Supporting Information

Structure and Photocatalytic Activity of $PdCrO_x$ Cocatalyst on $SrTiO_3$ for Overall Water Splitting

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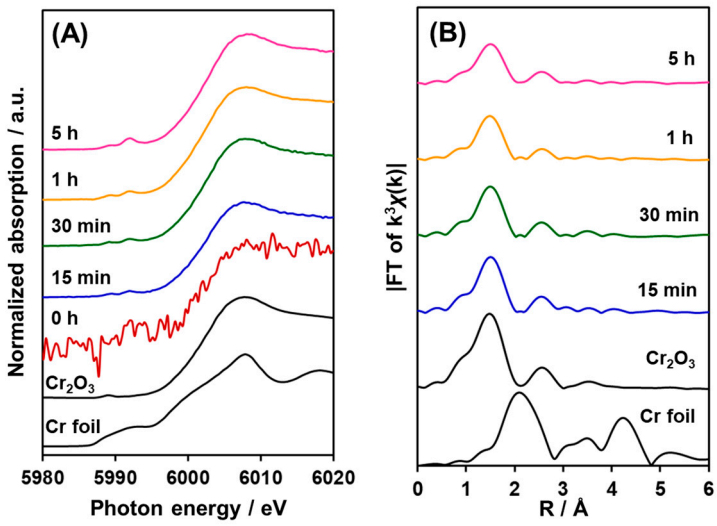

Figure S1. (A) XANES spectra and (B) Fourier transforms of k^3-weighted Cr K-edge of $PdCrO_x$ nanoparticles (0–5 h) on $SrTiO_3$. Cr foil and Cr_2O_3 are shown as references.

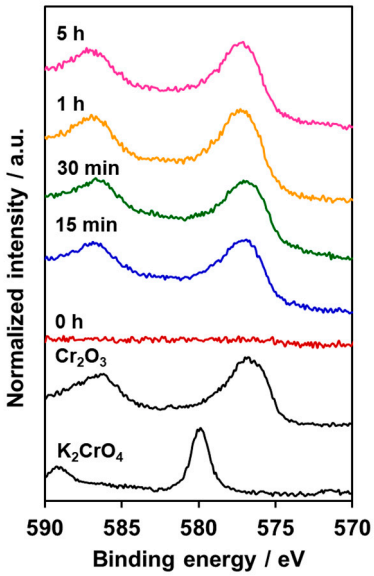

Figure S2. Cr 2p XPS spectra of $PdCrO_x/SrTiO_3$ prepared for various time periods (0–5h). Data for K_2CrO_4 and Cr_2O_3 are shown as references.

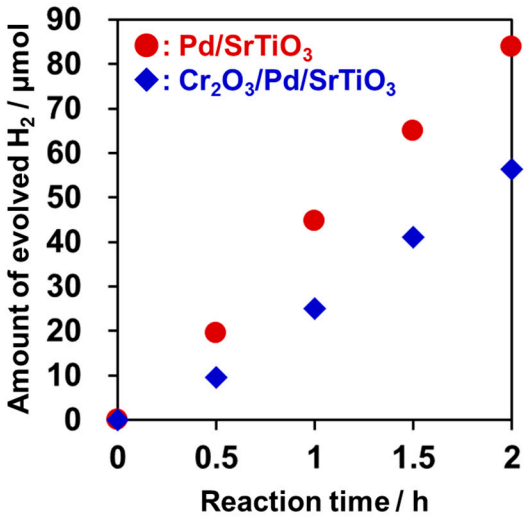

Figure S3. Time course of H_2 evolution over Pd or Cr_2O_3/Pd nanoparticle loaded $SrTiO_3$. Reaction conditions: catalyst, 100 mg; 10 vol% aqueous methanol solution, 140 mL; metal precursors, Pd 0.5 wt%, Cr 1.0 wt%; light source, a 300 W xenon lamp ($\lambda > 300$ nm).