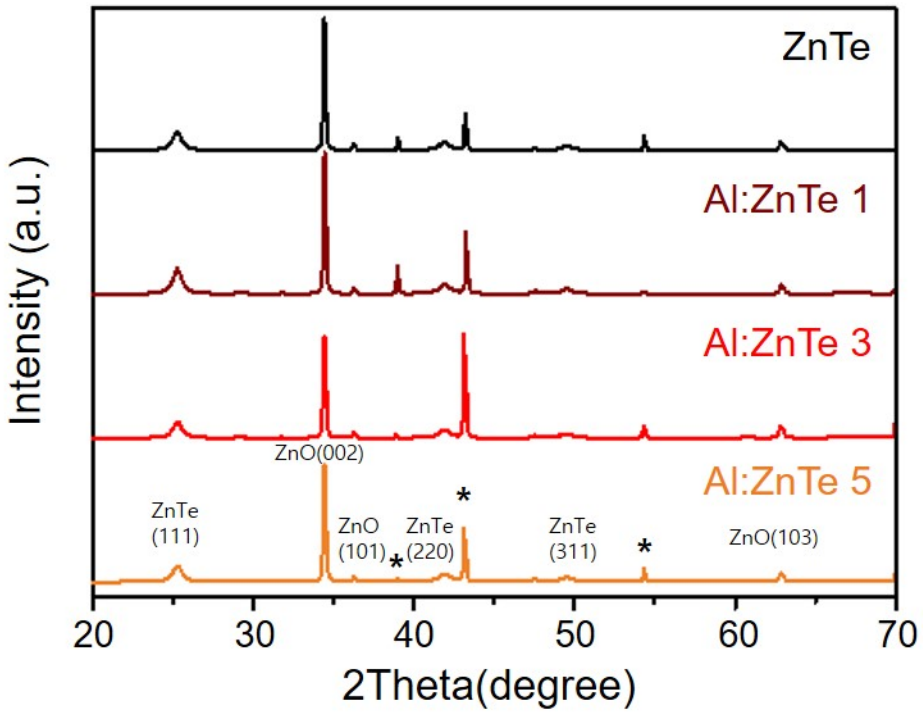

Figure S2. XRD patterns for ZnTe and Al:ZnTe X, where X indicates molar concentration of Al dopants of 1, 3, and 5 %. The symbol of * indicates XRD patterns for FTO substrate

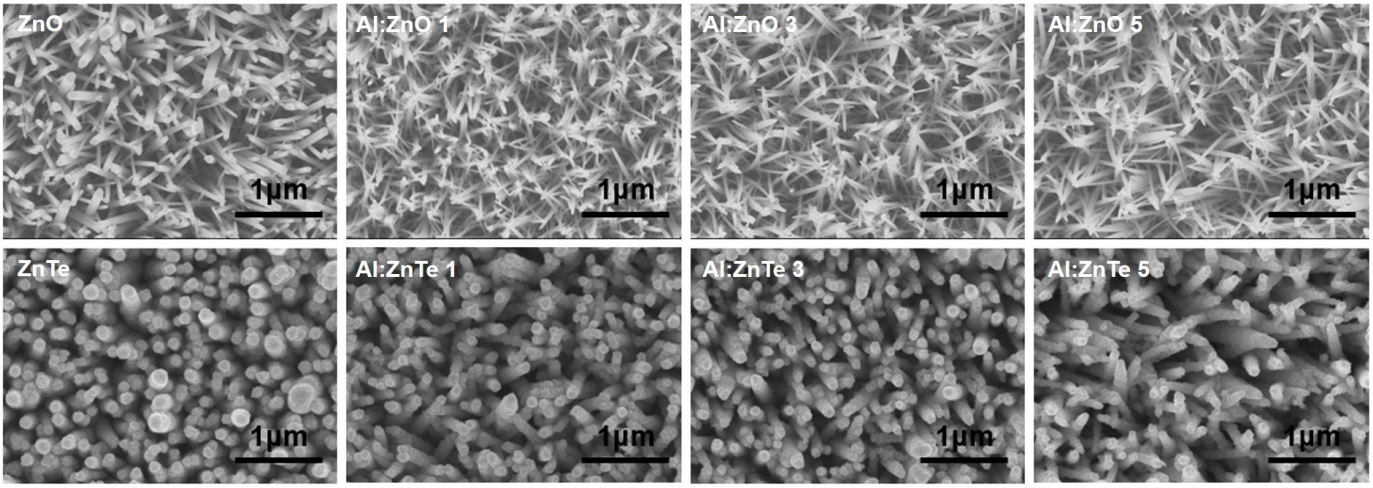

Figure S3. SEM images for ZnO, ZnTe, Al:ZnO X and Al:ZnTe X, where X indicates molar concentration of Al dopants of 1, 3, and 5 %.