

A route to fabricate commercially viable anodic aluminum oxide membranes: the detailed process

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The present authors invented a way to fabricate commercially viable anodic aluminum oxide (AAO) membranes more than a year ago, which anodize very cheap aluminum cooking foils until their bottom surfaces are anodized and thus through-hole pores are developed throughout the foil thickness. In this presentation, the role of etching process following the anodization process will be discussed. Also the origin of pore occurrence along stripes and a way for the pores to be able to be uniformly dispersed will be presented.

Finally the water permeability and rejection in molecular weight cut-off test of AAO composite membranes will be presented, which were fabricated using the proposed way to fabricate commercially viable anodic aluminum oxide membranes.