Supporting Information

One-step synthesis of mesoporous Pt-Nb$_2$O$_5$ nanocomposites with Enhanced Photocatalytic Hydrogen Production

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Captions for Figures

**Fig. S1** Schematic diagram of the reactor for UV induced methanol reforming for hydrogen.

**Fig. S2** Light spectrum of the high-voltage mercury lamp with 165W.
Fig. S3 TEM images of 0.8-Pt-I-M- Nb₂O₅.

Fig. S4 Recycle study of the photocatalyst 0.8-Pt-D-M- Nb₂O₅.
Fig. S5 X-ray photoelectron spectra (XPS) of survey spectrum of 0.8-Pt-D-M-Nb and 0.8-Pt-I-M-Nb.