

*Supplementary Material (ESI) for Journal of Materials Chemistry*  
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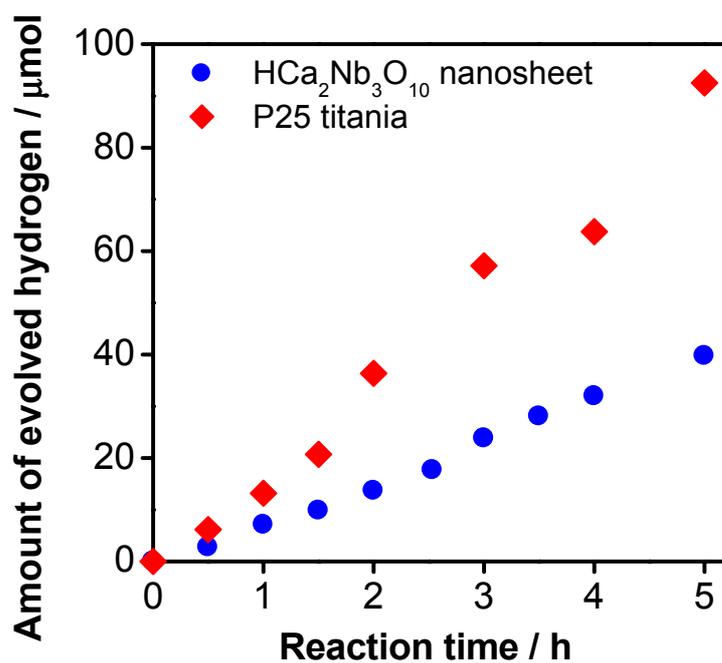
# Comparison of two- and three-layer restacked Dion-Jacobson phase niobate nanosheets as catalysts for photochemical hydrogen evolution

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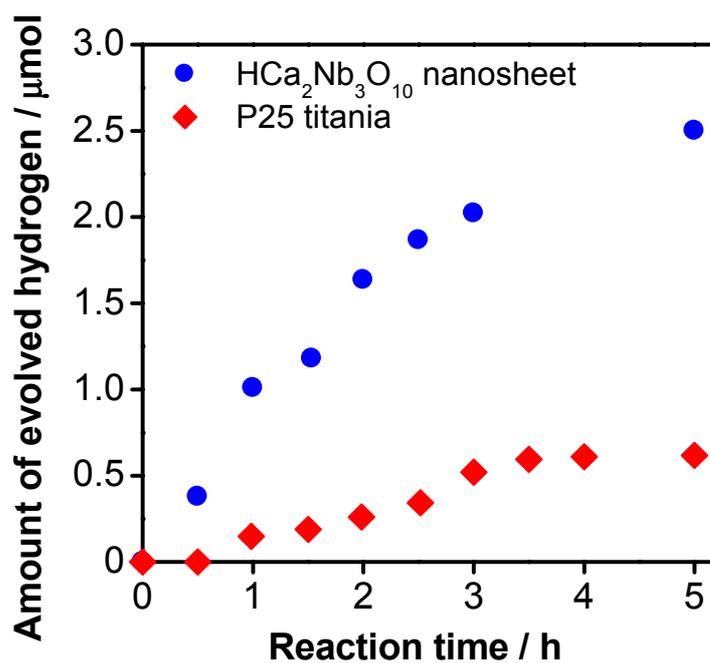
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**Figure S1.** Time courses of H<sub>2</sub> evolution from 0.3 wt% Pt-loaded restacked HCa<sub>2</sub>Nb<sub>3</sub>O<sub>10</sub> nanosheets and P25 titania under UV irradiation ( $\lambda > 300$  nm). Reaction conditions: catalyst, 5.0 mg; aqueous methanol solution (0.1 M, 2.0 mL); light source, xenon lamp (300 W).



**Figure S2.** Time courses of H<sub>2</sub> evolution from 0.1 wt % Pt-loaded restacked HCa<sub>2</sub>Nb<sub>3</sub>O<sub>10</sub> nanosheets and P25 titania sensitized by tris(2,2'-bipyridyl)ruthenium(II) chloride (Ru<sup>2+</sup>) with visible light ( $\lambda > 420$  nm). Reaction conditions: catalyst, 5.0 mg; aqueous solution (2.0 mL) containing 0.01 M EDTA and 50  $\mu\text{M}$  Ru<sup>2+</sup>; light source, xenon lamp (300 W) with a cutoff filter.