Supporting Information

Laser-Induced Deposition of Ni, Co-doped FeOOH Cocatalysts on WO_3 Photoanodes and Elucidating Their Roles in Water Oxidation in Terms of Carrier Dynamics

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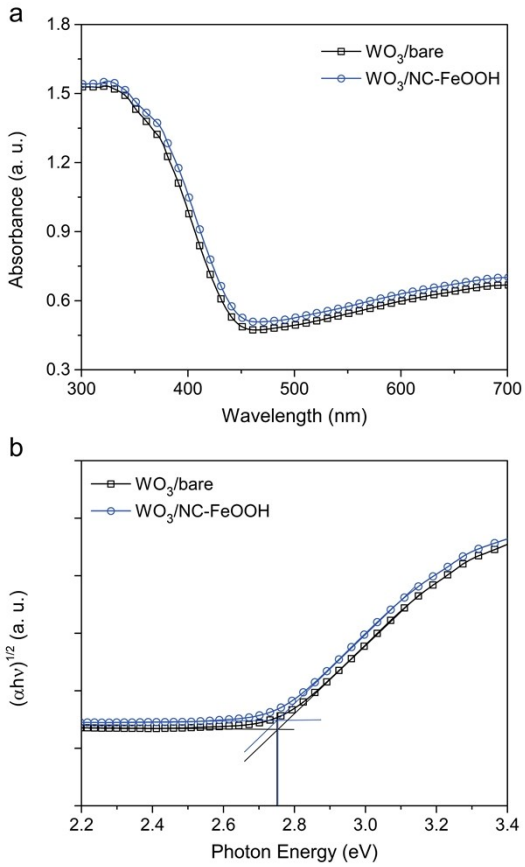

Figure S1. UV-Vis spectroscopy. a) Diffuse reflectance absorbance spectra and (b) Tauc plots of WO_3/bare and WO_3/NC-FeOOH samples.

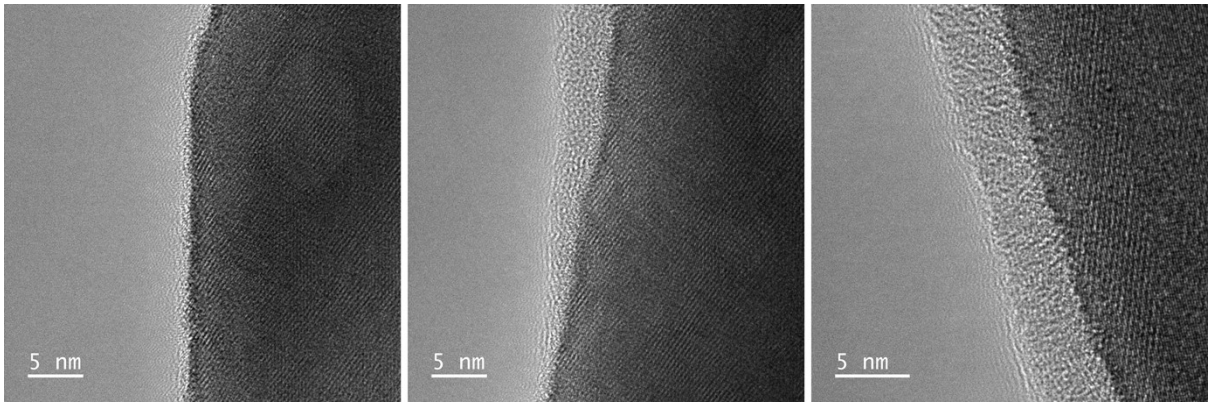

Figure S2. HRTEM images of several WO_3/NC-FeOOH samples.

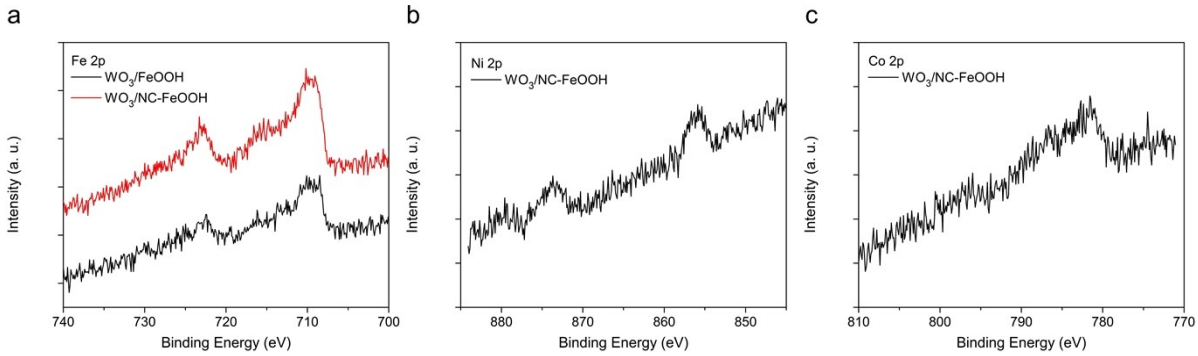

Figure S3. XPS core-level spectra of WO_3/FeOOH and WO_3/NC-FeOOH measured in (a) Fe 2p, (b) Ni 2p, and (c) Co 2p region, respectively.

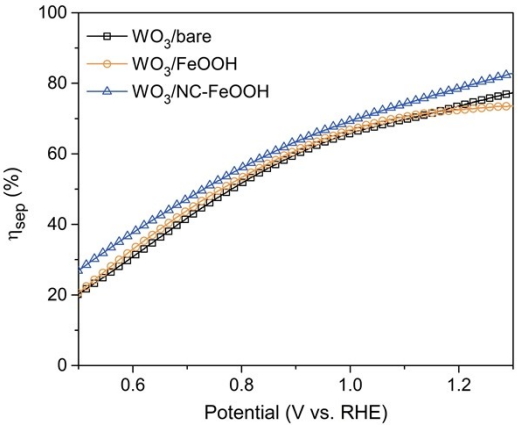

Figure S4. η_{sep} of WO_3/bare, WO_3/FeOOH, and WO_3/NC-FeOOH samples.

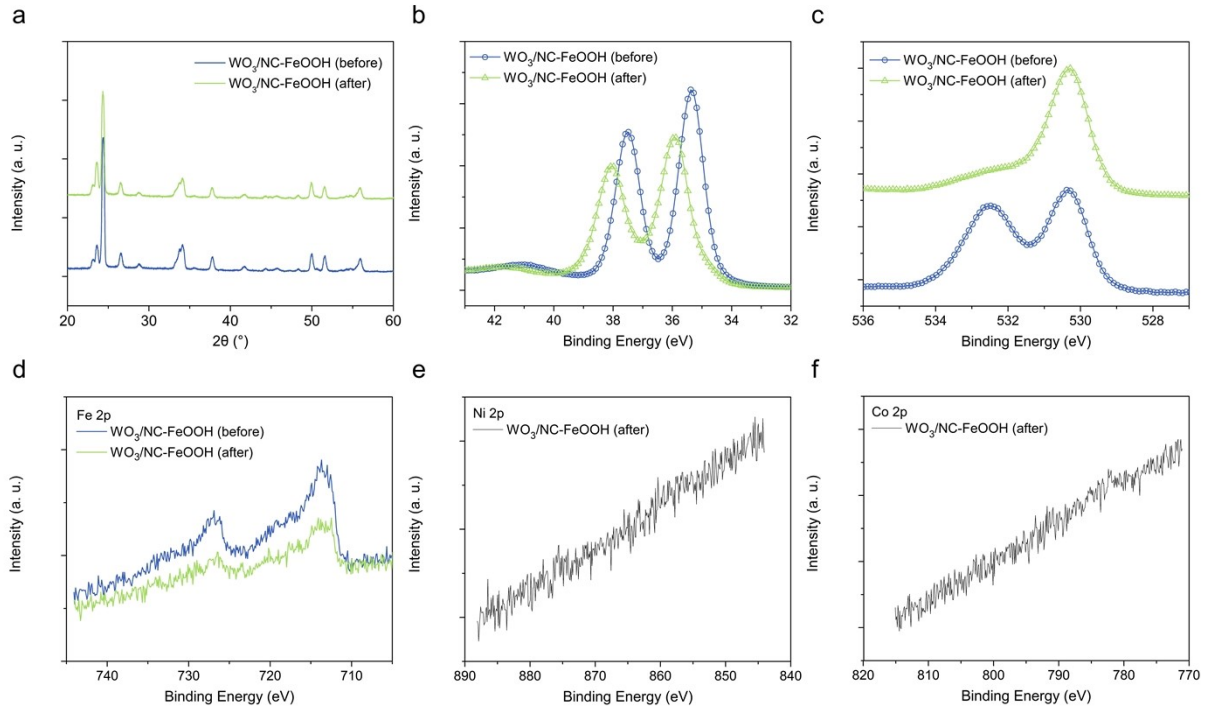

Figure S5. (a) XRD patterns, (b) XPS W 4f, (c) O 1s, (d) Fe 2p, (e) Ni 2p, and (f) Co 2p core-level spectra of WO_3/NC-FeOOH before (blue) and after (green) the photostability test for 1 h.

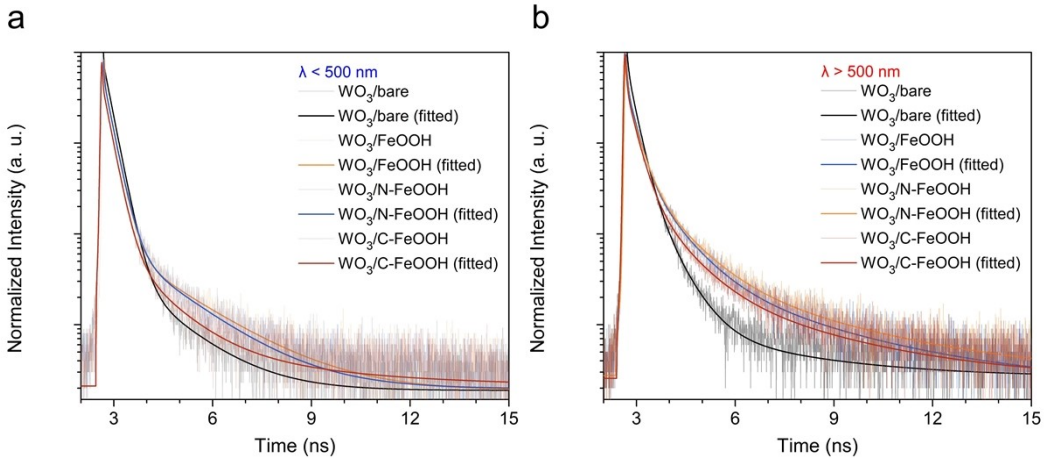

Figure S6. TRPL decay profiles of WO_3/bare, WO_3/FeOOH, WO_3/N-FeOOH, and WO_3/C-FeOOH measured using (a) SP and (b) LP optical filters.