Supplementary Information

Effects of electron charge density and particle size of alkali metal titanate nanotubes-supported Pt photocatalysts on production of H$_2$ from neat alcohol

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**Scheme S1.** Schematic diagram for the photocatalytic system: 1. 80 mL quartz tube with a rubber septum, 2. reaction mixture containing 15 mL of neat alcohol and 30 mg of photocatalyst, 3. stirrer bar, 4. magnetic stirrer, 5. two 15W UV lamps in a lamp housing, 6. electric fan for air circulation, 7. outlet for electric wire and air circulation, 8. home-made wooden box enclosure.
**Fig. S1** DRIFTS spectra for CO adsorbed on 3% Pt/NaTNTs and 3% Pt/CsTNTs. The blue, green and red curves are deconvolution peaks for CO adsorbed on the PtO₆, Pt⁰ and Pt⁵⁻ sites, respectively. The dash purple curve is the sum of the three component peaks, and the solid black curve is the collected spectra.