

Supporting information for

**980 nm NIR light driven overall water splitting over united CdS-RGO-NYF
photocatalyst**

Wei Gao^{a,b}, Yuqi Wu^b, Gongxuan Lu^{*,b}

^a State Key Laboratory for Oxo Synthesis and Selective Oxidation, Lanzhou Institute
of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, China

^b University of Chinese Academy of Sciences, Beijing 10080, China

*Corresponding E-mail: gxlu@lzb.ac.cn

Additional Figures

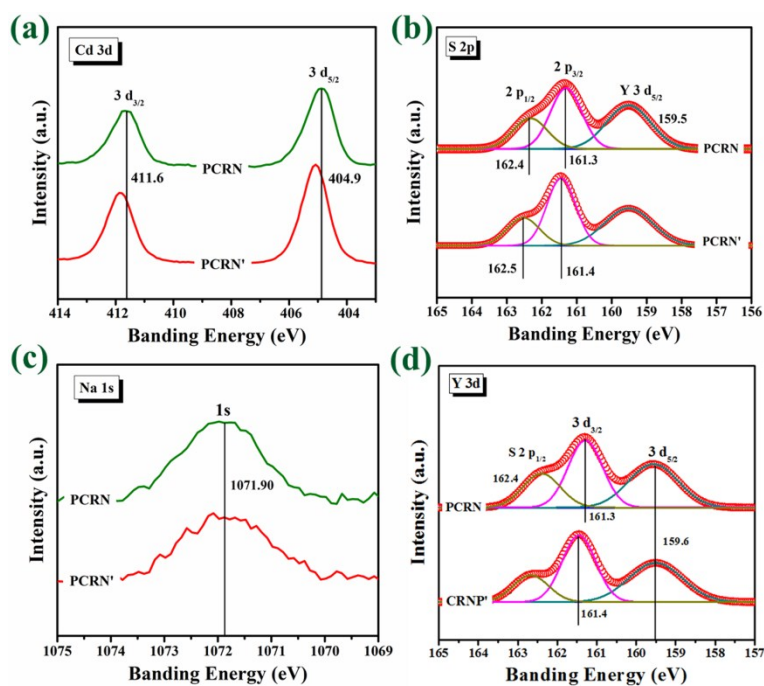


Figure S1 XPS spectra of (a) Cd 3d, (b) S 2p, (c) Na 1s, (d) Y 3d in Pt/CdS/RGO/NYF before and after reaction. (PCRN, PCRN' are Pt/CdS/RGO/NYF before and after reaction).

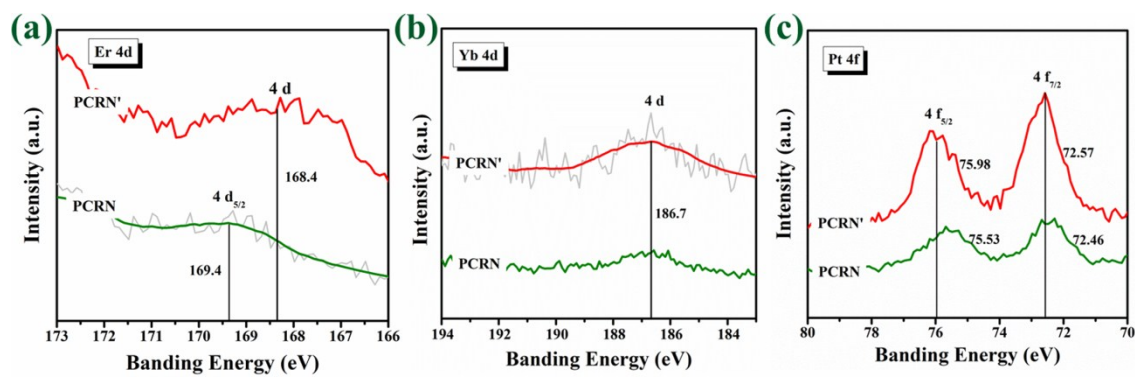


Figure S2 XPS spectra of (a) Er, (b) Yb and (c) Pt elements before and after reaction. (PCRN, PCRN' are Pt/CdS/RGO/NYF before and after reaction).

