

Supporting Information

Hollow mesoporous NiCo₂O₄ nanocage as efficient electrocatalysts for oxygen evolution reaction

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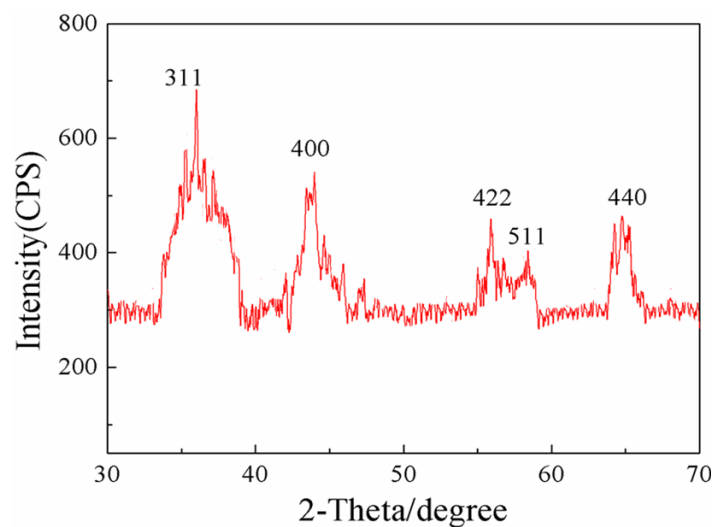


Figure S1. XRD pattern of NiCo_2O_4 nanocages obtained by calcination at 400°C for 3 h.

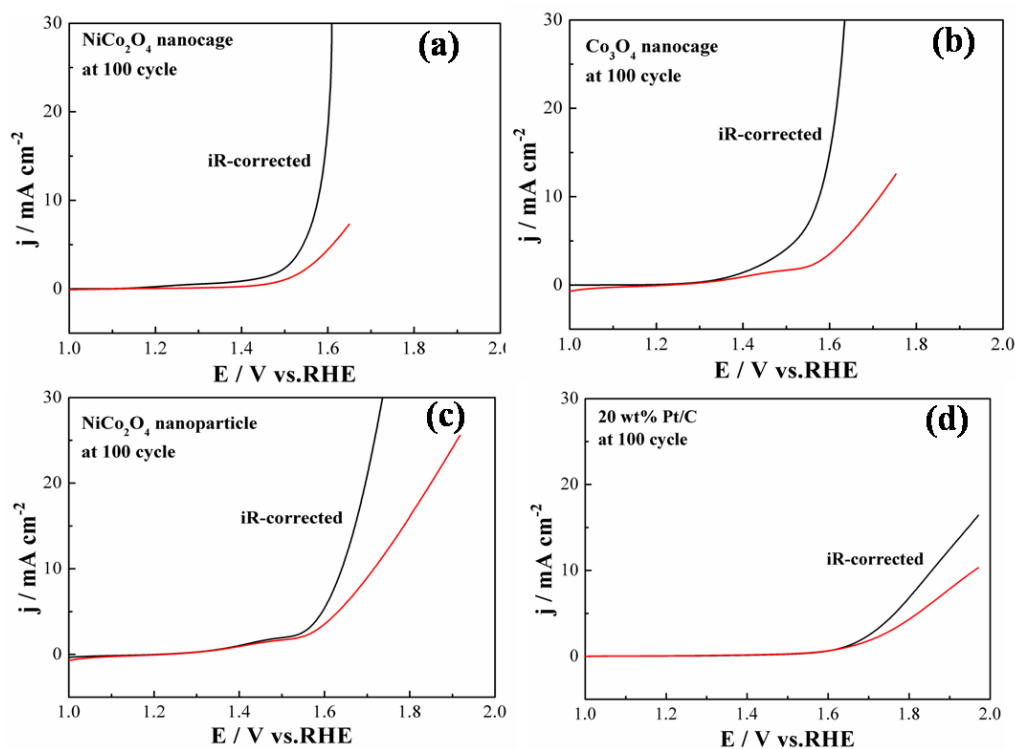


Figure S2. LSVs recorded at 100th cycle for modified GC electrodes comprising the (a) NiCo_2O_4 nanocage, (b) Co_3O_4 nanocage, (c) NiCo_2O_4 nanoparticles, (d) 20 wt% Pt/C with (black) and without (red) correction for iR losses. The ionic resistance ($\sim 45\ \Omega$) from the solution was determined by the EIS technique.

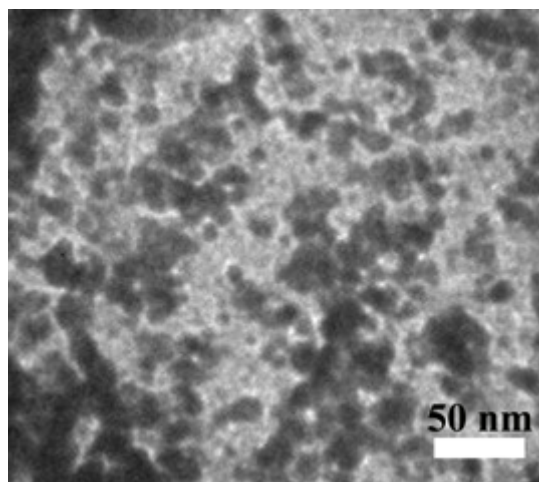


Figure S3. The typical TEM image for NiCo₂O₄ nanoparticles.

Table S1. Elemental composition of NiCo₂O₄ nanocage by XPS (at %)

Sample	C	Ni	Co	O
NiCo ₂ O ₄ nanocage	26.6	7.36	15.32	50.72

Table S2. Comparison of OER activities for various transition-metal oxides.

Catalysts	η (mV) at $J = 10 \text{ mA cm}^{-2}$	Tafel slope (mV dec ⁻¹)	Refs.
NiCo ₂ O ₄ nanocage	340	75	In this study[a]
Mesoporous Co ₃ O ₄	409	-	S1
Octahedral LiMn _{1.5} Ni _{0.5} O ₄	460	70	S2
NiCo ₂ O ₄ nanoplatelet	530	205	S3
Mn ₃ O ₄ /CoSe ₂	450	49	S4
Zn _x Co _{3-x} O ₄ -1:2	380	63	S5
NiCo ₂ S ₄ sub-micron spheres	360	-	S6
NiCoO _x	380	-	S7
IrO _x	320	31	S7

[a] Here all the potential values from this study and the references were converted to vs. RHE for comparison.

References

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