Electronic Supplementary Material (ESI) for RSC Advances.

Protein adsorption by high-capacity cation-exchange membrane prepared via atom transfer radical polymerization

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Supporting materials

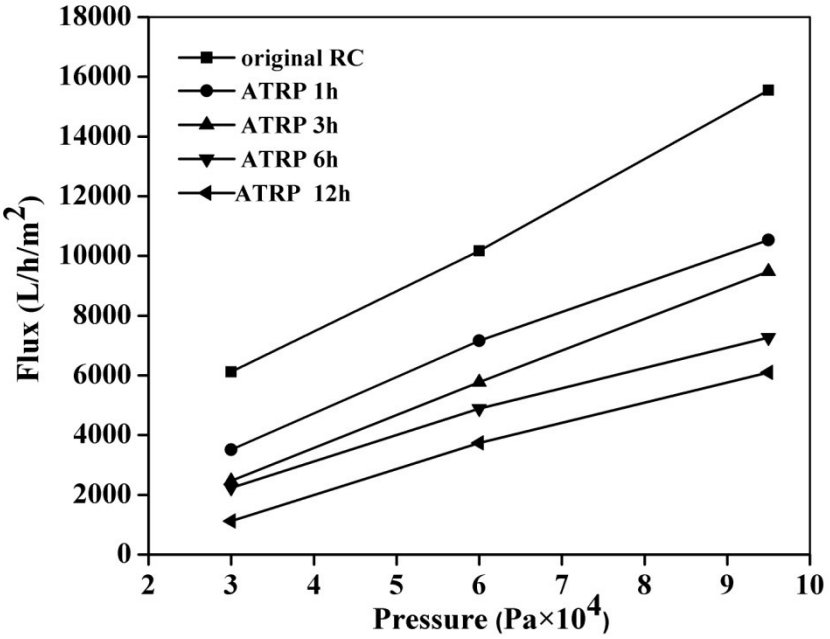

Fig.S1 Permeability of membrane with different graft time

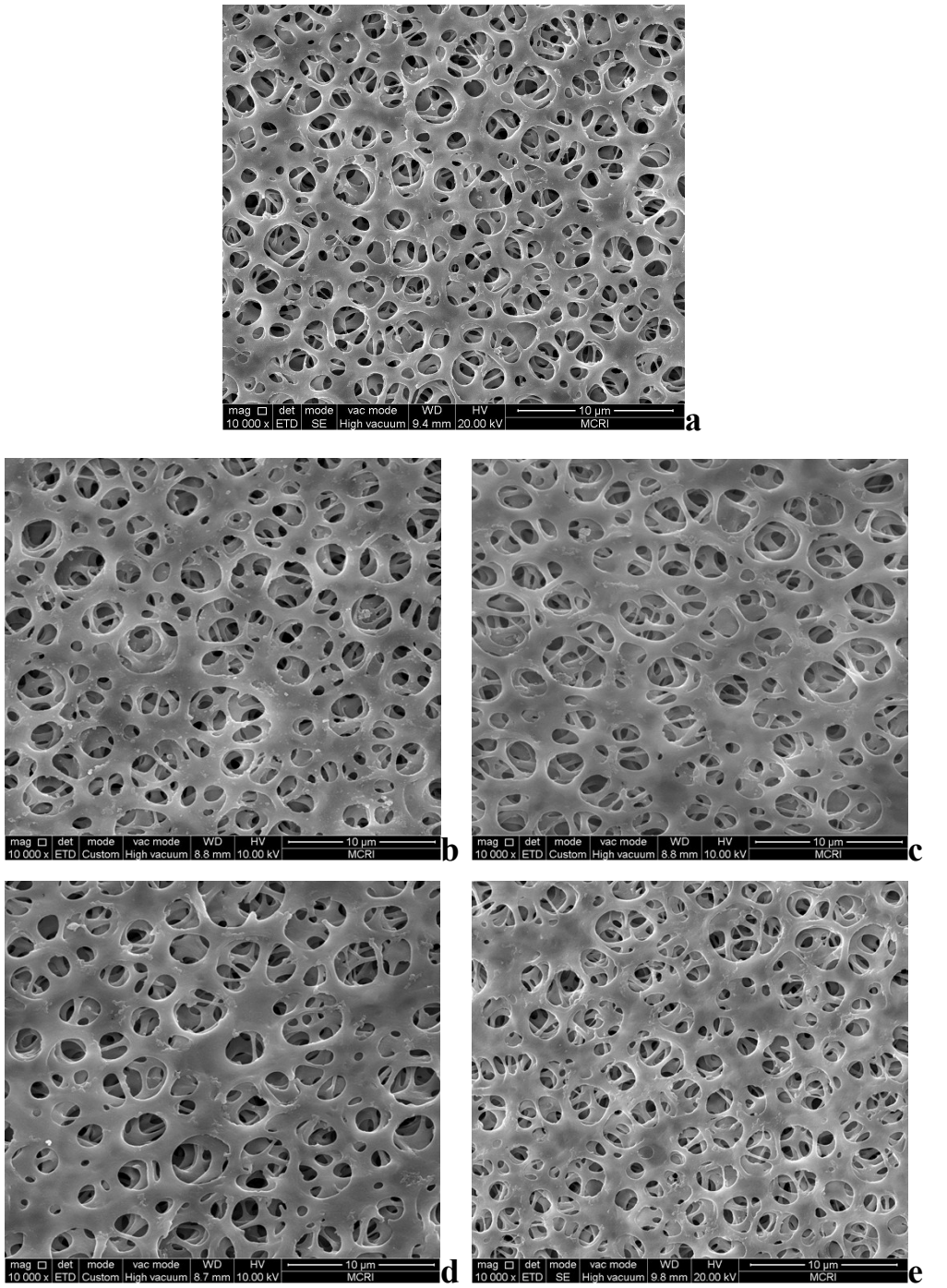

Fig.S2 SEM images of original RC membrane (a), b~e: RC/P-COOH membranes at ATRP time of 1 h (b), 3 h (c), 6 h (d), 12 h (e)

Table S1 Fitted parameters for Langmuir equation from the adsorption isotherms

ATRP	Equation parameters			
time (h)	Q_m (mg mL^{-1})	K_L[a](mL mg^{-1})	Linear equation	R^2
1	23.3	1.72	C_e/Q=0.043C_e+0.025	0.990
3	55.6	1.64	C_e/Q=0.018C_e+0.011	0.988
6	100.0	1.43	C_e/Q=0.010C_e+0.007	0.980
12	125.0	1.33	C_e/Q=0.008C_e+0.006	0.981

a) K_L is the equilibrium constant