



Fig. 1: Pore radius of the γ -alumina membranes modified using temporal ALD, determined with permoporometry (PPM, plotted as a function of number of ALD cycles. a) Results for t-ALD (settings: $T_{\text{growth}}=250$ °C, precursor times: 0.1 s TiCl_4 & 0.1 s H_2O , N_2 purge: 4 s / 50 s) and b) for s-ALD (settings: $T = 130$ °C, rotation frequency 20 rpm, $P_{\text{TiCl}_4} = 0.3$ mbar, $P_{\text{H}_2\text{O}} = 0.4$ mbar).