

Development of DMFC anode substrate using pulse electroplating technique

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Micro DMFC has been fabricated on PCB substrate by electroplating of Au to enhance several beneficial properties. Fuel cell system based on PCB has design flexibility, facile device integration, light weight and low cost fabrication. However the corrosion of Cu current collector occurs on the anodic side of the fuel cell. Corrosion can cause some severe problems such as a performance degradation and cell stability. In order to avoid the destruction of the copper layer, Au should be adopted on the Au layer. In this study, the effect of electroplating method for anodic current collector in micro DMFC is investigated.