

A stimuli-responsive gradient-structured membrane for dual controlled release of bioactive agents: application to chronic wound dressings

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Figure S1: Impact of the concentration of PVA in pure water (●) and in an aqueous solution of 4 % w/w PAA (◆)

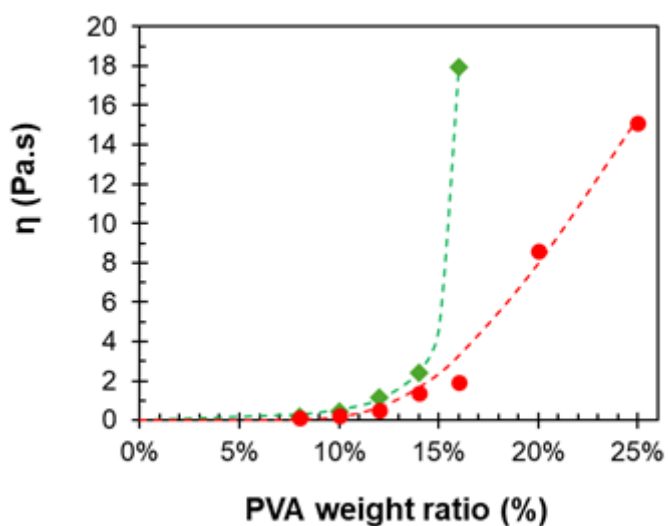


Figure S2: Microscopy pictures of PVA 14% and PVA14%-EtOH6%

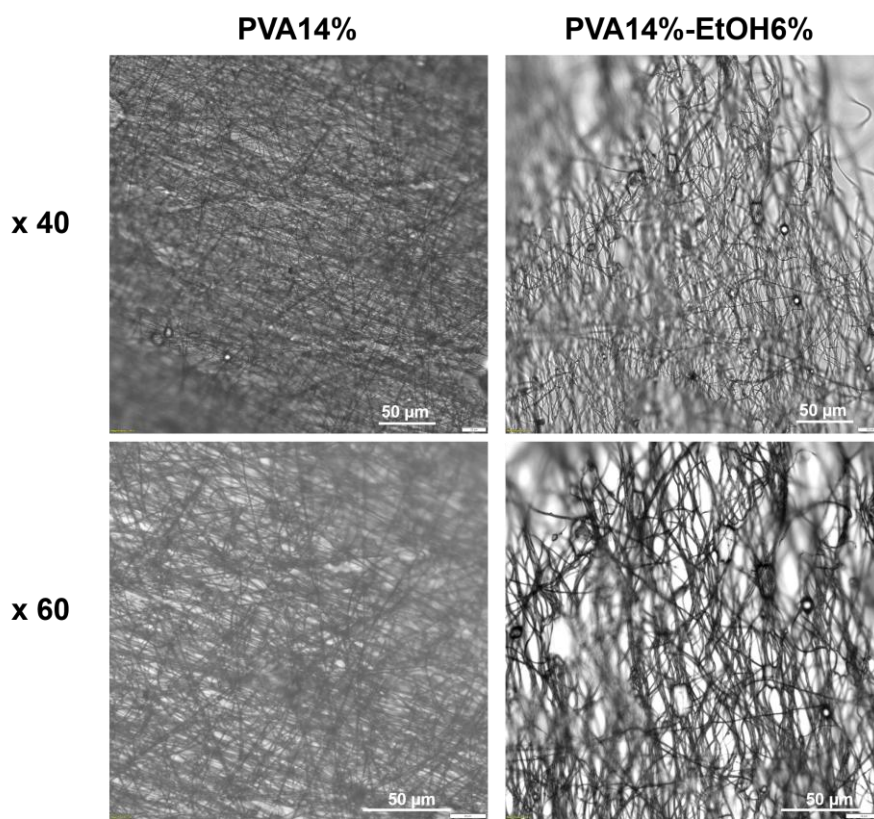


Figure S3: microscopy pictures of PVA8%-PAA4%, PVA8%-PAA4%-EtOH6% and PVA8%-PAA4%-EtOH6% after heat treatment

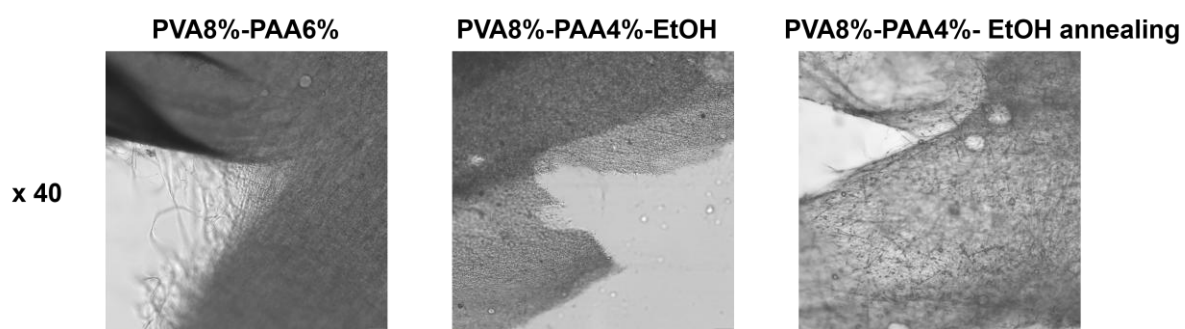


Figure S4: Pictures of PVA and heat treated PVA (PVAT) after immersion in water for 24 hours

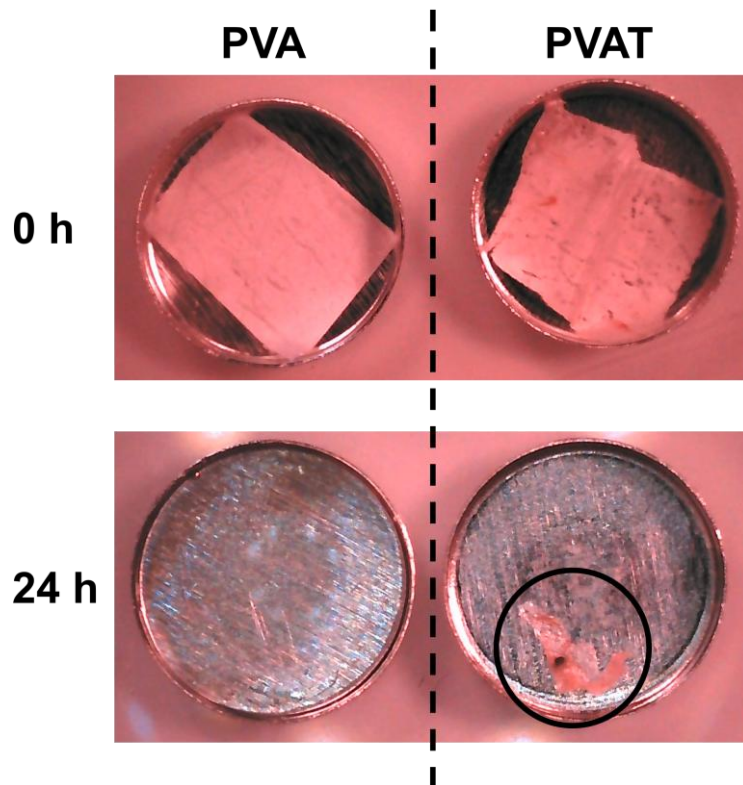


Figure S5: Water sorption measurements on PVAT and PVAT-PBA samples

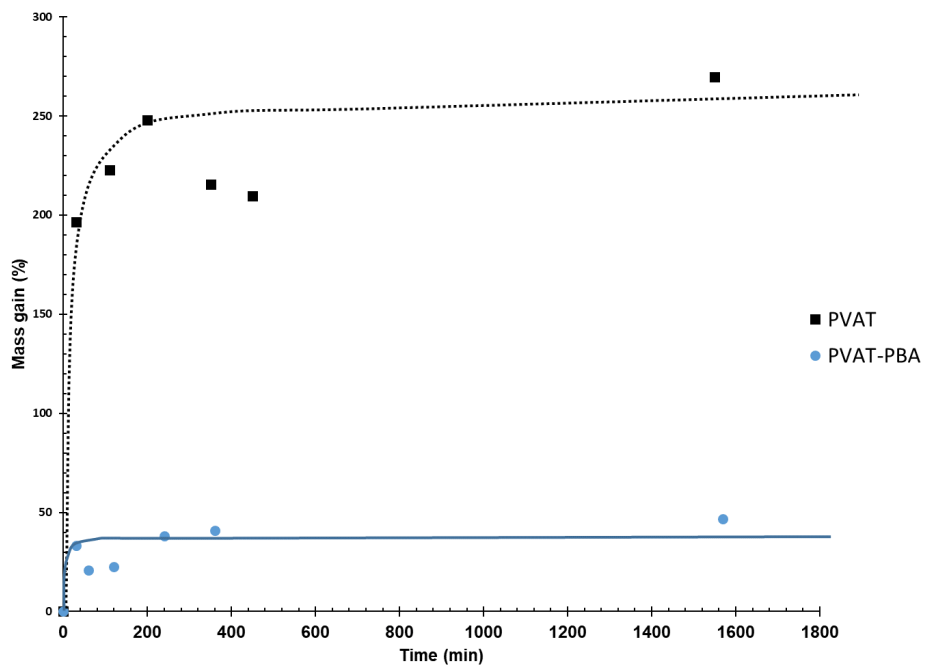


Figure S6: A) Thermal gravimetric analysis and B) DSC measurements of the different fibers

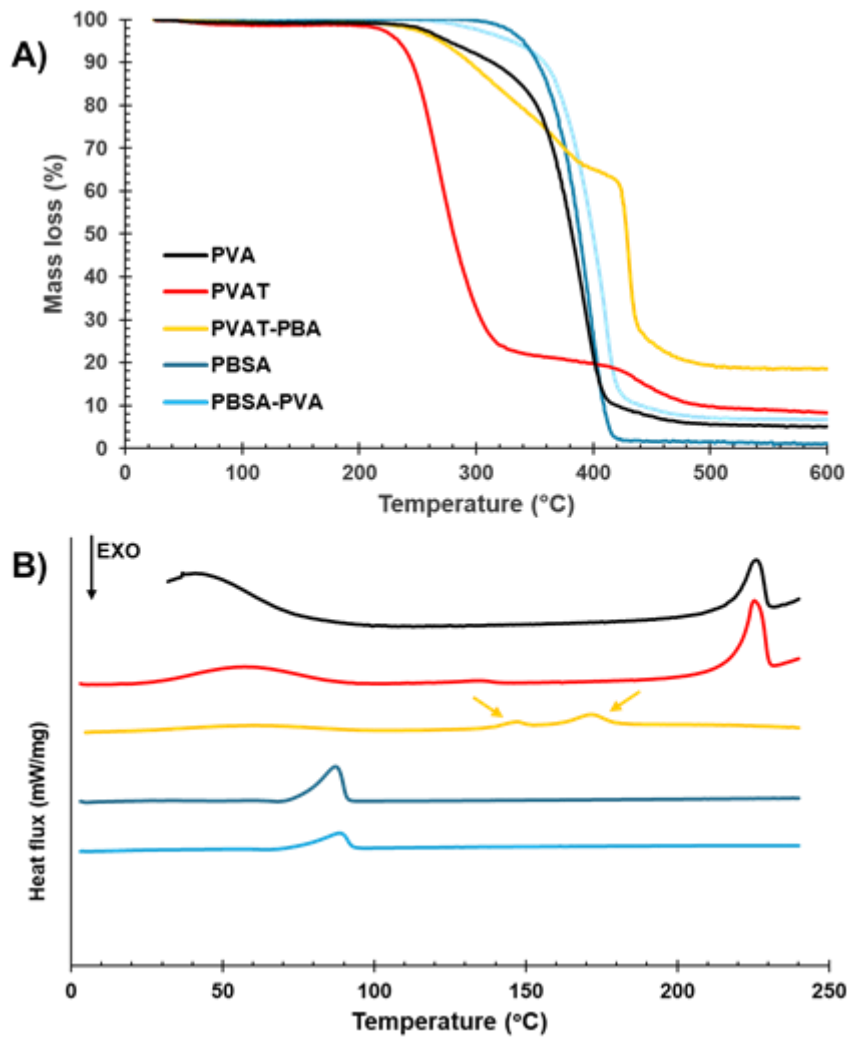


Figure S7: Degradation profile of PVA fibers expressed as the mass loss (%) versus time at 120 °C

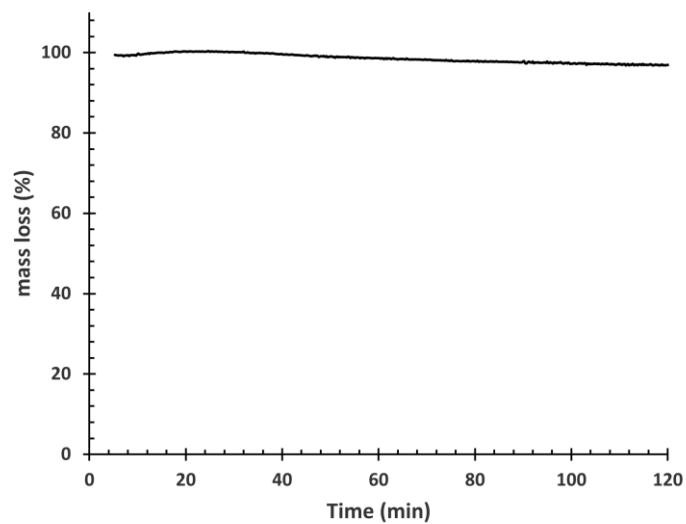


Figure S8: Degradation profile expressed as mass loss of PVA after curing 2 hours at 120 °C in the oven (plain line) and after curing 2 hours at 120 °C in the TGA (dash line)

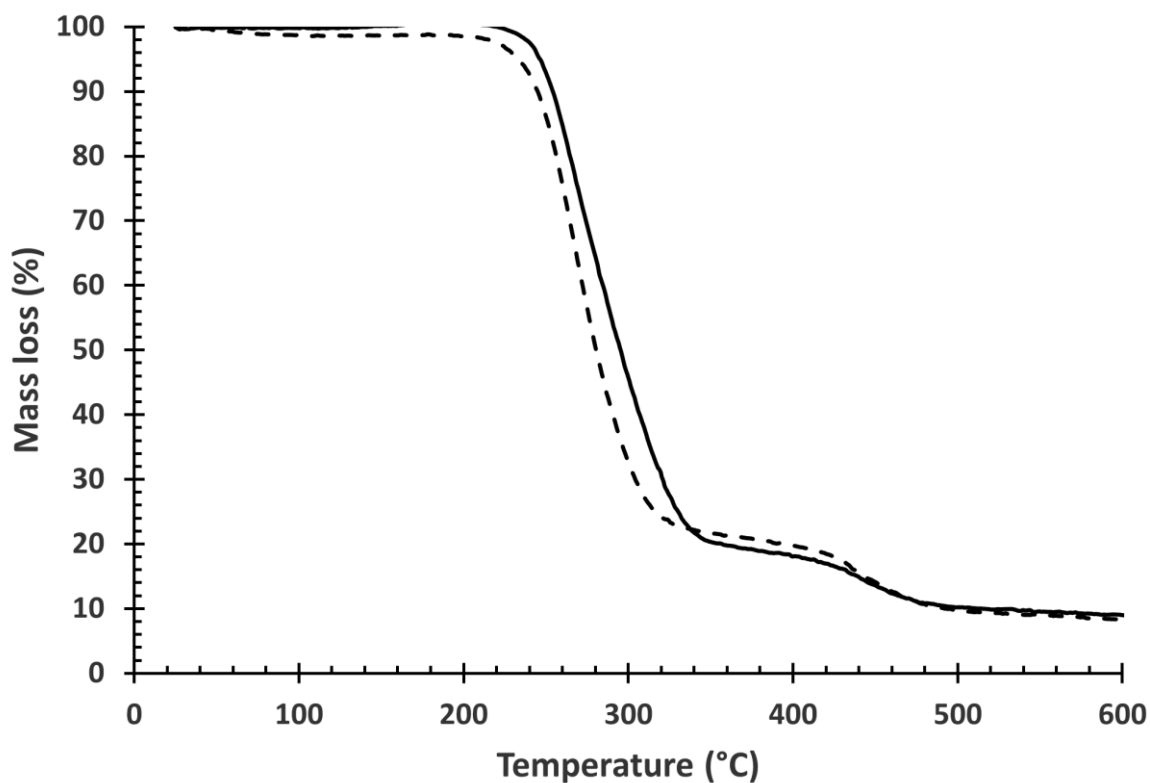


Figure S9: IR spectra of PBA, PVAT and PVAT-PBA

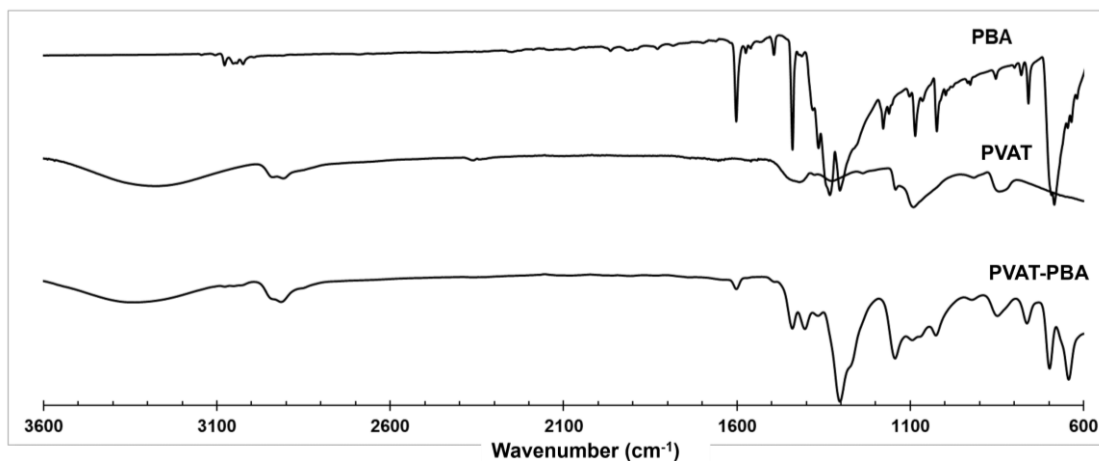


Figure S10: MEB pictures at 3000 magnifications of PVAT complexed with PBA shows area with A) high concentration of PBA and area with B) low concentration of PBA.

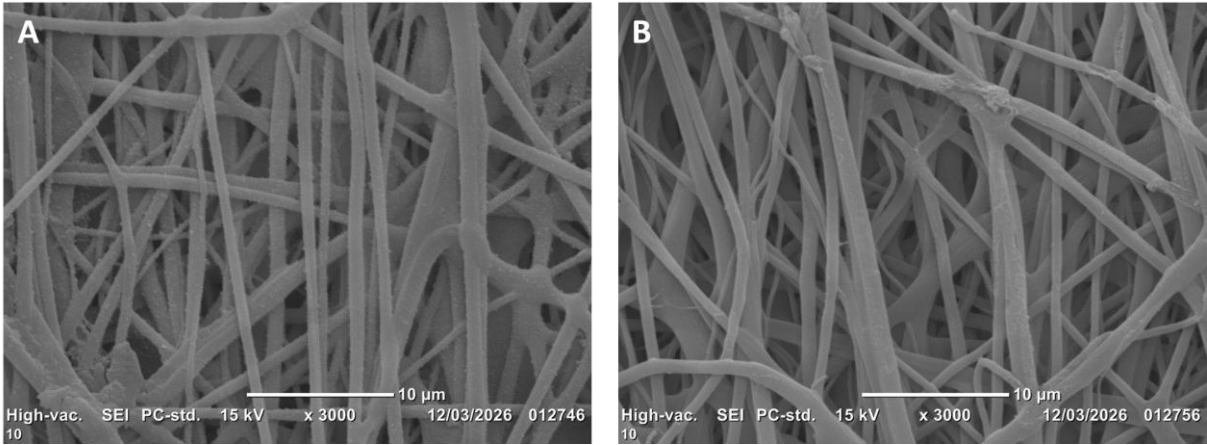


Figure S11: dynamic vapor measurements for PVAT, PVAT-PBA, PBSA and DCAM samples at 95 % humidity rate and at 25°C.

