

*Supporting Information*

**Trace Amounts of Co<sub>3</sub>O<sub>4</sub> Nano-Particles Modified TiO<sub>2</sub> Nanorod Arrays for Boosted Photoelectrocatalytic Removal of Organic Pollutants in Water**

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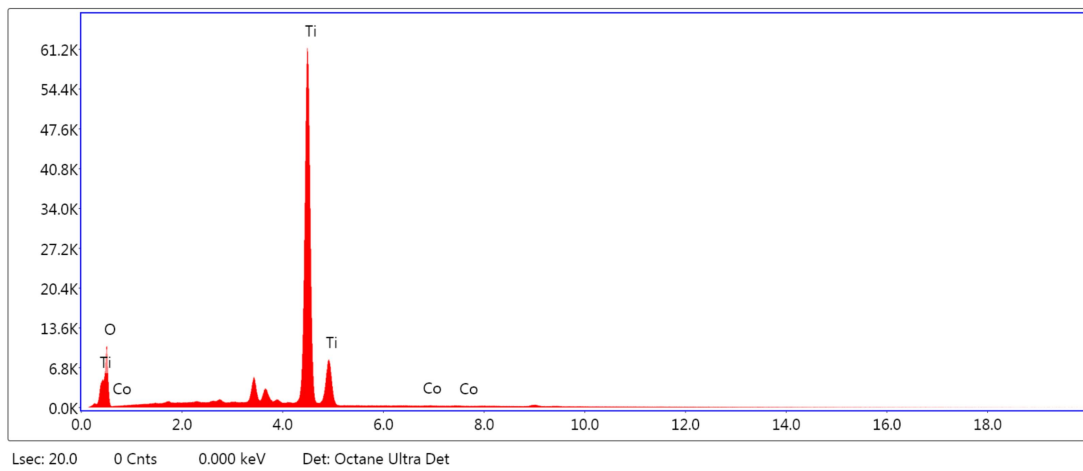
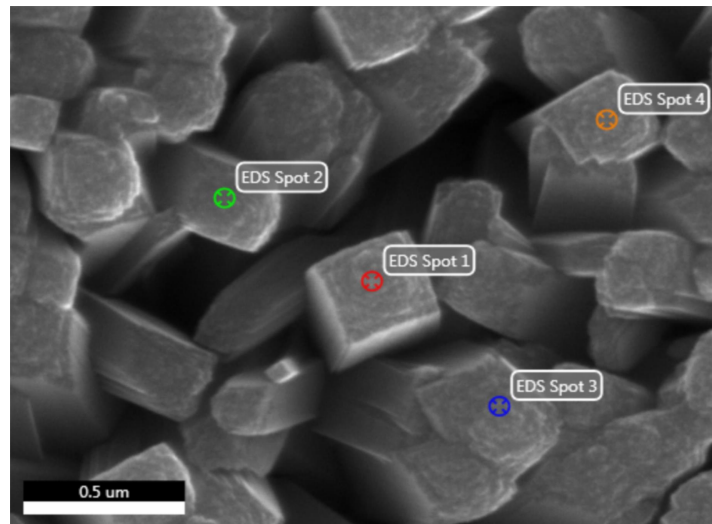
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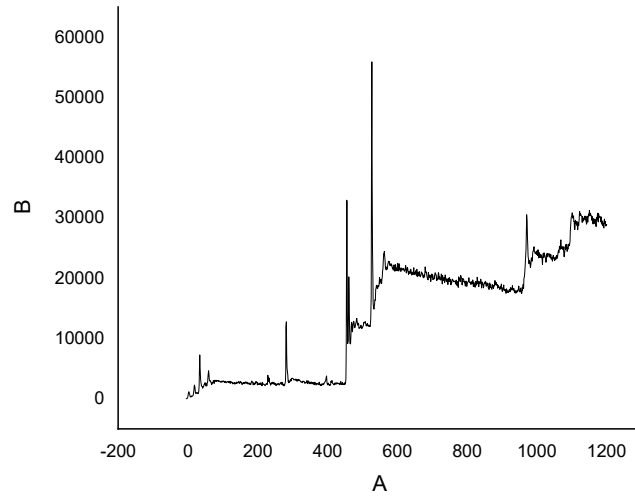
† These authors contributed equally to this work.



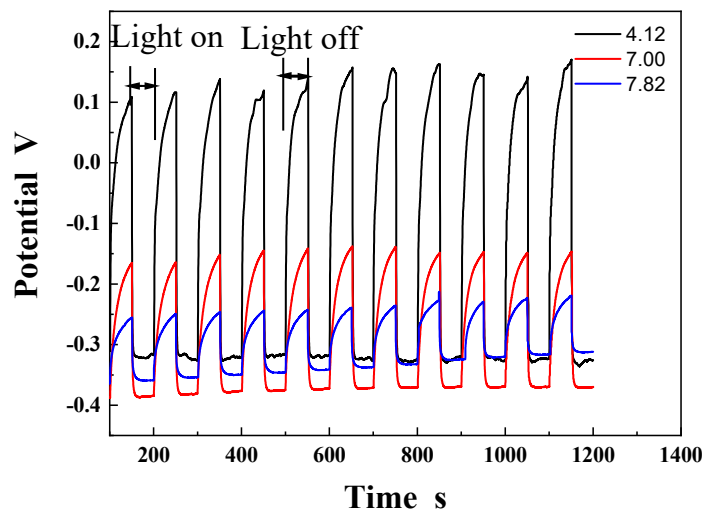
**Figure S1** EDX of  $\text{Co}_3\text{O}_4$  modified  $\text{TiO}_2$  nanorod arrays

**Table S1** the content of  $\text{Co}_3\text{O}_4$  modified  $\text{TiO}_2$  nanorod arrays.

Element	Weight %	Atomic %	Net Int.	Error %	Kratio	Z	R	A	F
O K	54.76	78.38	3555.82	9.97	0.0629	1.0869	0.9491	0.1055	1.0000
TiK	45.20	21.61	39524.04	1.14	0.4118	0.8759	1.0522	1.0222	1.0168
CoK	0.04	0.01	18.33	55.79	0.0003	0.8512	1.0757	0.9335	1.0587



**Figure S2.** Full XPS data of  $\text{Co}_3\text{O}_4$  modified  $\text{TiO}_2$  nanorod arrays



**Figure S3.** OCP response of  $\text{Co}_3\text{O}_4$  modified  $\text{TiO}_2$  nanorod arrays fabricated in different pH value.