

Synthesis and characterization of PBI composite membranes for high temperature PEMFC

서광원, 한학수*
연세대학교
(hshan@yonsei.ac.kr*)

Nafion® for proton exchange membrane fuel cell(PEMFC) is widely used for few years because of its properties. However, there are still many problems to be solved because it can be operated at low temperature, around 80°C. To solve these problems, PEMFC that can be operated at temperature above 150°C have been researched. In this work, PBI membrane was synthesized with introducing inorganic material. To obtain the membrane electrode assembly (MEA), membrane and electrode which is gas diffusion layer (GDL) sprayed with Pt/C as catalyst were attached, and then pressed at high temperature and pressure.