

Developing The Most Suitable Polymer Electrolyte Membrane Fuel Cell With Controlling Nanostructure Three Phase Interface

김민석, 박중혁*
성균관대학교
(lutts@skku.edu*)

There have been numerous studies of polymer electrolyte membrane fuel cell. In this study, the electrochemical properties such as A.C. Impedance and powerdensity(mW/cm²) of the fuel cell using carbon black as diffusion layer were investigated for the first time. And the fuel cell using inverse opal structure as diffusion layer was investigated, too. The A.C. Impedance of the fuel cell using inverse opal structure as diffusion layer was more smaller than that of the fuel cell using carbon black as diffusion layer. The powerdensity of the fuel cell using inverse opal structure as diffusion layer was more higher than that of the fuel cell using carbon black as diffusion layer.