## **Supporting Information**

## Pivot Roles of Noble Metal in Single-Phase $TaX_zON$ (X = Pt, Ru, 0<Z<0.001) and Heterostructured $X_\delta/TaX_{z-\delta}ON$ (X = Pt, Ru, 0.001<Z<0.016) Visible Light Photocatalysts Based on Photoinduced Interfacial Charge Transfer for Hydrogen Production

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## **Additional Results**

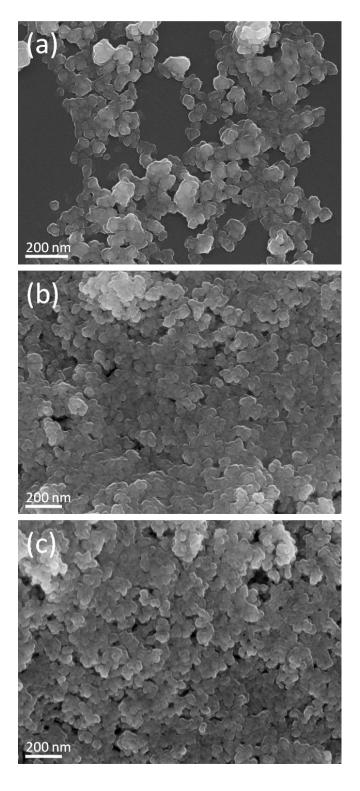
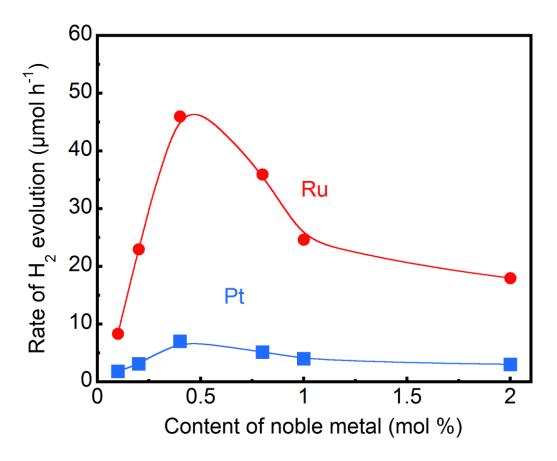


Fig. S1. SEM images of the photocatalysts T0 (a), PT4 (b), and RT4 (c).



**Fig. S2.** Photocatalytic property of TaON photocatalysts with different amount of noble metal loading.