A study for pattern optimization of anodic aluminum oxide composite membranes prepared using lithography technique

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The present authors presented a way to fabricate anodic aluminum oxide (AAO) composite membranes using lithography technique in last ECS meeting. The composite membranes showed high water permeability's up to 1,800 L/(m²·h·bar), but the maximum pressure for breaking the membranes was very low, at best 4 bar.

So the membranes pattern has been modified to enhance the maximum breaking pressure. The result of such attempt will be presented in the present presentation.