

Supplemental Data

Table S1. UV intensities and exposure times used to achieve each UV dose (i.e. total energy) for A8-B.10 and A12-B.25 gel compositions as well as their resultant Young's moduli.

Gel Composition	UV Intensity (mW/cm ²)	Exposure Time (s)	Dose (mJ/cm ²)	E (kPa)
A8-B.10	26.411	43	1.14	0.08 ± 0.03
		57	1.51	0.38 ± 0.32
		71	1.88	1.14 ± 0.48
		172	4.54	2.96 ± 0.75
		300	7.92	3.14 ± 0.73
		757	19.99	2.70 ± 0.69
		1493	39.43	3.00 ± 0.73
A12-B.25	15.112	50	0.76	2.34 ± 0.27
		75	1.13	11.79 ± 1.29
		100	1.51	41.24 ± 2.71
		125	1.89	71.37 ± 4.59
		300	4.53	80.80 ± 0.98
		524	7.92	87.73 ± 4.73
		1324	20.01	87.63 ± 3.50
		2609	39.43	93.80 ± 0.27
A12-B.25	26.411	43	1.14	15.27 ± 19.36
		57	1.51	37.65 ± 35.26
		71	1.88	54.98 ± 12.04
		172	4.54	82.39 ± 7.21
		300	7.92	85.22 ± 4.43
		757	19.99	81.86 ± 6.10
		1493	39.43	82.84 ± 8.60
A12-B.25	66.701	28	1.87	1.07 ± 0.47
		68	4.54	69.11 ± 0.69
		119	7.94	75.27 ± 7.28
		300	20.01	74.37 ± 3.89
		591	39.42	74.12 ± 0.78

Table 2: Comparison of Young's moduli for UV and AP/TEMED-polymerized PAA gels. A8-B.10 and A12-B.25 UV-polymerized gels were prepared with 0.01% Irgacure at 15 mW/cm² intensity and 500 s exposure time.

Gel type	UV gel Young's modulus \pm SD (kPa)	TEMED gel Young's modulus \pm SD (kPa)	Statistically different?
A8-B.10	11.32 \pm 0.46	9.82 \pm 1.75	No
A12-B.25	100.4 \pm 11.3	112.3 \pm 8.0	No