$Co(OH)_2$ hollow nanoflowers as highly efficient electrocatalysts for oxygen evolution reaction

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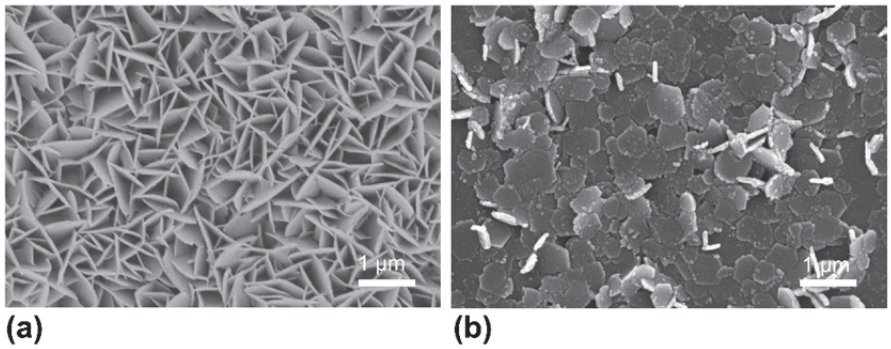

FIG. S1. SEM images of contrast samples: (a) α-$Co(OH)_2$/NSs, (b) β-$Co(OH)_2$/NSs.

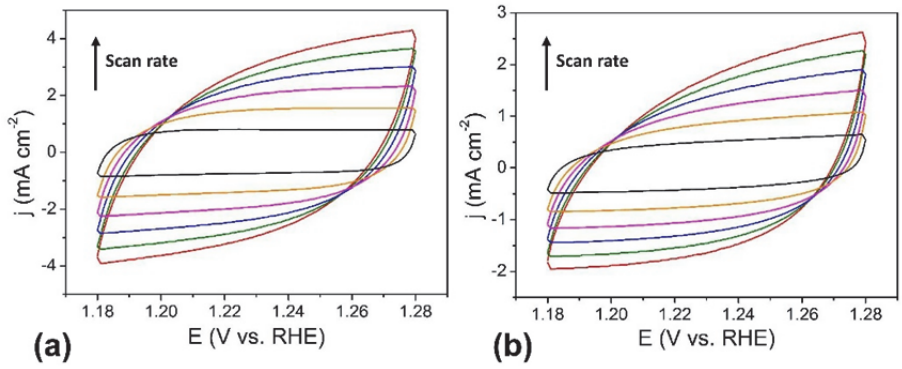

FIG. S2. CV curves of the α-$Co(OH)_2$/NSs (a) and β-$Co(OH)_2$/NSs (b) in 1 M KOH at different scan rates from 20 to 120 mV s^{-1}.

TABLE S1. Comparison of OER performance for α-$Co(OH)_2$/HNFs and other OER electrocatalysts published in literature.

Catalysts	**Substrate**	**Electrolyte**	**Overpotential @10 mA cm^{-2} (mV)**	**Reference**
α-$Co(OH)_2$/HNFs	GC	1 M KOH	310	**This work**
CoCo LDH	GC	1 M KOH	393	*Nat. Commun*. **2014**, 5, 4477
CoO/NG	GC	1 M KOH	340	*Energy Environ. Sci.***2014**, 7, 609
Co_xO_y/NC	GC	0.1 M KOH	430	*Angew. Chem. Int. Ed.***2014**, 53, 8508
N-CG-CoO	GC	1 M KOH	340	*Energy Environ. Sci.* **2014**, 7, 609
Co NPs	GC	0.1 M KOH	390	*J. Am. Chem. Soc.* **2015**, 137, 7071
α-$Co(OH)_2$ nanosheets	PI/CNT	1 M KOH	317	*Nanoscale* **2016**, 8, 9667
α-$Co(OH)_2$–Cl	GC	1 M KOH	320	*J. Mater. Chem. A* **2016**, 4, 9578
Co_3O_4 nano-islands	FTO	1 M NaOH	376	*Adv. Energy Mater.***2016**, 6, 1600697
α-$Co(OH)_2$ nanoplates	GC	1 M KOH	348	*RSC Adv.* **2017**, 7, 3783