

The study on carbon nanotubes-supported Pt catalysts for PEMFC

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Abstract: Carbon nanotube-supported-platinum (Pt/CNTs) and carbon-supported-platinum (Pt/C) catalysts were prepared by in situ chemical reduction method and analyzed by TEM and XRD. Then the experiments were carried out to test the performance of PEMFCs with the Pt electrodes. The results showed that in both catalyst, Pt was of small particle size (about 4 nm) and Pt/CNTs exhibited higher catalytic activity than Pt/C.

Key words: carbon nanotubes; platinum; proton exchange membrane fuel cells

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