Electronic Supplementary Material (ESI) for Energy Advances.

SUPPORTING INFORMATION

Co-Prussian blue analogue supported on graphene-based material as electrocatalyst for oxygen evolution reaction under neutral pH

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Table S1. The positions of the D and G bands on Raman spectra of the graphene-based samples.

Sample	D band (cm^{-1})	G band (cm^{-1})
GO	1349	1600
r_GO	1346	1592
r_GO_N1	1348	1596
r_GO_N2	1348	1593
r_GO_N3	1348	1593

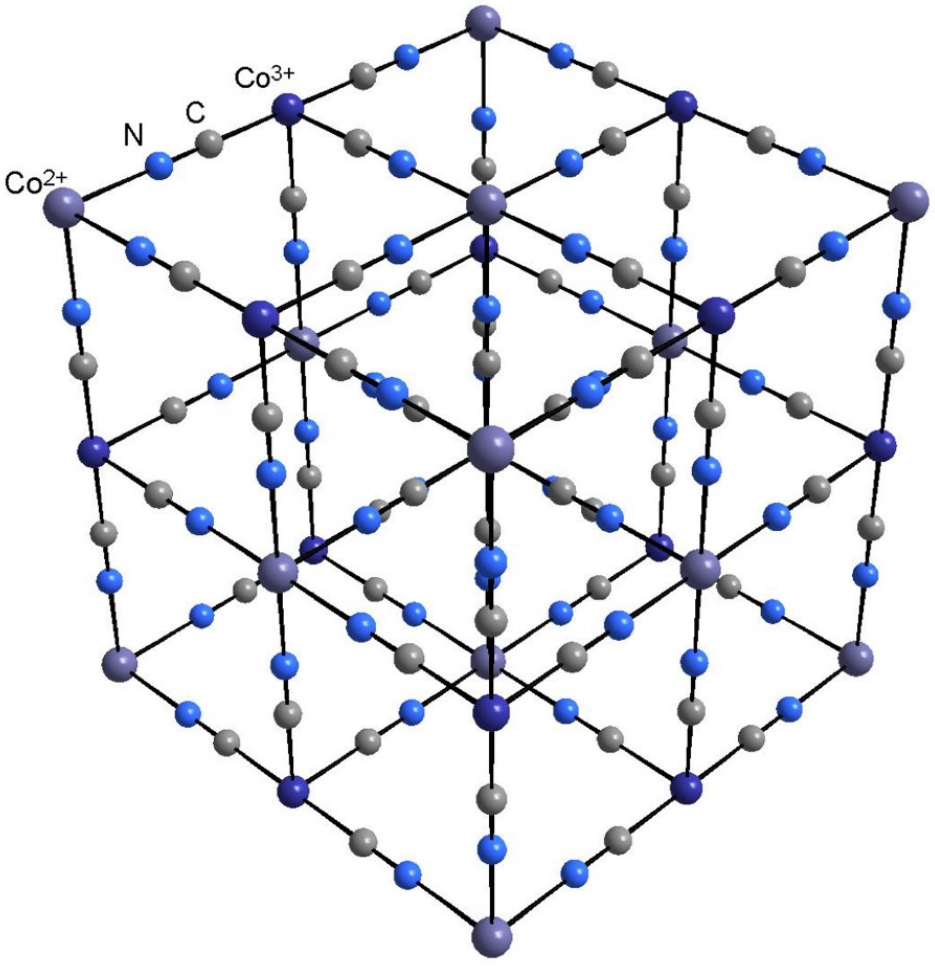

Figure S1. A schematic structure view of Co-PBA.

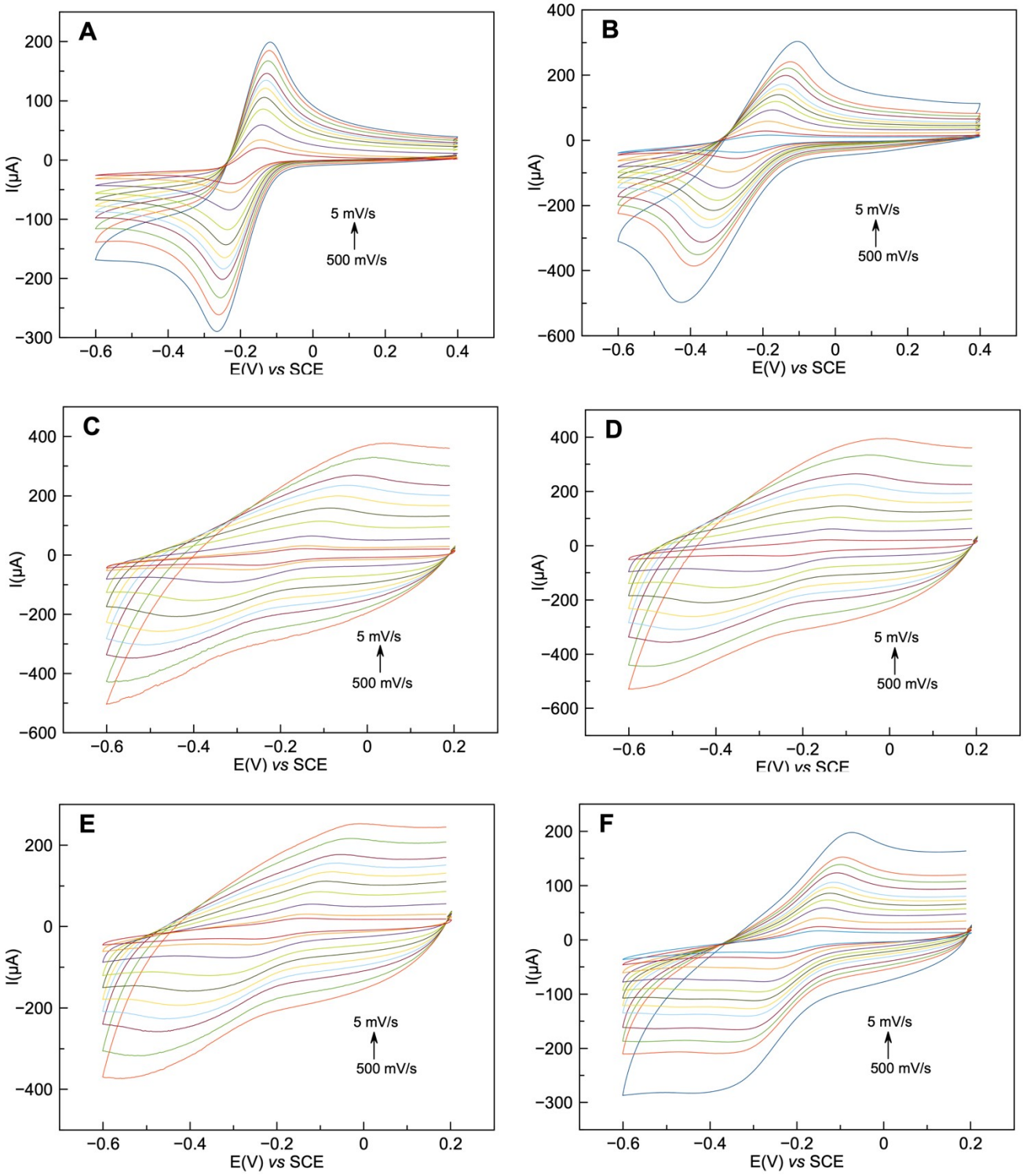

Figure S2. Cyclic voltammograms at different scan rates (500 to 5 $mV.s^{-1}$) to determine the electroactive surface area (ECSA) and heterogenous rate constant (k_{obs}) in a solution containing 5$mmol.L^{-1}$ $[Ru(NH_3)_6]^{3+}$ as redox probe and 0.1 $mol.L^{-1}$ KNO_3 as support electrolyte. (A) Co-PBA (B) GO, (C) r_GO, (D) r_GO N1, (E) r_GO N2 and (F) r_GO N3.

Table S2. Comparison of some electrocatalysts for OER under mild conditions

Electrocatalyst	Electrolyte	η J_{10} (mV)	Tafel slope (mV dec^{-1})	Ref
Co-PBA + r_GO N2	0.1 M KNO_3	926	180	This work
Co-Fe PBA	0.5 M KNO_3	970	151	1
Co-PBA	0.1 M Kpi	1141	155	2
Co_3O_4	0.1 M Kpi	931	138	2
$Ni(S_{0.5}Se_{0.5})_2$	1.0 M PBS	640	94	3
CoP	1.0 M PBS	536	85	4
Co_3O_4 + graphene	0.1 M PBS	498	98	5
S-$NiFe_2O_4$	1.0 PBS	494	118	6

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