

Unrevealing the multicomponent Metal ion incorporation and sulfide modification in cobalt oxide for efficient water Oxidation

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Table S1. Comparison of overpotential and Tafel slope values of the various reported cobalt based electrocatalysts for OER activity with the as-synthesized electrocatalysts.

Catalyst	Electrolyte	Overpotential (mV) at 10 mAcm ⁻²	Tafel Slope (mV dec ⁻¹)	Ref.
CdCoO	1 M KOH	208	81.98	Our Work
CdCoS	1 M KOH	199	63.45	Our Work
CdCoO@CuCoO	1 M KOH	215	83.05	Our Work
CdCoS@CuCoS	1 M KOH	208	69.91	Our Work
Co ₃ O ₄ -GC	1 M KOH	350	60.5	[1]
La _x Sr _{1-x} CoO _{3-δ} -GC	1 M KOH	250	NA	[2]
Co ₂ FeO ₄ -GC	1 M KOH	359	43	[3]
CoOOH-CC	1 M KOH	426	60	[4]
Zn _{0.2} Co _{0.8} OOH-GC	1 M KOH	235	35.7	[5]
LiCoO _{1.8} Cl _{0.2} -GC	1 M KOH	276.8	55.4	[6]
NiCo ₂ O ₄ -CP	1 M KOH	270	39	[7]
SrCoO _{3-δ} -GC	1 M KOH	417	66	[8]
FeCoSe ₂ -GC	1 M KOH	370	53.5	[9]
Fe ₃ Co(PO ₄) ₄ -GC	1 M KOH	237	57	[10]
CoAl ₂ O ₄ -GC	1 M KOH	290	70	[11]
Zn _{0.35} Co _{0.65} O-GC	1 M KOH	290	42.6	[12]
CoFe ₂ O ₄ -NF	1 M KOH	248	54.2	[13]
CaCoO ₃ -GC	1 M KOH	260	38	[14]
Co ₂ (OH) ₃ Cl-GC	1 M KOH	270	42	[15]
Co ₃ Sn ₂ S ₂ -CW	1 M KOH	300	74	[16]
γ-CoOOH-CC	1 M KOH	300	38	[17]
CoS-Co(OH) ₂ -NF	1 M KOH	380	68	[18]
GC = Glassy Carbon, NF = Nickel Foam, CC = Carbon Cloth, CW = Copper Wire, CP = Carbon Paper				

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