

## Supporting Information

### Type-II ZnO Nanorod/SnO<sub>2</sub> Nanoparticles Array: Structure, Optical Property and Photocatalytic Activity Characterization

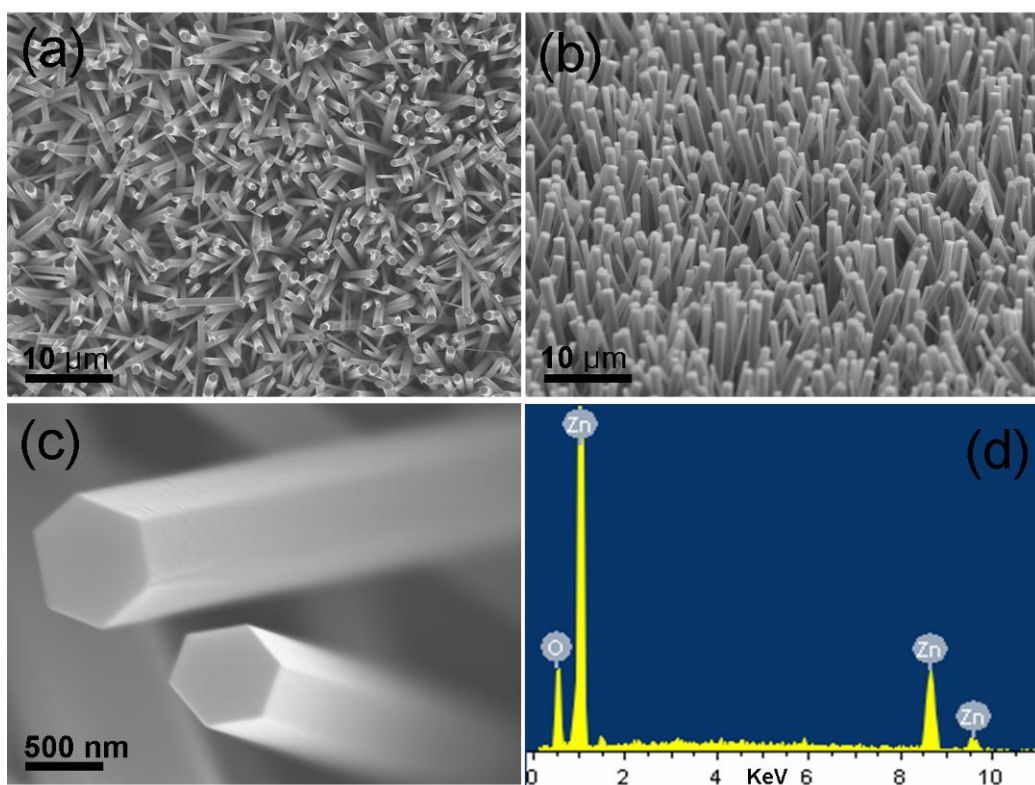
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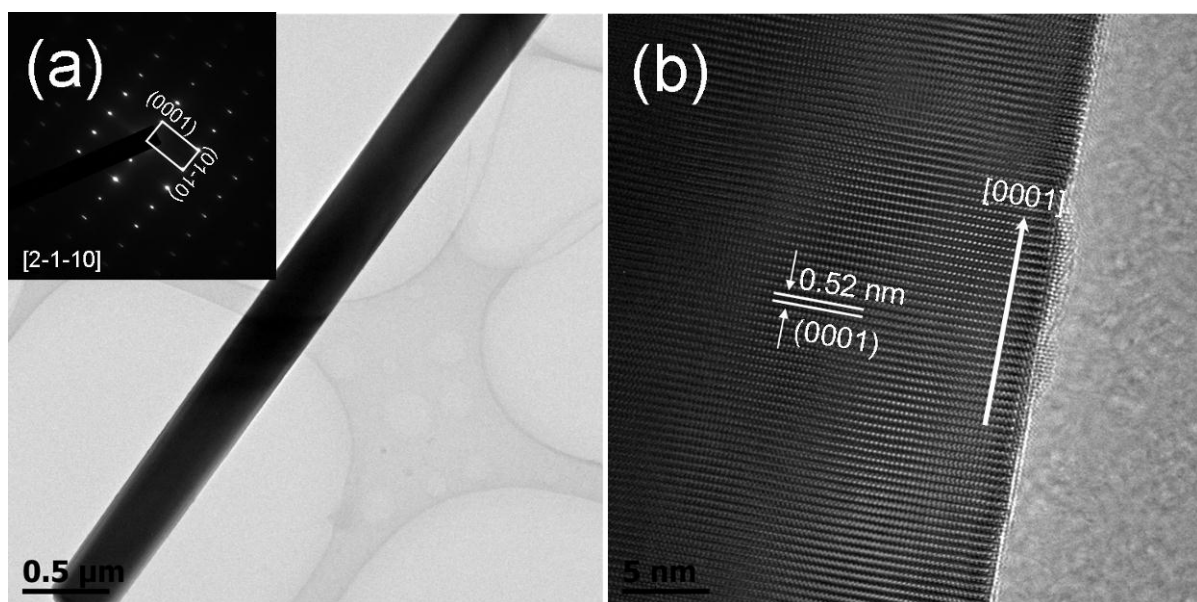
<sup>‡</sup>University of Chinese Academy of Sciences, 19A Yuquan Road, 100049 Beijing, P. R. China.

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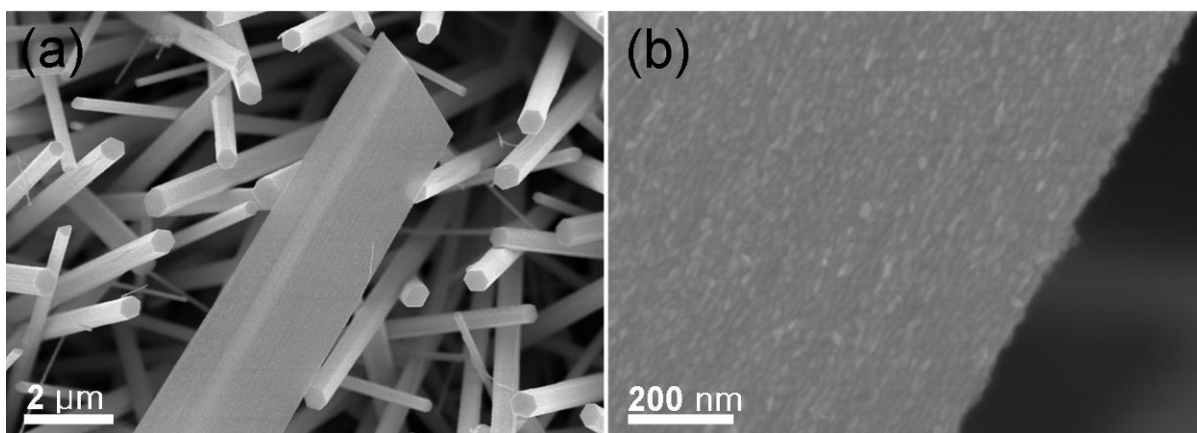
Email: mengxiangmin@mail.ipc.ac.cn



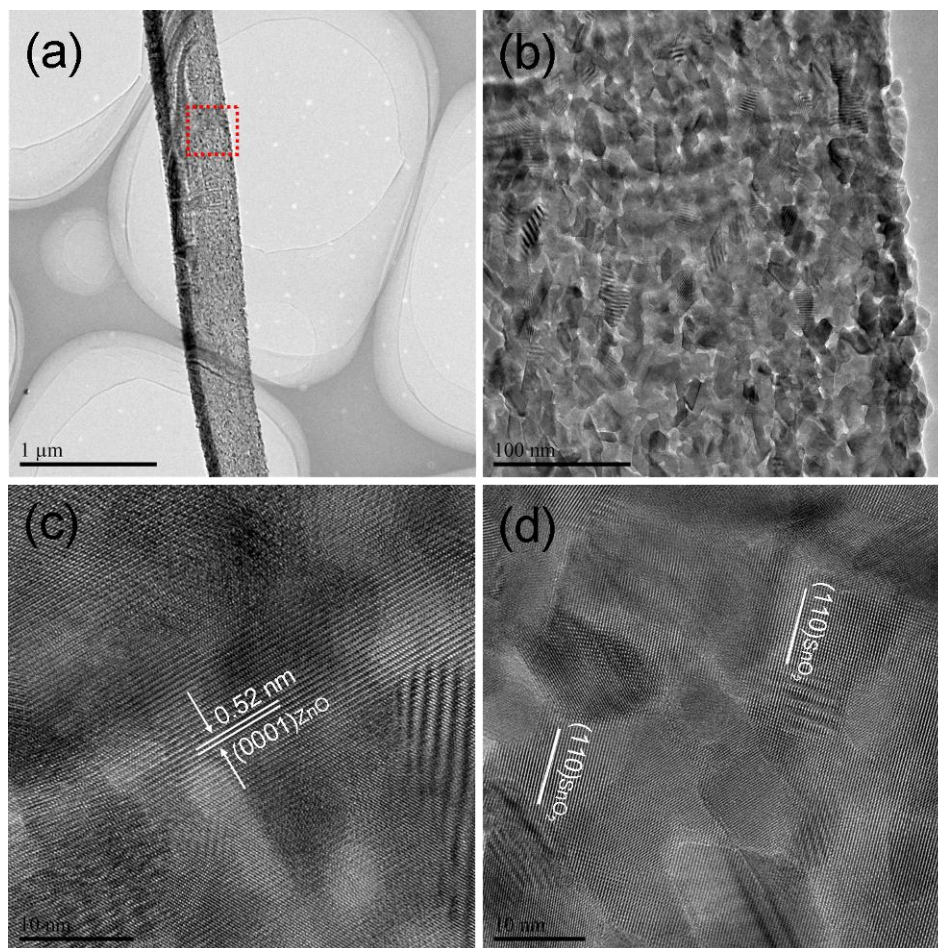
**Fig. S1** Low-magnification (a) top-view and (b) tilt-view SEM images of the ZnO NRs array; (c) High-magnification SEM image and (d) EDX data of the ZnO NRs array.



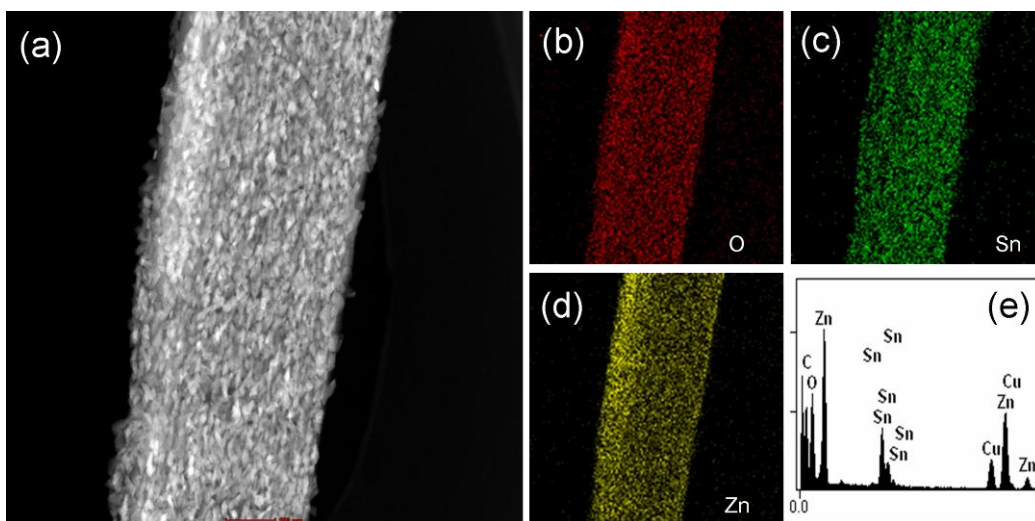
**Fig. S2** Bright-field (a) TEM and (b) HRTEM images of the obtained ZnO NR; inset of (a) is the corresponding SAED pattern of ZnO NR.



**Fig. S3** (a) Low-magnification and (b) high-magnification SEM images of the ZnO ribbon/SnO<sub>2</sub> NPs heterostructure.



**Fig. S4** Bright-field (a) TEM, (b) enlarged TEM and (c-d) HRTEM images of ZnO ribbon/SnO<sub>2</sub> NPs heterostructure.



**Fig. S5** (a) HAADF image and (b-e) STEM-EDX elemental mapping of the ZnO ribbon/SnO<sub>2</sub> NPs heterostructure.