One-step synthesis of CoO/g-C₃N₄ composites by thermal decomposition for overall water splitting without sacrificial reagents

Supporting Information



Figure S1 XRD patterns of CoO/g-C₃N₄ composites with different mass ratios of Co(AcO)₂ from 0% to 20%.



Figure S2 XPS spectrum of 10%CoO/g-C₃N₄.



Figure S3 TEM image for pure CoO NPs after photocatalytic H₂ evolution.



Figure S4 (a) LSV curves for bare working electrode, $g-C_3N_4$, CoO and 10%CoO/ $g-C_3N_4$ in 20 mM H₂O₂ solution. (b) CV curves for 10%CoO/ $g-C_3N_4$ in 10 mM, 20 mM, 30 mM and 40 mM H₂O₂ solutions.



Figure S5 Electrochemical impedance spectra (a) and PL spectra (b) of $g-C_3N_4$ and $10\%CoO/g-C_3N_4$.