

Supporting Information

***In situ* automatic deposition of PLGA/PLLA composite
nanofibrous membranes for personalized wound dressing**

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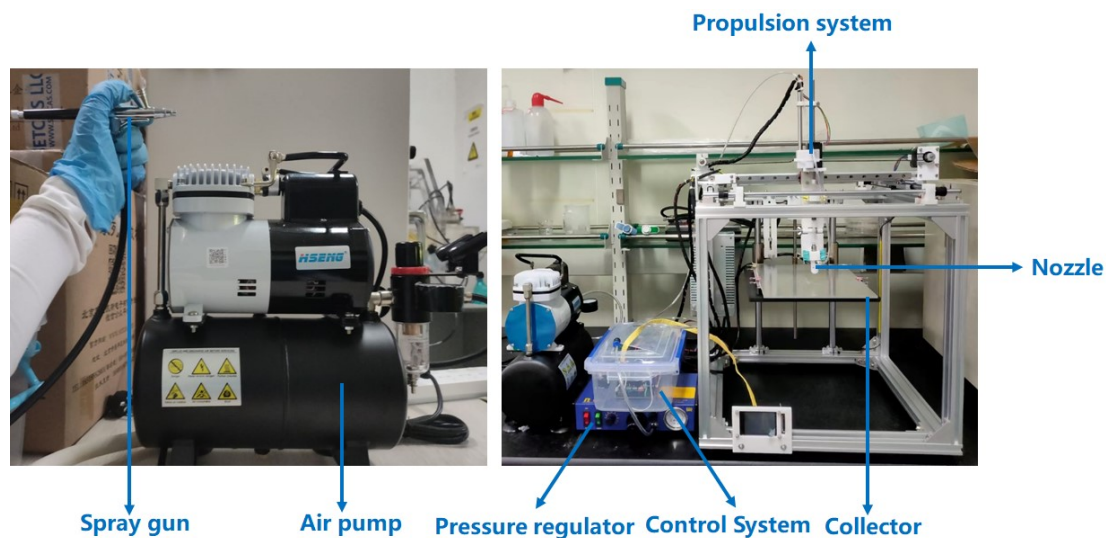


Fig. S1 Pictures showing (a) the commercial manual deposition device and (b) home designed automatic *in situ* deposition device.

Table S1 Table of orthogonal experiments on the spinning distance of 10 cm

Experiment #	Factors (wt% of PLGA)	A	B	C
		(wt% of PLGA)	(wt% of PLLA)	(Air pressure, kPa)
a	6	6	1	200
b	6	6	2	230
c	6	6	3	260
d	8	8	1	230
e	8	8	2	260
f	8	8	3	200
g	10	10	1	260
h	10	10	2	200
i	10	10	3	230

Table S2 Table of orthogonal experiments on the spinning distance of 5 cm

Experiment #	Factors (wt% of PLGA)	A	B	C
		(wt% of PLGA)	(wt% of PLLA)	(Air pressure, kPa)
a	5	5	1	160
b	5	5	2	180
c	5	5	3	200
d	7	7	1	180
e	7	7	2	200
f	7	7	3	160
g	9	9	1	200
h	9	9	2	160
i	9	9	3	180

Table S3 Table of orthogonal experiments on the spinning distance of 2 cm

Experiment #	Factors A (wt% of PLGA)	B (wt% of PLLA)	C (Air pressure, kPa)
a	4	1	100
b	4	2	125
c	4	3	150
d	5	1	125
e	5	2	150
f	5	3	100
g	6	1	150
h	6	2	100
i	6	3	125

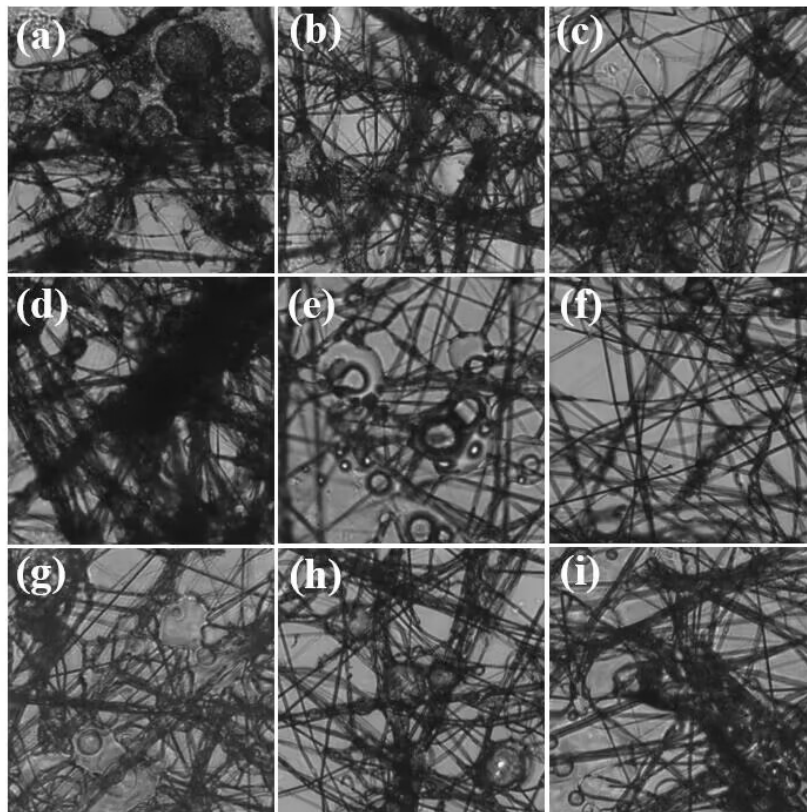


Fig. S2 Results of orthogonal experiments at 10 cm

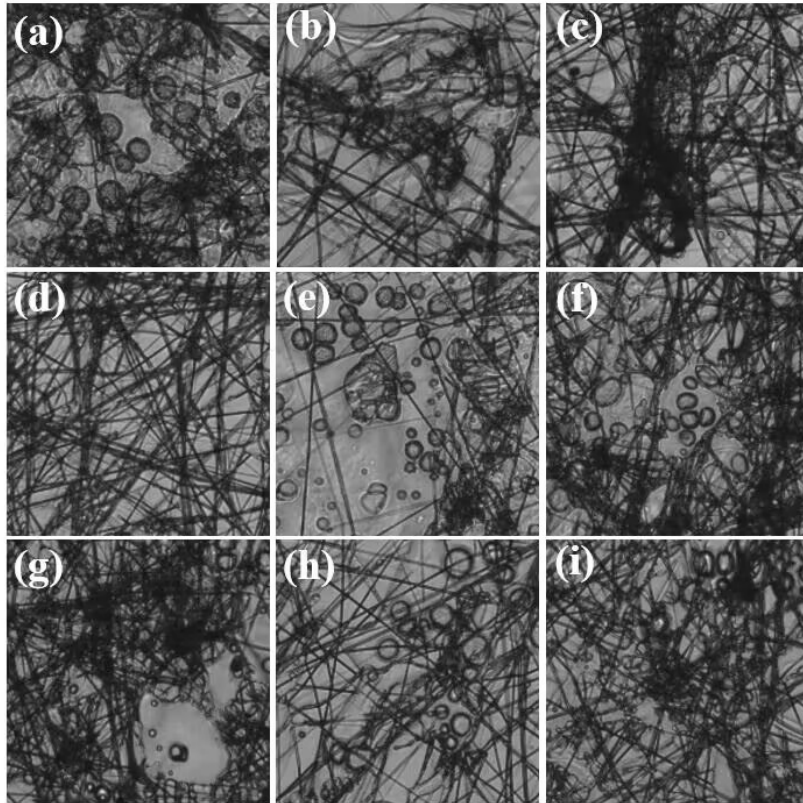


Fig. S3 Results of orthogonal experiments at 5 cm

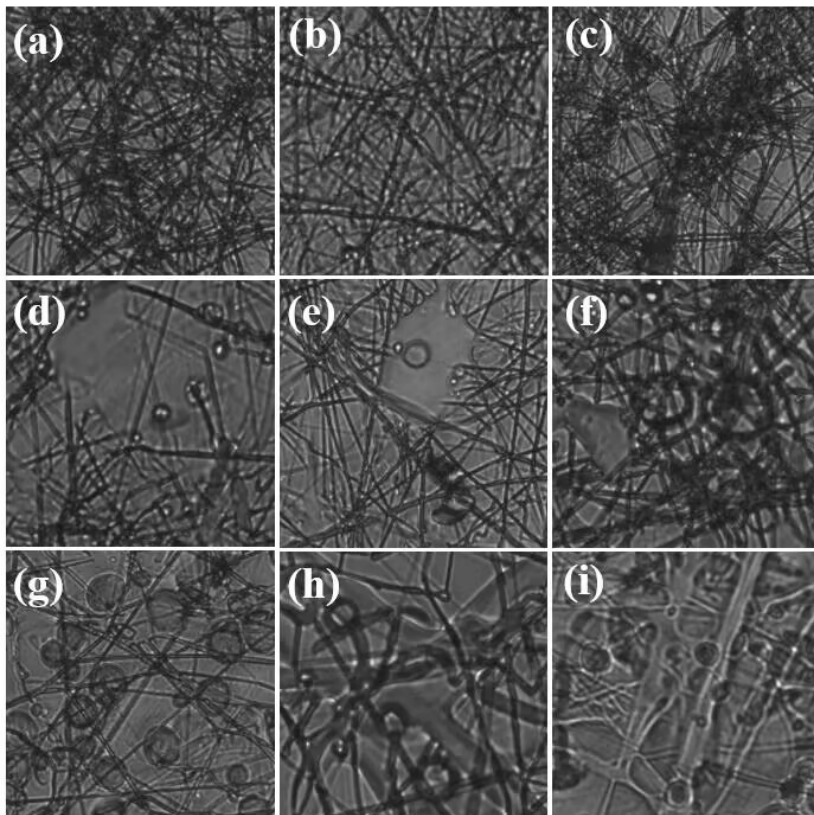


Fig. S4 Results of orthogonal experiments at 2 cm

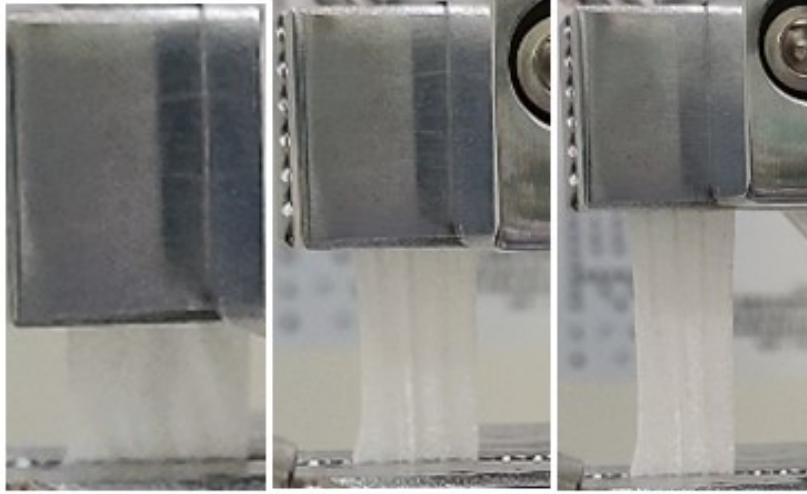


Fig. S5 A picture of the stretching process of nanofiber membranes.

Table S4 Comparison of mechanical properties of the nanofiberous membranes fabricated in this work with those reported in literatures

Main materials	Reference
PLGA/PEG/Ag+	[1]
PLGA/SF/AA	[2]
PLGA/Ge(7:3)(Dry)	[3]
PLLA40/GEL60	[4]
PLLA/POSS	[5]
PLLA/PEO_HP_CS	[6]
PLLA-Curc	[7]
HA/PLGA	[8]
Res-PLGA	[9]
GEL/PLGA	[10]
PLLA/zein-RCSPs	[11]
PLGA/PLLA	↓

Reference

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