Electronic Supplementary Information

Thermally stabilised poly(vinyl alcohol) nanofibrous materials produced by scalable electrospinning: Applications in tissue engineering

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Table S1. Summary of peaks commonly associated with FT-IR spectrum of PVA [1-3].

Peak absorption (cm^{-1})	**Group**
3000-3500	O-H stretching
2900-2950	C-H stretching
1710-1750	C=O stretching
1600-1650	C=C stretching
1410	C-H vibration
1330	C-O vibration
1140	C-O stretching
1096	O-H bending

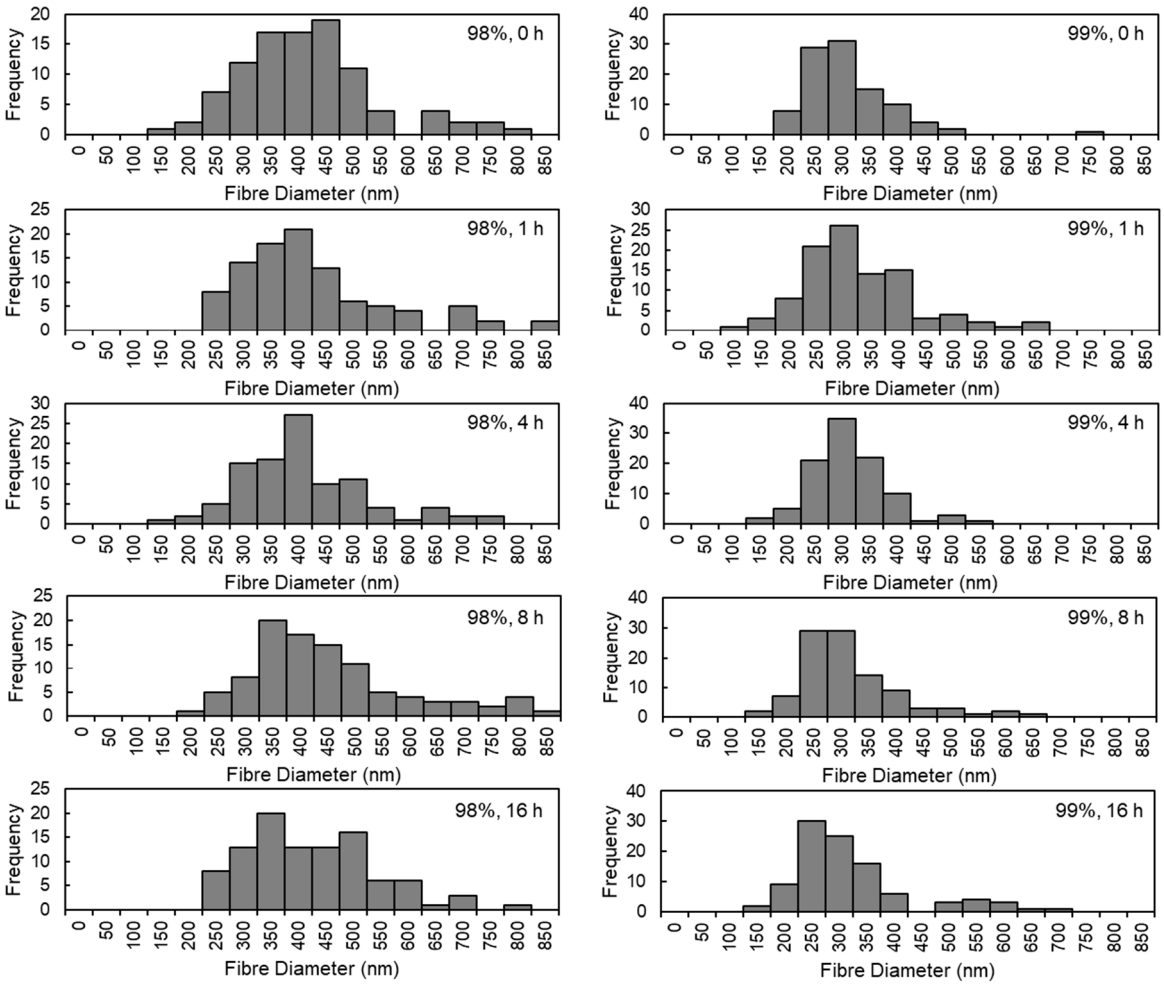


Figure S1. Histograms of fibre diameters of electrospun PVA samples produced by DC Needleless electrospinning, following 0-16 h heat treatment duration at 180 °C.

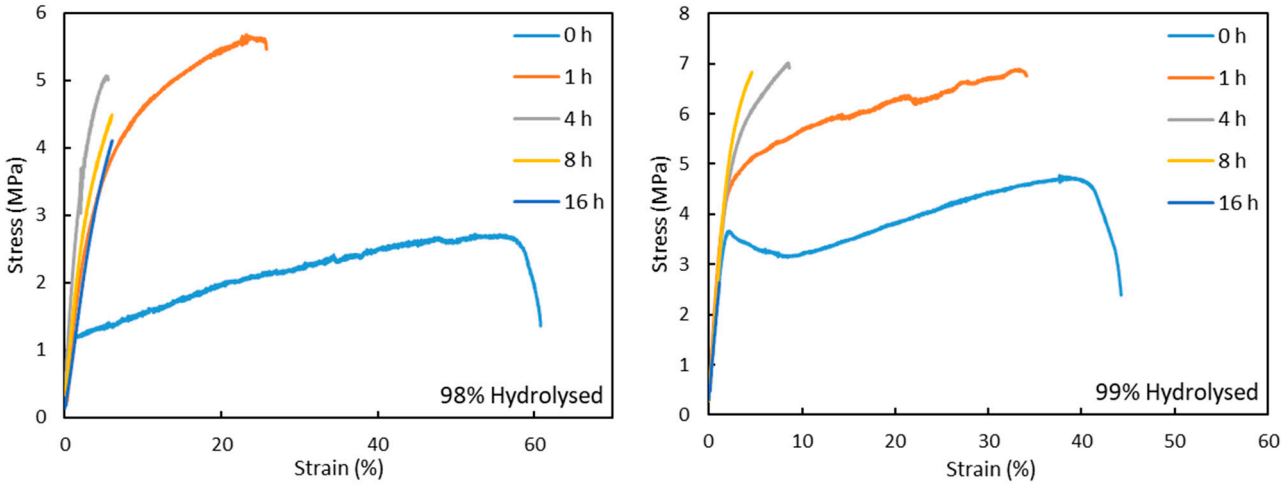


Figure S2. Stress-strain curves of electrospun PVA samples produced by DC Needleless electrospinning, following 0-16 h heat treatment duration at 180 °C.

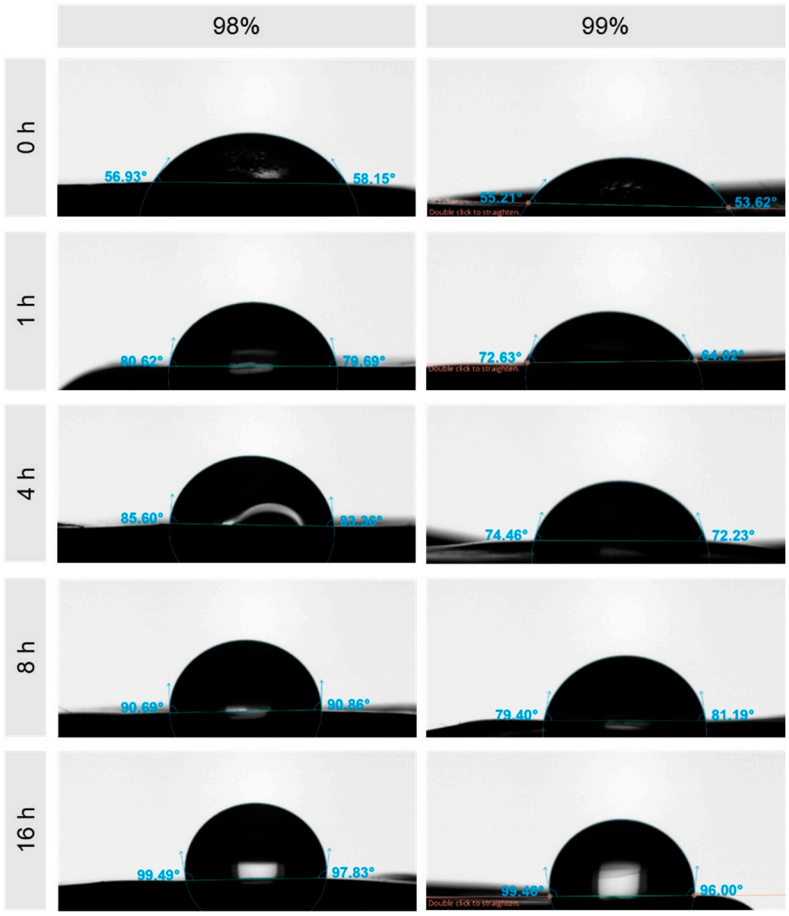


Figure S3. Representative images from sessile drop contact angle testing of films produced from 98% and 99% hydrolysed PVA films after thermal stabilisation.

References

1. Tretinnikov, O.N. and S.A. Zagorskaya, *Determination of the degree of crystallinity of poly(vinyl alcohol) by FT-IR spectroscopy.* Journal of Applied Spectroscopy, 2012. **79**(4): p. 521-526.
2. Alhosseini, S.N., et al., *Synthesis and characterization of electrospun polyvinyl alcohol nanofibrous scaffolds modified by blending with chitosan for neural tissue engineering.* International Journal of Nanomedicine, 2012. **7**: p. 25-34.
3. Jipa, I.M., et al., *Effect of gamma irradiation on biopolymer composite films of poly(vinyl alcohol) and bacterial cellulose.* Nuclear Instruments & Methods in Physics Research Section B-Beam Interactions with Materials and Atoms, 2012. **278**: p. 82-87.