



## Supporting Information

for

### **Amorphous Ni<sub>x</sub>Co<sub>y</sub>P-supported TiO<sub>2</sub> nanotube arrays as an efficient hydrogen evolution reaction electrocatalyst in acidic solution**

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### **Comparison of the overpotentials (vs RHE) between the references and this work**

**Table S1:** Comparison of the overpotentials (vs RHE) between the references and this work.

Catalyst	Substrate	Electrolyte	$\eta_0$ (mV)	$\eta_{10}$ (mV)	$\eta_{20}$ (mV)	$\eta_{100}$ (mV)	Tafel slope (mV·dec <sup>-1</sup> )	Reference
Ni-Co-P	NF	1 M KOH		107	125		62	[1]
NiCoP@Cu <sub>3</sub> P	CF	1 M KOH		54			73	[2]
HWS NiCoP	NF	1 M KOH		59		220	90	[3]
NiCoP	CNT/NF	1 M KOH	69	80		173	62	[4]
Ni <sub>2-x</sub> Co <sub>x</sub> P	RGO	0.5 M H <sub>2</sub> SO <sub>4</sub>	31	42	55		45.2	[5]
NiCoP NPs		0.5 M H <sub>2</sub> SO <sub>4</sub>	42	97		158	52	[6]
Nest-like NiCoP	CC	0.5 M H <sub>2</sub> SO <sub>4</sub>		48		137	38.5	[7]
		1 M KOH		62		158	68.2	
H-NiCoP	NF	1 M KOH		44			38.6	[8]
NiCoP	NF	1 M KOH		32			37	[9]
<b>Ni<sub>x</sub>Co<sub>y</sub>P</b>	<b>TNAs</b>	<b>0.5 M H<sub>2</sub>SO<sub>4</sub></b>	<b>65</b>	<b>209</b>	<b>257</b>		<b>46.6</b>	<b>this work</b>

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