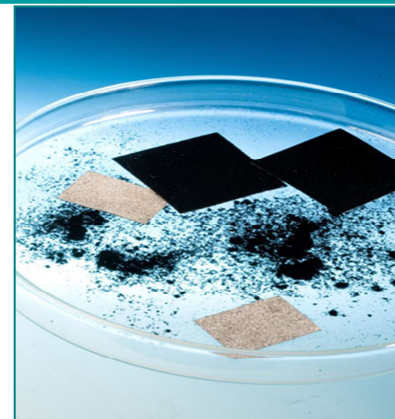


4020

A CATALYST

noble metal free carbon based cathode catalyst for use in hydrogen alkaline membrane fuel cells.



Composition

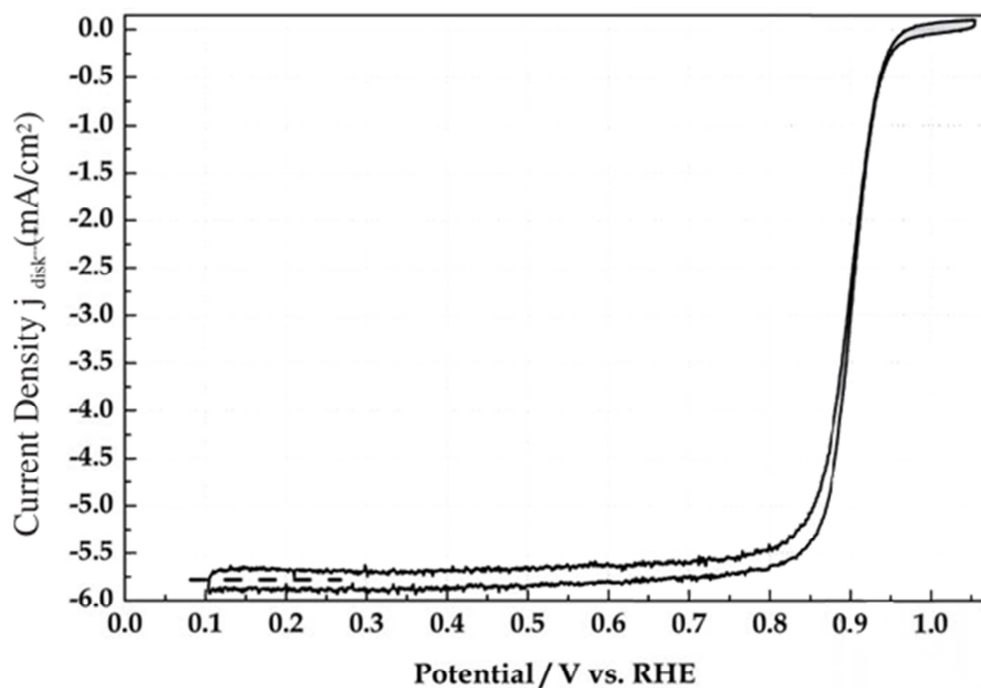
Standard composition: Approx. 3.5 wt. % transition metal on carbon support
Standard form: Fine powder

Physical properties

Performance in Fuel Cell
BET surface area: 690 m² g⁻¹
Pore volume: 1.6 cm³ g⁻¹

Catalyst activity

A typical RDE cyclic voltammogram for 4020 catalyst is shown here, demonstrating performance as an oxygen reduction catalyst (fuel cell cathode).



RDE experimental conditions

Electrolyte: 0.1 M KOH, O₂ saturated
Reference Electrode: Ag/AgCl (in saturated KCl)
Electrode prepared by deposition of catalyst ink on glassy carbon (area 0.196cm²)
Scan Rate: 5 mV/s
Rotation Rate: 1600 rpm
Temperature: 25°C

Acta S.p.A.

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