Supplementary Material (ESI) for Journal of Materials Chemistry

Supporting Information

Nanoscale ZnO/CdS Heterostructures with Engineered Interfaces for High Photocatalytic Activity under Solar Radiation

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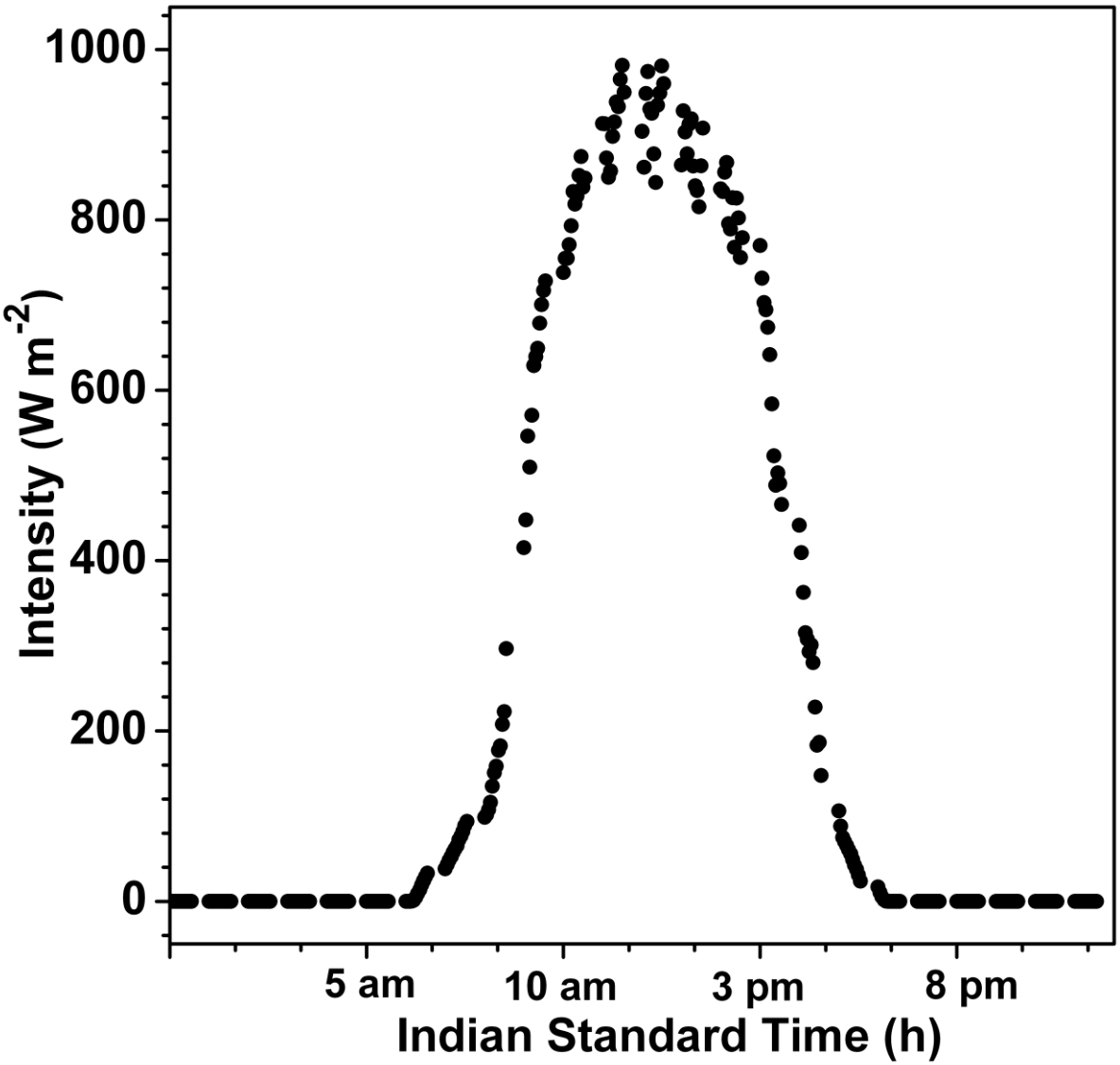

Figure S1: Variation of the average solar intensity during the different periods of the day from April 01 to April 12, 2010.

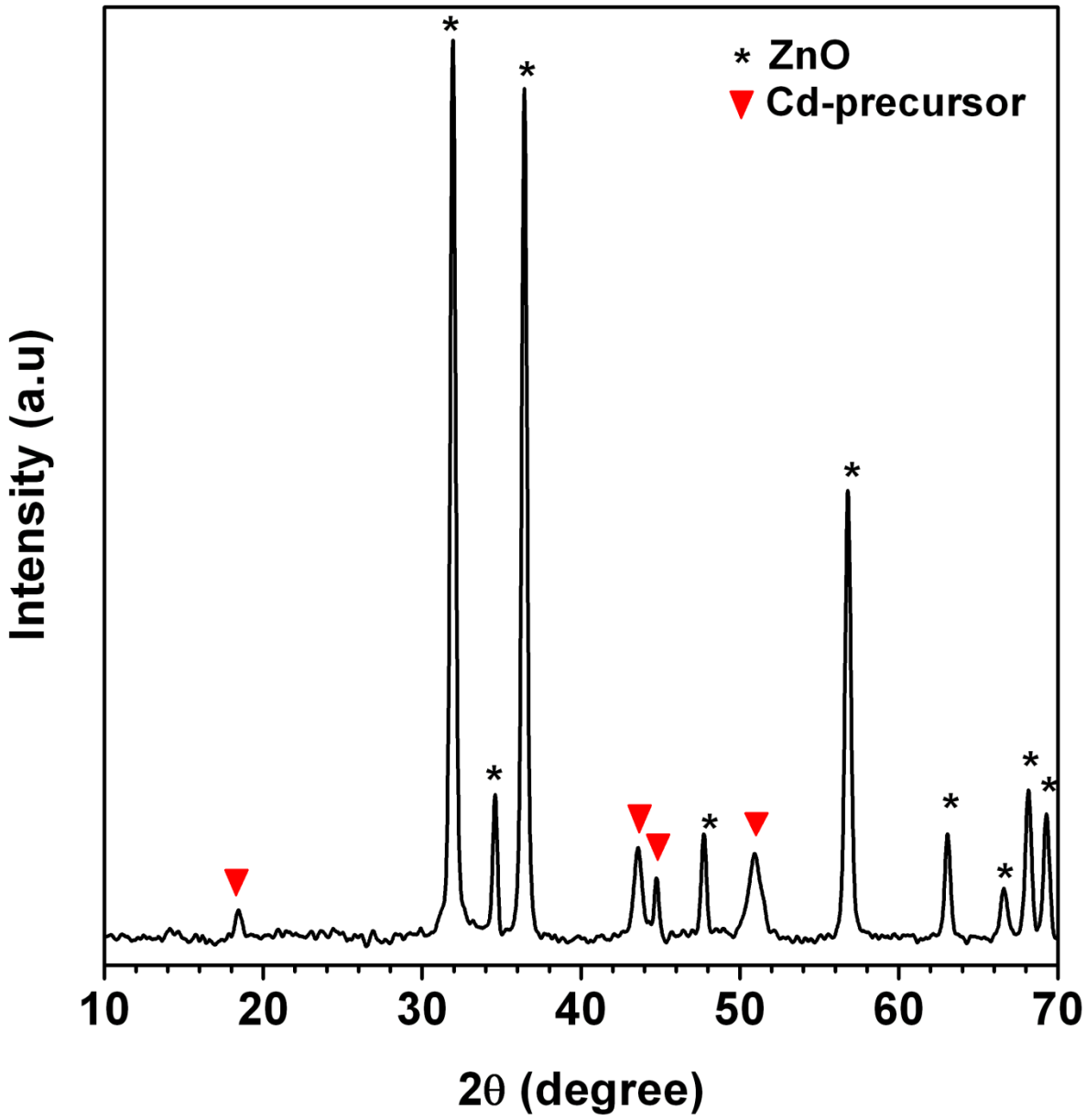

Figure S2. XRD pattern obtained from the Cd-precursor coated ZnO before sulfidation.

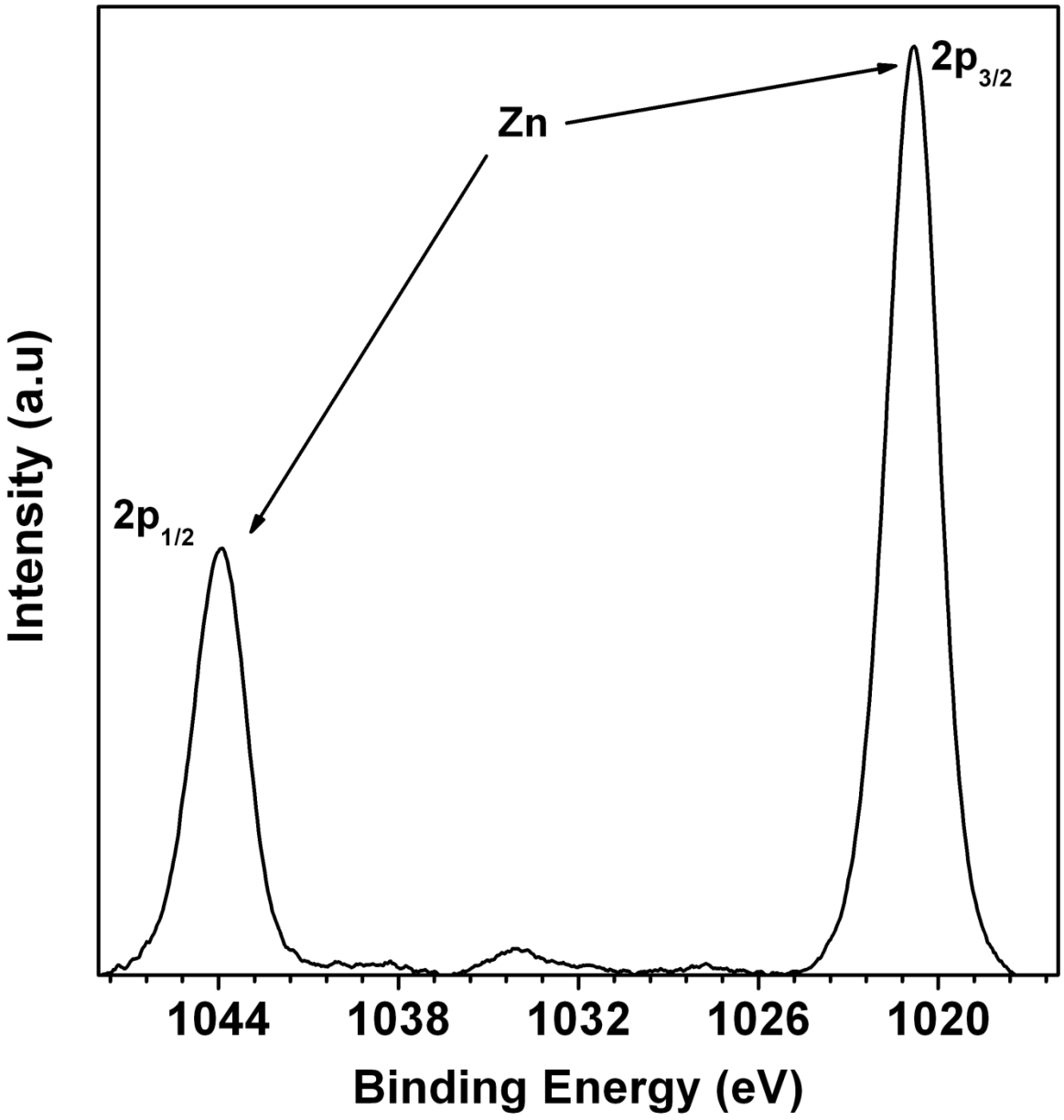

Figure S3. XPS core-level spectra of Zn2p in ZnO nanorods.

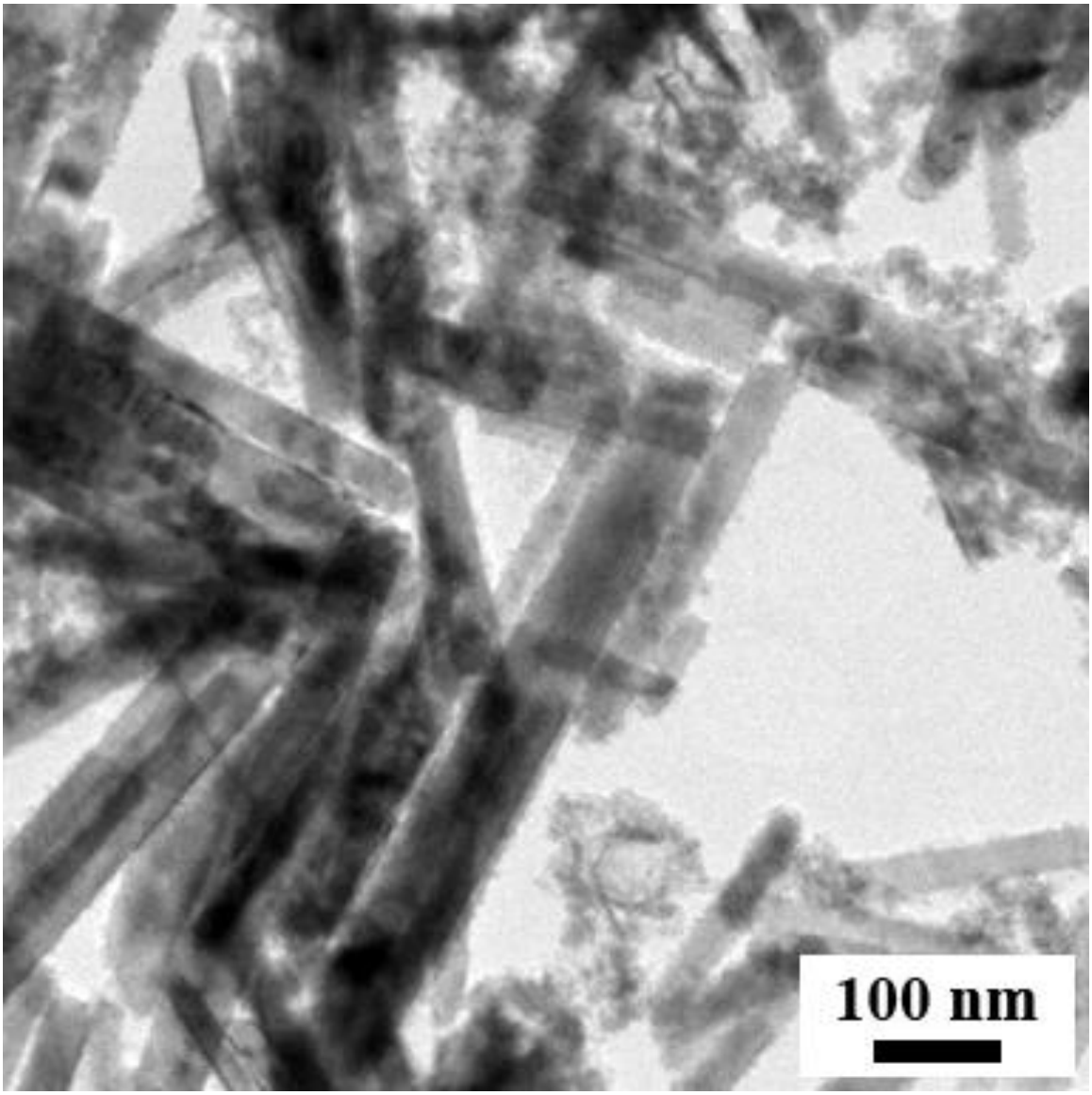

Figure S4. Bright Field TEM image of ZnO-CdS nanohybrid, ZC-3, showing fine particle clusters of CdS attached to ZnO nanorods.

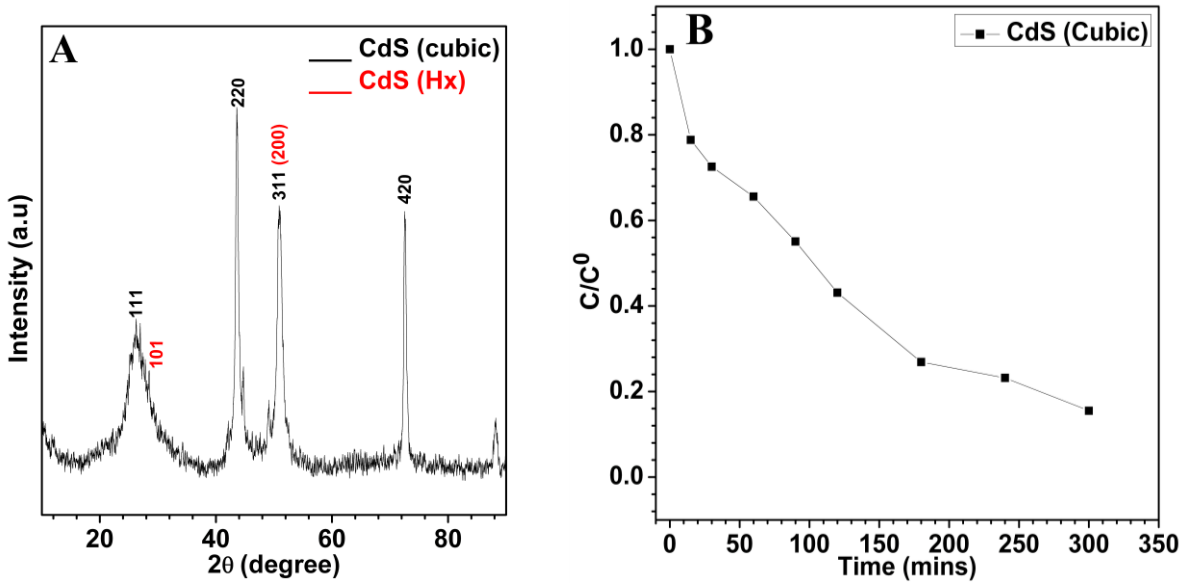

Figure S5. (A) XRD pattern of the CdS synthesized by precipitation method using same conditions as ZC-3 and heated to 150 ^{o}C for 30 mins and (B) degradation rate of methylene blue (MB) under solar radiation in presence of CdS (cubic phase + hexagonal phase), which is similar to ZC-3.