Electronic Supporting Information

Novel TiO$_2$/Sb$_2$S$_3$ Heterojunction with Whole Visible-light Response for Photoelectrochemical Water Splitting Reactions

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**Figure S1** The photos for the TiO$_2$ NR array, unannealed TiO$_2$/Sb$_2$S$_3$, and annealed TiO$_2$/Sb$_2$S$_3$ nanocomposites.

**Figure S2** (a) The annealed TiO$_2$/Sb$_2$S$_3$ photoanode soaked in the electrolyte containing 0.5 M Na$_2$S and 0.5 M Na$_2$SO$_4$ along with a reference electrode and the enlarged picture for the electrode, and (b) the annealed TiO$_2$/Sb$_2$S$_3$ photoanode after being soaked in the electrolyte and before soaked in the electrolyte.