In-situ construction of self-supporting Ni-Fe sulfide for high-efficient oxygen evolution

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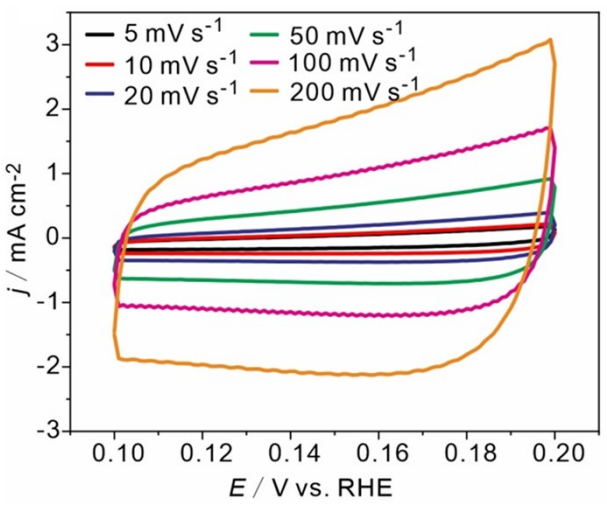

Figure S1 CV curves of $(Fe,Ni)_3S_4$-90 at potential window from 1.1 to 1.2 V under different scan rates.

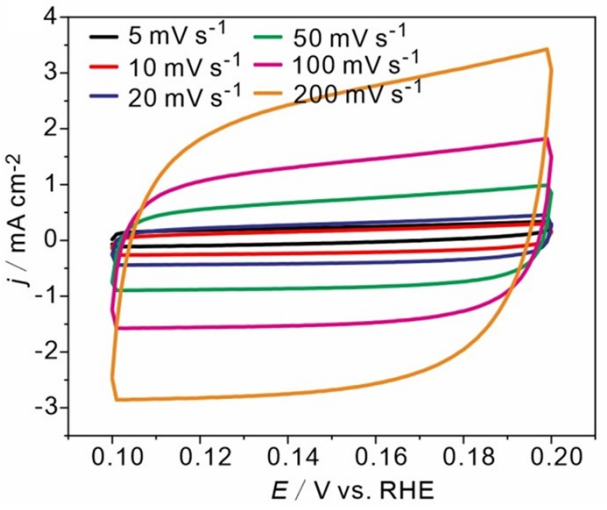

Figure S2 CV curves of $(Fe,Ni)_3S_4$-130 at potential window from 1.1 to 1.2 V under different scan rates.

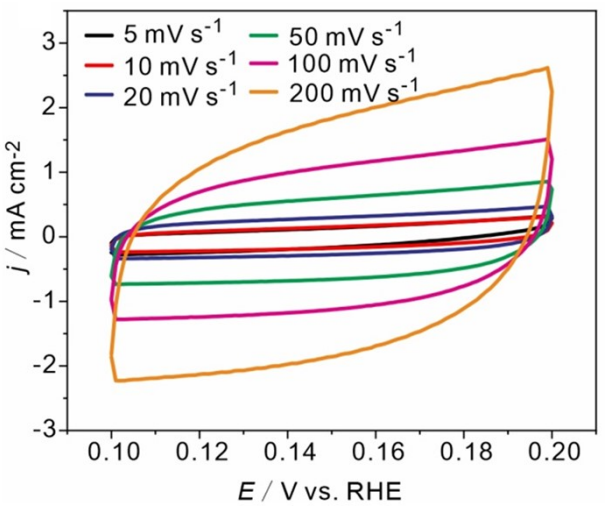

Figure S3 CV curves of $(Fe,Ni)_3S_4$-150 at potential window from 1.1 to 1.2 V under different scan rates.

Table S1 Comparison of key parameters for the OER performance of recent published references related to Fe-based catalysts.

Catalysts	j (mA cm^{-2})	$E_{10\ mA\ cm-2}$ OER (V)	Electrolyte	Refs
$NiCo_2O_4$@NiCoFe-OH	10	235.0	1 M KOH	[1]
Co-NC@$CoFeS_2$	10	275.0	1 M KOH	[2]
$NiFeO_x$ film	10	336.0	1 M KOH	[3]
NiFe LDH	10	300.0	1 M KOH	[4]
Ni-Fe nanoparticles	10	311.0	1 M NaOH	[5]
$NiFe_2O_x$ Spinels	10	356.0	1 M NaOH	[6]
$FeNiS_2$	10	310.0	0.1 M KOH	[7]
Ni-Fe-O-S	10	272.0	1 M KOH	[8]
$FeNi_2S_4$ hollow balloons	10	273.0	1 M KOH	[9]
(Ni, Fe)S_2@MoS_2	10	270.0	1 M KOH	[10]
Ni-Fe-$S_{3:1}$-160	10	207.0	1 M KOH	[11]
NiS/Fe_3O_4/carbon nanotube	10	243.0	1 M KOH	[12]
Fe_3O_4@NiS_x/rGO	10	330.0	1 M KOH	[13]
Fe-Ni_3S_2/FeNi	10	282.0	1 M KOH	[14]
$(Fe,Ni)_3S_4$-110	50	240.0	1 M KOH	This work

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