

SUPPLEMENTARY INFORMATION

The Enhancement Mechanism of Co Oxyhydroxide groups Deposited on Pt Surface for Oxygen Reduction Reaction with Cathode in Fuel Cell

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Reference	Product	Ink				Amount of ink coating (ul)	Working electrode size (mm)	Electrolyte solution	Limiting current density (mA/cm ²)	Pt loading (ug/cm ²)
		Catalyst mass (mg)	Solvent volume	Water volume (ml)	Nafion (ul)					
1	PtPb/vxc-72	1	0	1	15	20	5	0.1M HClO ₄	5.6	15.3
2	PtNi/vxc-72	2	1ml methanol	0	none	10	3	0.1M HClO ₄	5.8	28
3	Pt ₃ Co/vxc-72	2	0.2ml Isopropyl alcohol	0.8	20	10	5	0.1M HClO ₄	6	20
4	L ₁ -PtCo/vxc-72	2	0.9ml Isopropyl alcohol	0	100	10	5	0.1M HClO ₄	5.8	20
5	Pt ₇₅ Co ₂₅	1	1ml ethanol	0	4	6	3	0.5M KOH	6	40
6	Pt ₇₈ Co ₂₂ NCs/rGO	1	none	1	4	3	3	0.5M KOH	6	20
8	PtCoNi/vxc-72	1	1ml ethanol	0	40	3	3	0.5M KOH	6	18
This work	Pt/vxc-72	2	0.5ml ethanol	0.5	20	3	3	0.1M KOH	5.6	16
This work	Pt-OCO ₂ H/vxc-72	2	0.5ml ethanol	0.5	20	3	3	0.1M KOH	5.6	14.4

Table S1 Summary of ink coating amount, catalyst amount and Pt loading amount.

