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A novel hierarchical ZnO-nanosheet-nanorod-structured film for quantum-dot-sensitized solar cells

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Response to reviewer's comments

Reviewer #1:

Dear Professor:

Thanks for your valuable comments and suggestions on our manuscript. We have revised our paper according to your comments. The changes were highlighted with yellow background in the revised manuscript.

1. It is difficult to tell the nanosheet-nanorod structures in SEM and TEM images as shown in Figure 1. Images with better resolution and higher magnification may be needed.

A new SEM image was given in Figure 1. Obvious nanorods structure was obtained.

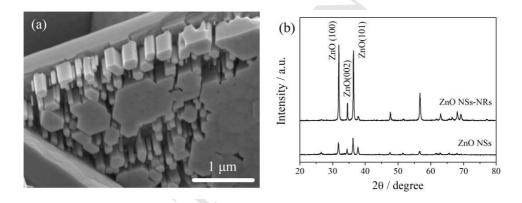


Fig. 1 FE-SEM micrographs (a), TEM (inset figure of (a)) and XRD (b) of ZnO NS-NRs prepared without the TiO_2 intermediate layer, 0.6 M $Zn(CH_3COO)_2$ seed precursor solution, 8 h hydrothermal treatment

2. To confirm the existence of TiO₂ intermediate layer within the ZnO NS-NRs structure, it is suggested to provide the SEM-EDS mapping results and related analysis.

EDS spectrum of the $(NH_4)_2 TiF_6$ treated ZnO NSs film was supplied in the revised manuscript. A peak at 4.5 KeV corresponding to the Ti Ka was observed in the EDS spectrum.

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