

Electrospun Pt nanowire as electrocatalyst for direct methanol fuel cell

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Electrospinning has studied widely by a lot of researchers as one of the potential methods to make variable 1-D nanostructures of polymer, metal oxide and metal such as PAN, PVP, TiO₂, SnO₂, Co, and Ni. The 1-D metal nanowires of them have attracted due to their expectable electrocatalytic properties in direct methanol fuel cell.

In this work, pure platinum nanowires with diameter of ca. 40nm were fabricated by electrosinning method. Nanosturcture & morphology of electrpun nanowires were investigated by SEM, TEM, and XRD. To confirm electrocatalytic activity, We conducted Cyclic Voltametry(CV) test using Auto-lab potentiaostat/Galvanostat.