EFFECT OF ACID AND ALKALI TREATMENT ON FILLER Al_2O_3

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Nur Asheila Nadirah Jamaluddin

ABSTRACT

EFFECT OF ACID AND ALKALI TREATMENT ON FILLER Al_2O_3

The addition of nanoparticles filler have been developed in polymer electrolytes and yield the composite polymer electrolytes. The conductivity of composite polymer electrolytes is better compared to solid and gel polymer electrolytes. The increasing of ionic conductivity with the addition of PEO and nano fillers have been explained due to the dissociation of ion aggregates and decreasing of polymeric crystalline. However, the results of filler addition in the samples are always inhomogeneous. So, the modification of filler surface should be done to overcome the problems by using acid base treatment. The concentration of H^+ and OH^- in the Al_2O_3 could be determined by the amount of titration volume and the formulae calculation.

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