Technical Data Sheet

ACS Material Platinum-copper on Carbon Catalyst (PtCu/C)

Contact Information:

ACS Material, LLC.

Address: 959 E Walnut St., Suite 100,

Pasadena, CA 91106, USA

Phone: (866)-227-0656

Fax: (781)-518-0284

E-Mail: contact@acsmaterial.com

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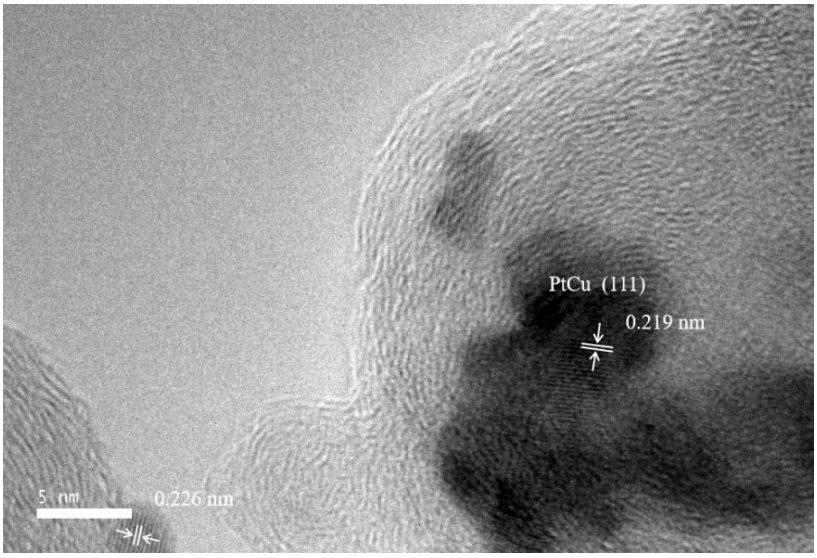
1. Preparation Method

Low-temperature wet reduction.

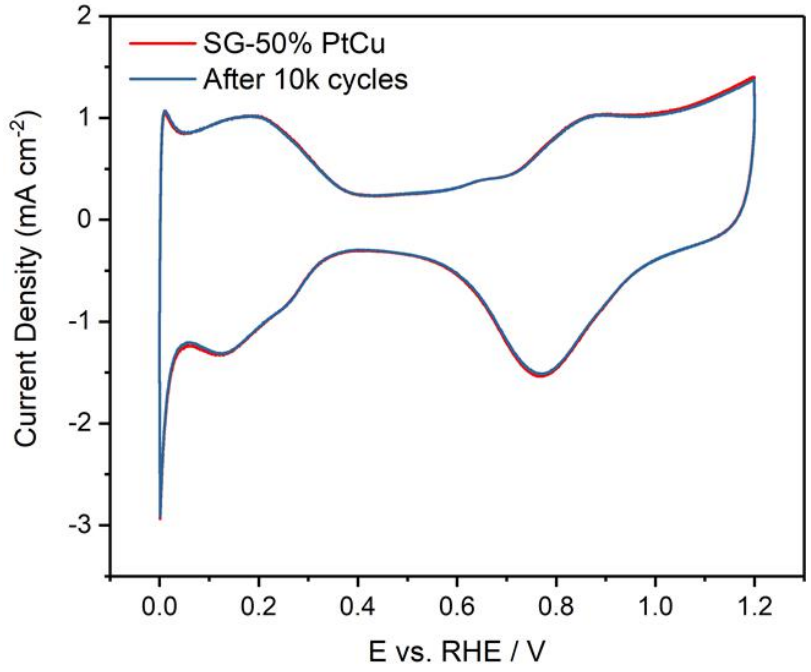
2. Characterizations

Products	40% PtCu/C	50% PtCu/C
Mass Ratio	40% Pt; 13% Cu; 47% C	50% Pt; 16% Cu; 34% C
Appearance	Black Powder	Black Powder
Catalyst support	High surface carbon	High surface carbon
Mass activity (A/mg)	0.25	0.435
ECSA (m2/g)	73.2	83
Catalyst durability in MEA	Cycles of 0.6-0.95V while voltage loss < 30 mV at 1.5 A/cm2 and ECSA loss < 40% (>30000 cycles)	
Particle size of load (nm)	4.0	4.4
Features	High active	High active

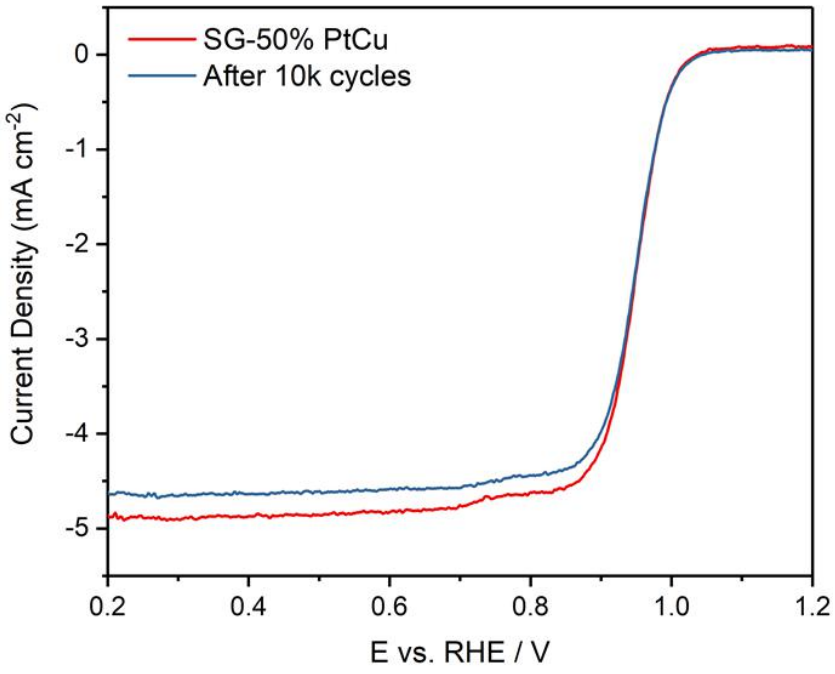
This product may contain 1% impurities whose main components are Cl and B.



Typical TEM Image of ACS Material 50% PtCu/C



Electrochemical Performance Image of ACS Material 50% PtCu/C (1)



Electrochemical Performance Image of ACS Material 50% PtCu/C (2)

2. Applications

1) Fuel cell
2) Chemical reaction with oxygen
3) Organic Synthesis

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