

## Supporting Information

### Coordination of $\text{Ti}^{3+}$ and $\text{Ni}^{3+}$ to promote the electrocatalytic OER properties of $\text{SrTiO}_3@\text{TiO}_2$ heterojunctions

Yanqin Bi, Zenghua Zhao, \* Jianhua Qian, Liangliang Chen, and Chunyang Duan, \*

College of Petroleum and Chemical Engineering

Liaoning Petrochemical University Fushun 113001, China

E-mail: zzh799@126.com

duanchunyang@lnpu.edu.cn

Fig. S1: Ti 2p High Resolution XPS Spectra of different samples

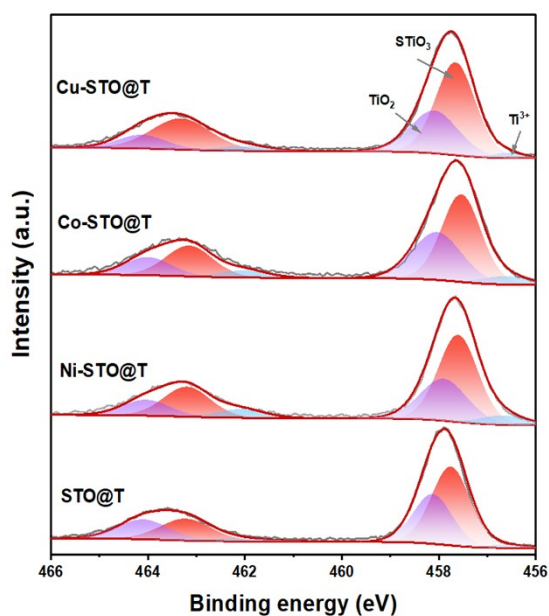


Fig. S2: Magnification of  $Ti^{3+}$  peaks of different samples in  $Ti\ 2p_{1/2}$

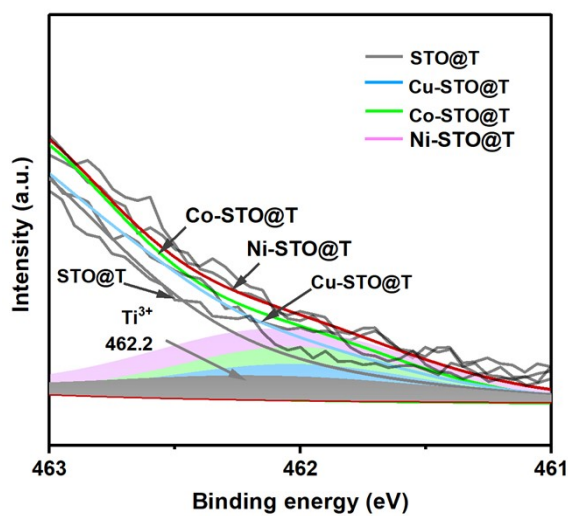


Fig. S3: Magnification of  $Ti^{3+}$  peaks of different samples in  $Ti\ 2p_{3/2}$

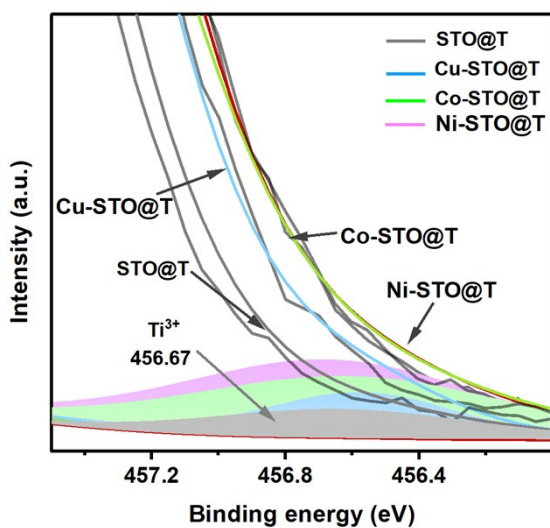
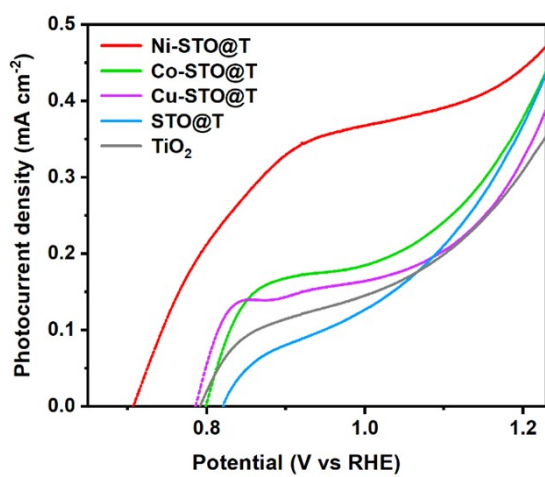


Fig. S4: Photo electrocatalytic properties of Ni-STO@T, Co-STO@T, Cu-STO@T,



**STO@T and TiO<sub>2</sub>**