

Supplementary Information for

DIRECT INK WRITING OF POROUS SHAPE MEMORY POLYMERS

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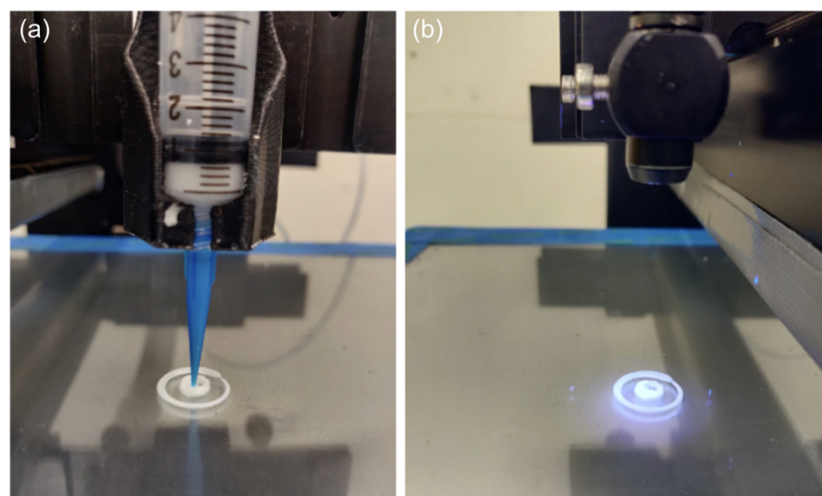


Figure S1. DIW Process consisting of (a) extrusion of ink and (b) curing.

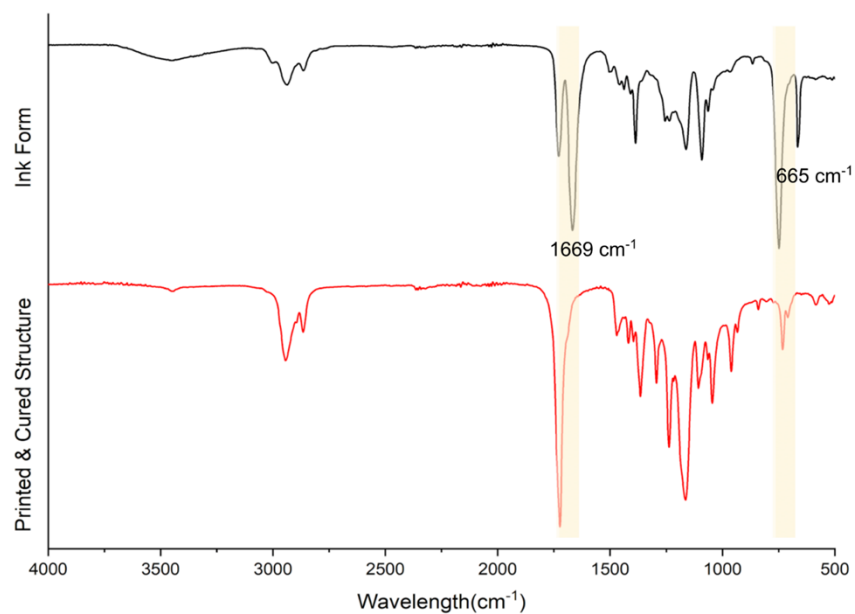


Figure S2. Offset FTIR spectra of ink (black trace) and the printed and cured structure (bottom, red trace).

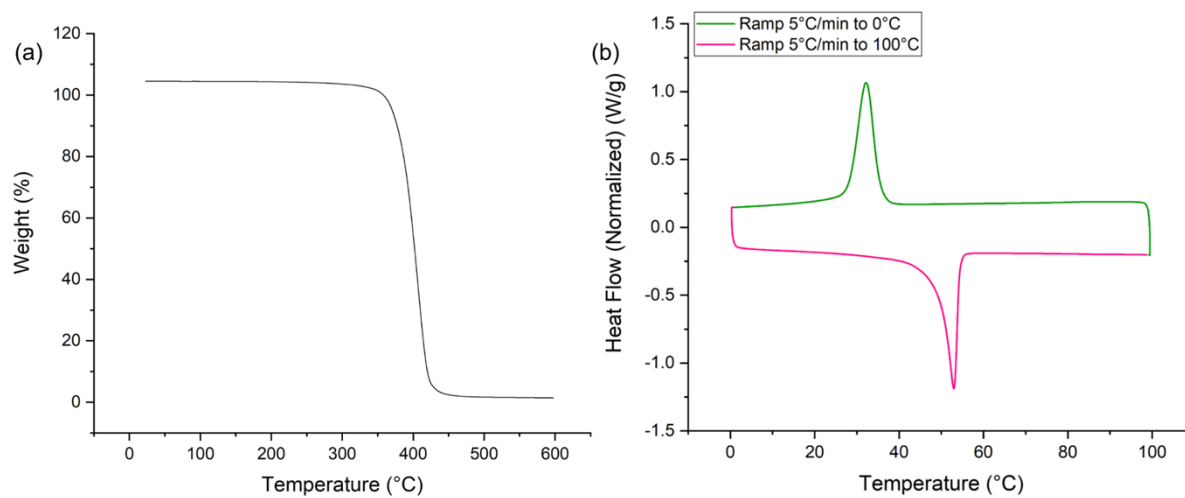


Figure S3. (a) TGA weight loss profile, and (b) DSC thermogram of printed and cured structure.

Table S1. Weight of samples during the degradation studies.

| | Sample | Initial Mass | Final Mass | Mass Loss (%) | Average | Std. Deviation |
|--------|---------------|---------------------|-------------------|----------------------|----------------|-----------------------|
| Day 3 | 1 | 0.0127 | 0.013 | -2.362 | 4.334 | 0.605 |
| | 2 | 0.0147 | 0.014 | 4.762 | | |
| | 3 | 0.0128 | 0.0123 | 3.906 | | |
| Day 6 | 1 | 0.0123 | 0.0113 | 8.130 | 12.898 | 4.320 |
| | 2 | 0.0145 | 0.0121 | 16.552 | | |
| | 3 | 0.0157 | 0.0135 | 14.013 | | |
| Day 9 | 1 | 0.0098 | 0.0062 | 36.735 | 29.043 | 6.749 |
| | 2 | 0.0156 | 0.0115 | 26.282 | | |
| | 3 | 0.0141 | 0.0107 | 24.113 | | |
| Day 12 | 1 | 0.0152 | 0.0081 | 46.711 | 45.221 | 2.666 |
| | 2 | 0.0141 | 0.0075 | 46.809 | | |
| | 3 | 0.014 | 0.0081 | 42.143 | | |
| Day 15 | 1 | 0.0129 | 0.003 | 76.744 | 73.252 | 12.924 |
| | 2 | 0.0151 | 0.0062 | 58.940 | | |
| | 3 | 0.0113 | 0.0018 | 84.071 | | |