Electronic Supplementary Material (ESI) for RSC Advances

Electronic Supplementary Information

Poly(vinylidene fluoride)-*graft*-Poly(dopamine acrylamide) Copolymer For Surface Functionalizable Membranes

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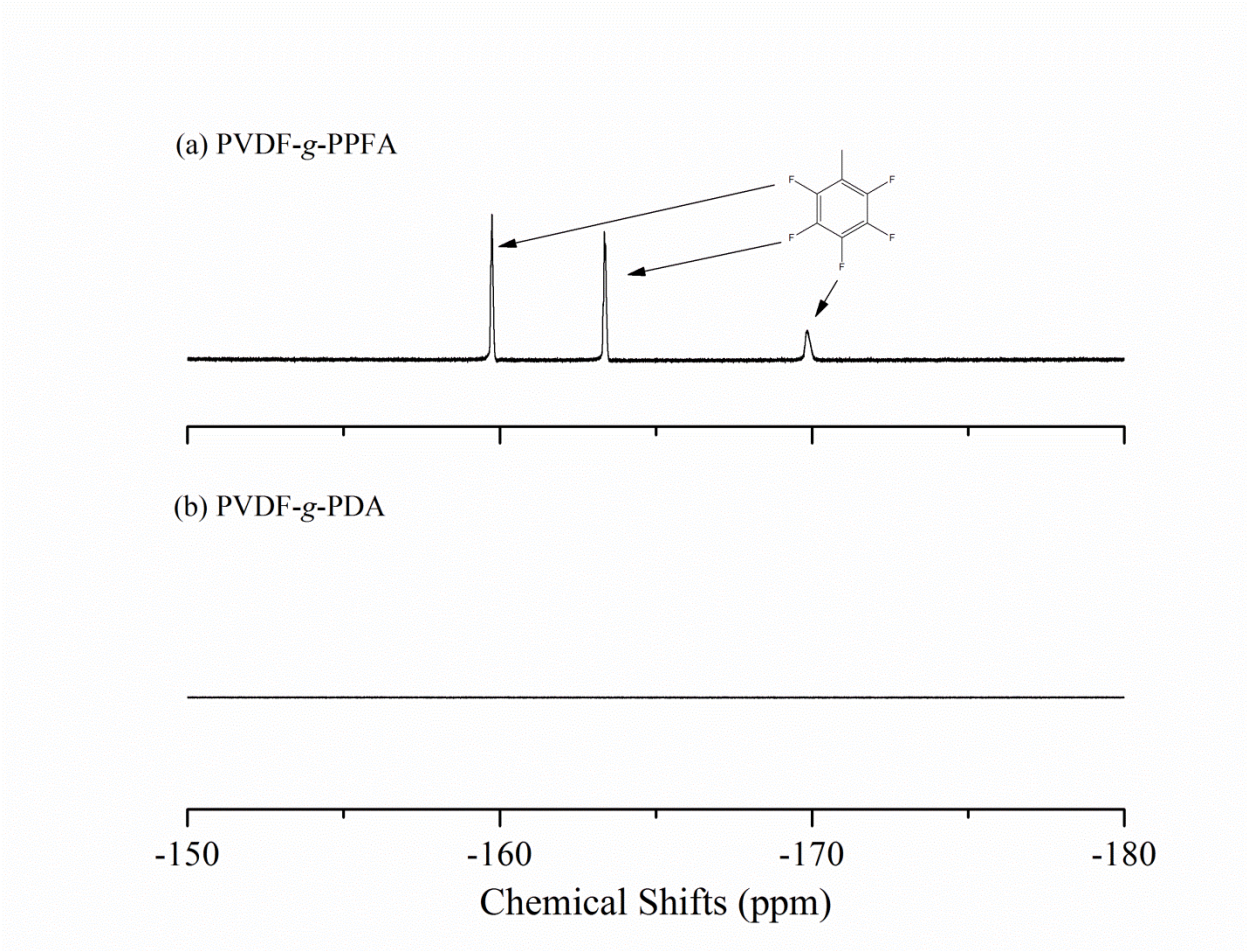

Figure S1: ^{19}F NMR spectra of (a) PVDF-*g*-PPFA and (b) PVDF-*g*-PDA copolymers.

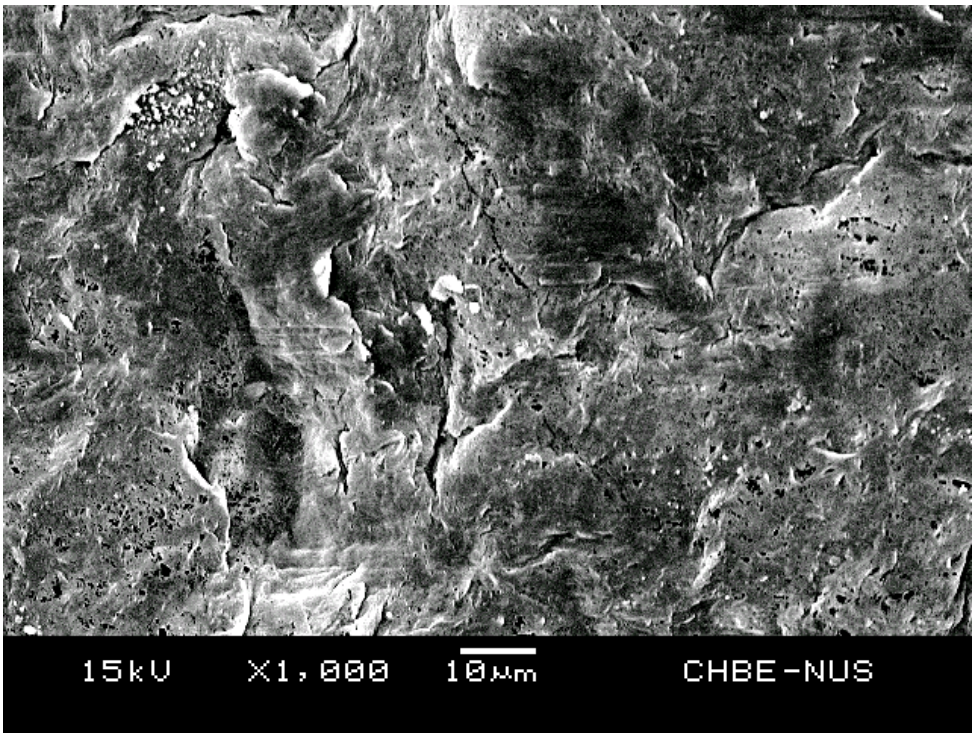

Figure S2: SEM image of the pristine PVDF membrane.

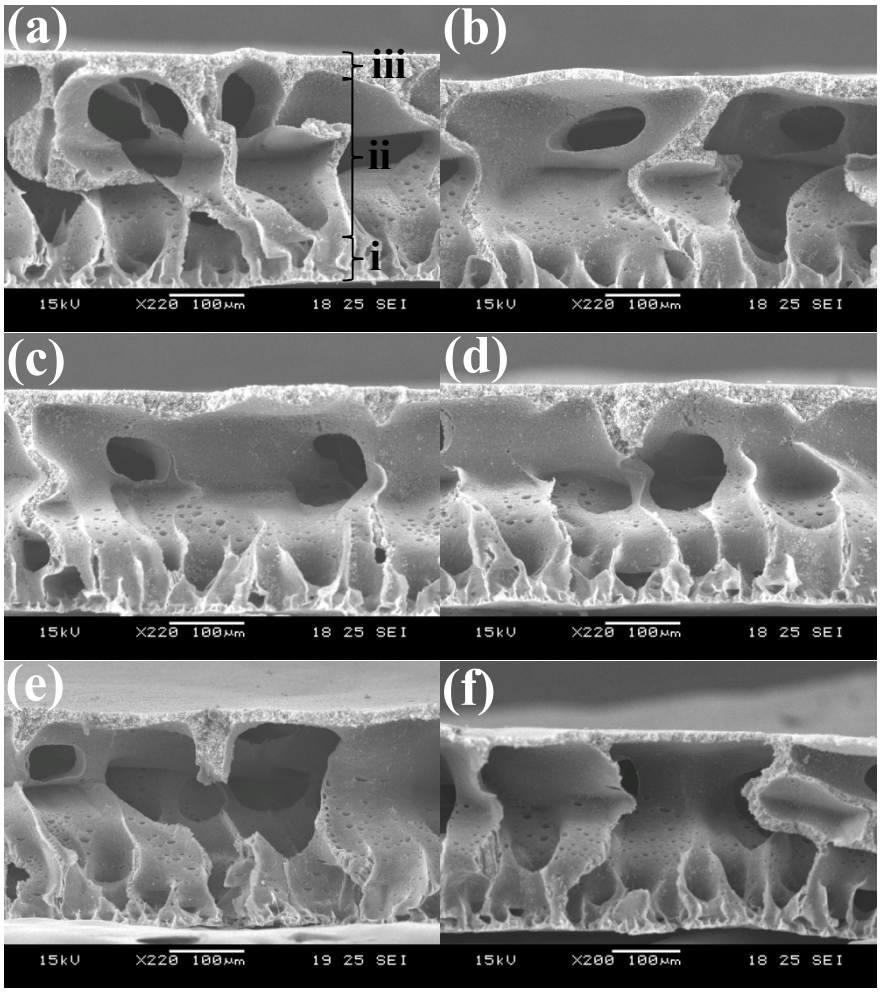

Fig. S3. SEM images of the cross-section of the (a) PVDF-*g*-PDA, (b) PVDF-*g*-PDA/AgNPs, (c) PVDF-*g*-PDA/AuNPs, (d) PVDF-*g*-PDA/PEG, (e) PVDF-*g*-PDA/PNIPAM and (f) PVDF-*g*-PDA/HPG MF membranes.

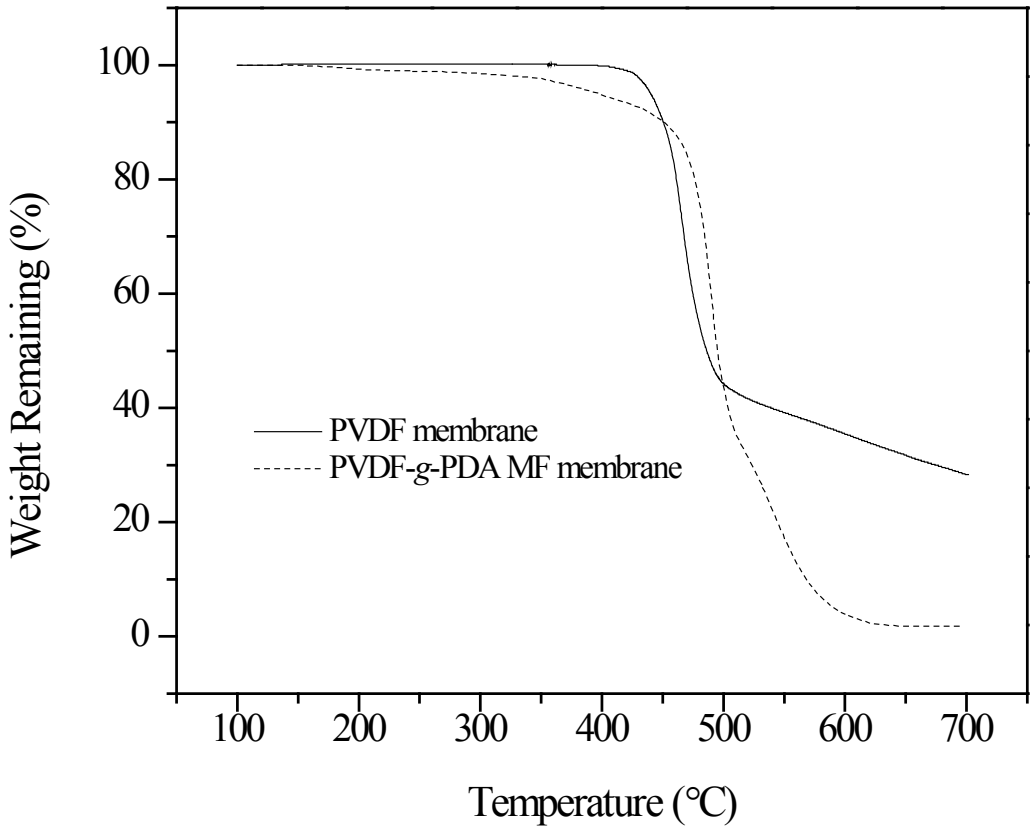

Fig. S4. Thermogravimetric analysis (TGA) curves of the (a) PVDF and (b) PVDF-g-PDA MF membranes at a heating rate of 15 ^{o}C/min in air.

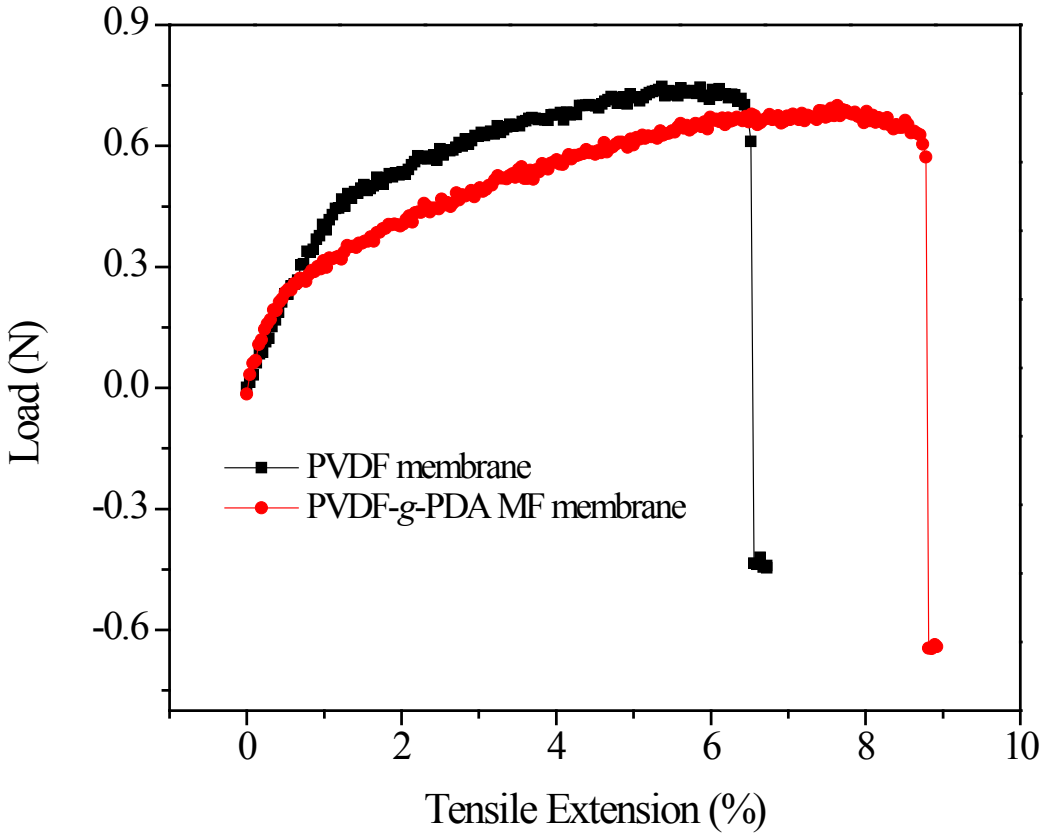

Fig. S5. Stress-strain relationship for the PVDF and PVDF-g-PDA MF membranes.

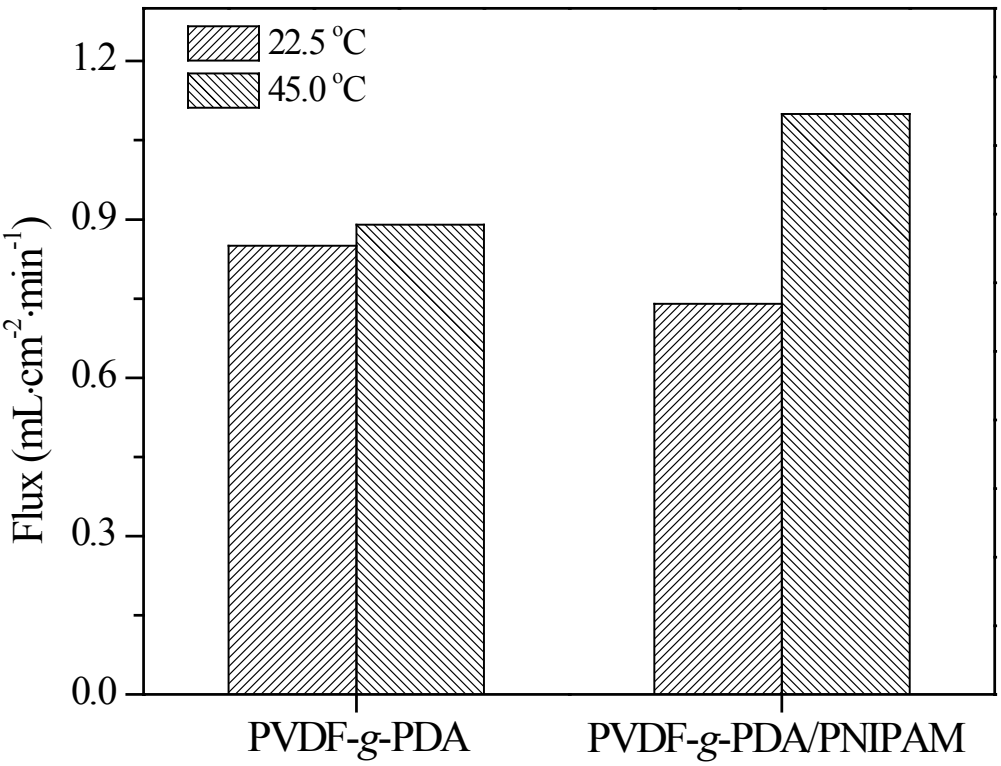

Fig. S6. Temperature-dependent water permeability through the PVDF-*g*-PDA and PVDF-*g*-PDA/PNIPAM MF membranes under an imposed pressure of 0.1 kg/cm^2 in a microfiltration cell (Toyo Roshi UHP-25 Japan).

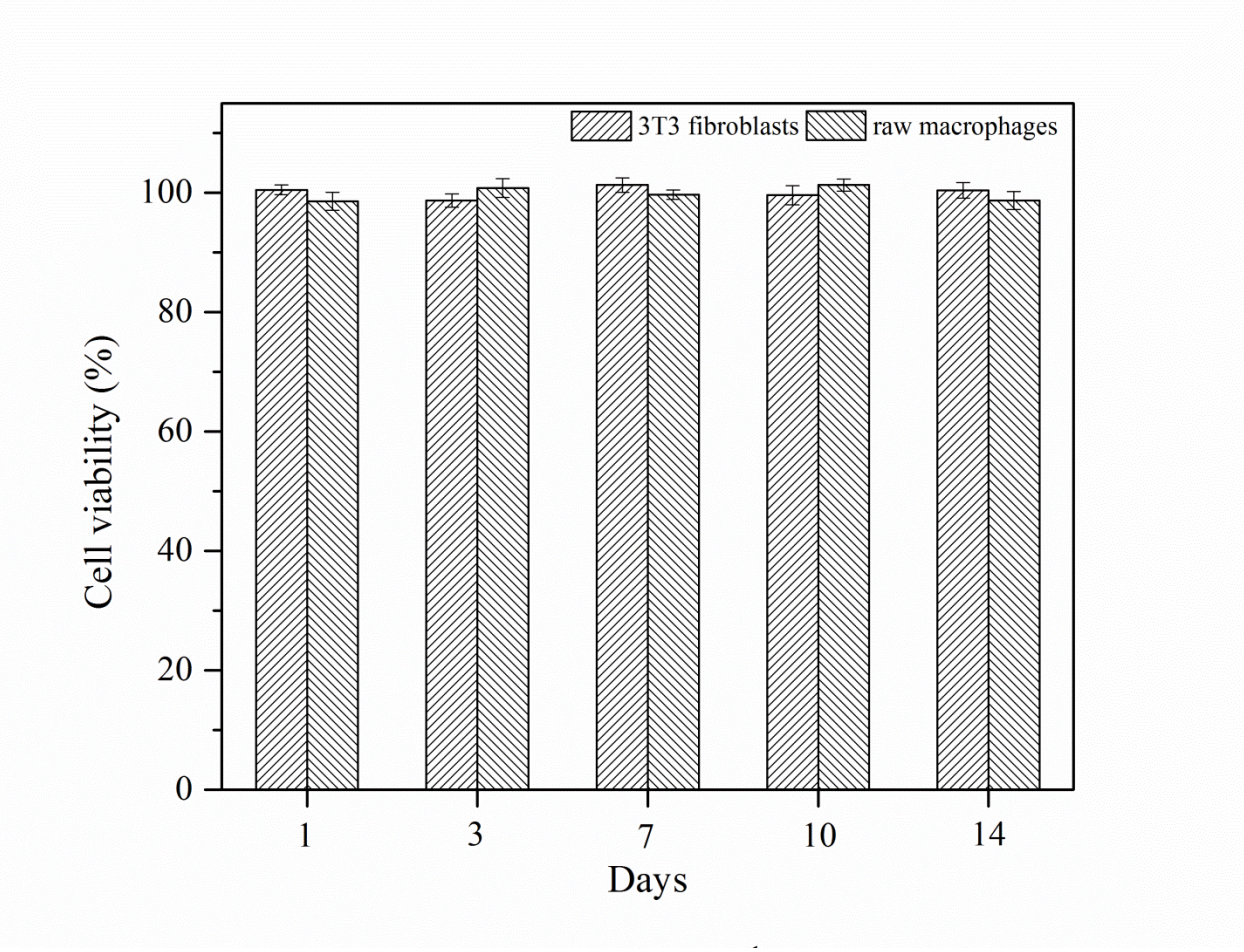

Figure S7. Relative cell viability of 3T3 fibroblasts and raw macrophages after 72 h of culturing in DMEM medium pretreated with the PVDF-*g*-PDA MF membrane for 1, 3, 7, 10 and 14 days