

Supporting Information

Novel Stretchable Thermochromic Transparent Heaters Designed for Smart Windows Defrosters Applications by Spray Coating Silver Nanowire

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Table S1. Temperature decay of the thermochromic ink and silver nanowire-coated polydimethylsiloxane device

S.No	Voltage (V)	Temperature °C (0% stretch)	Temperature °C (30% stretch)	Temperature Decay % (30%)
1	2	29	29	0%
2	5	53	44	17%
3	10	110	68	38%

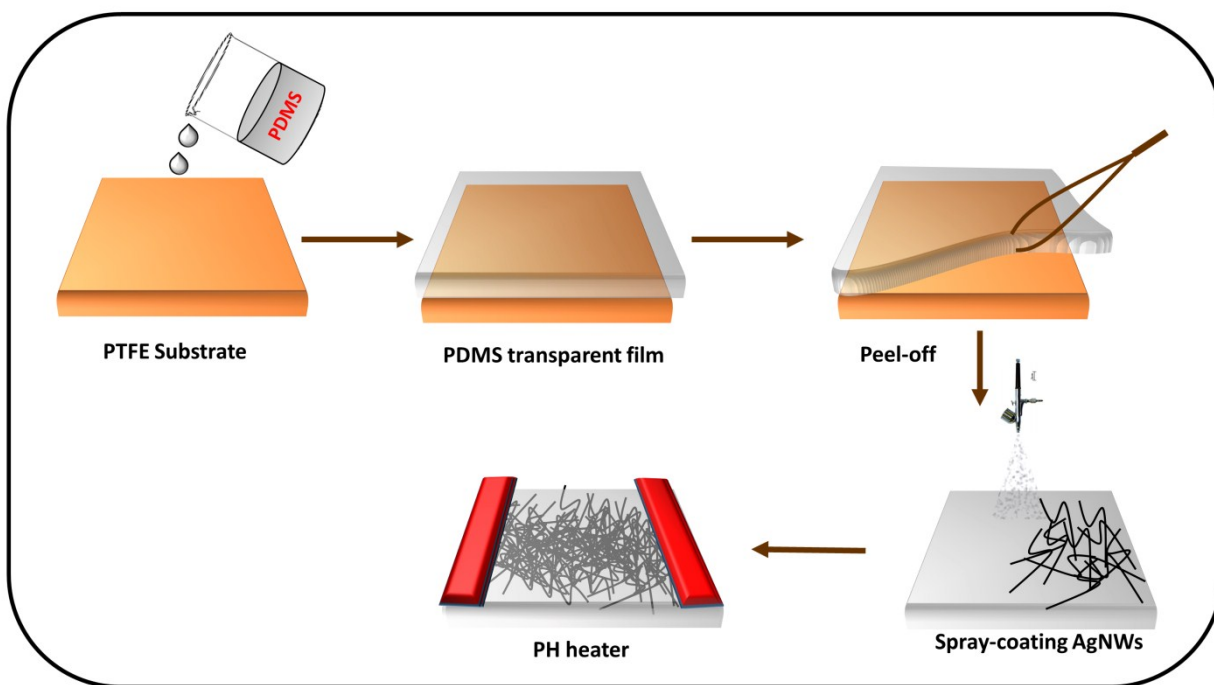


Figure S1. Scheme representing the fabrication of a PH heater (AgNW-coated polydimethylsiloxane [PDMS]) through the drop-casting process and spray-coating technique.

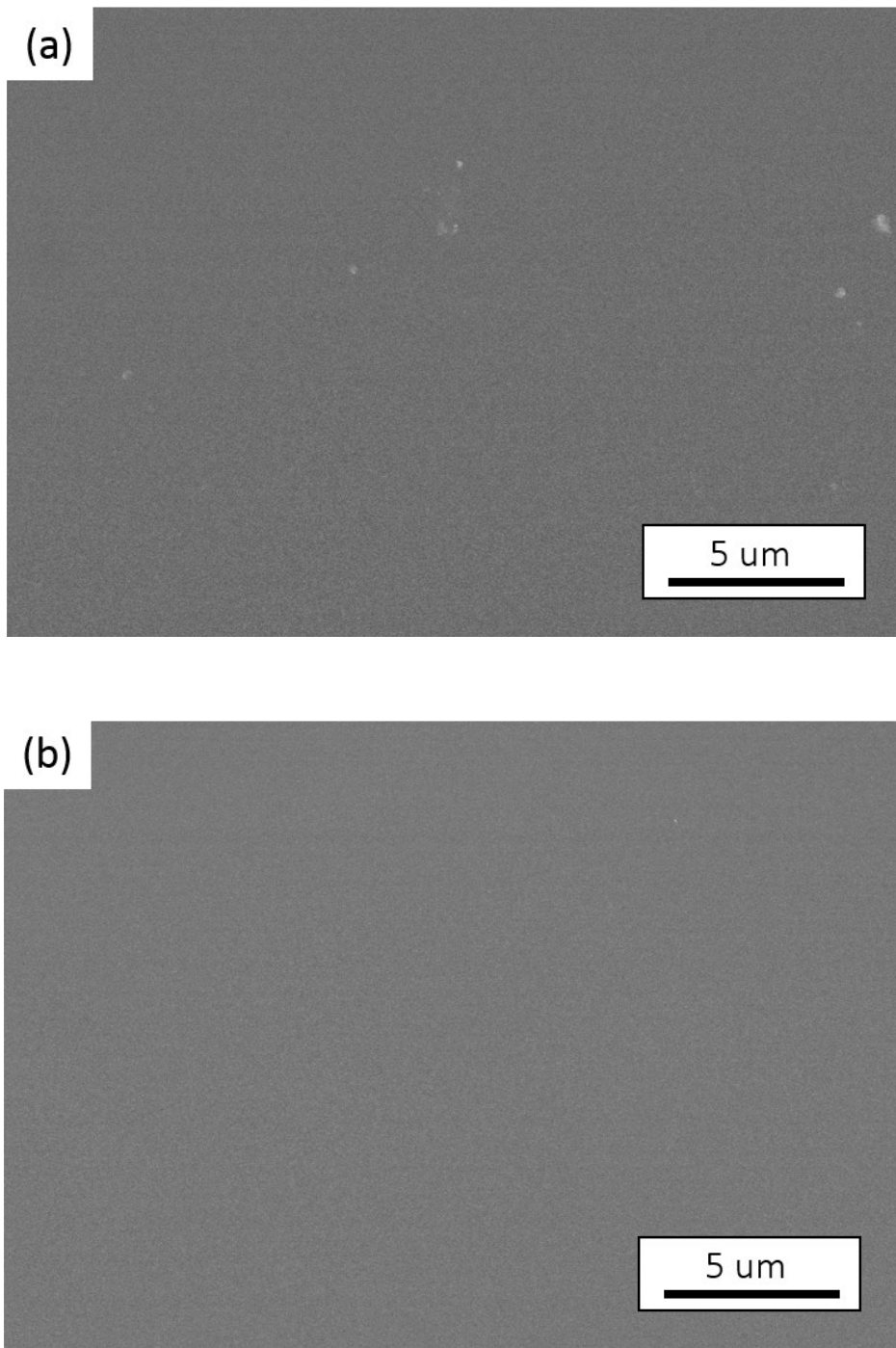


Figure S2. Top-view FE-SEM image of (a) pristine polydimethylsiloxane (PDMS) and (b) thermochromic ink-blended PDMS film

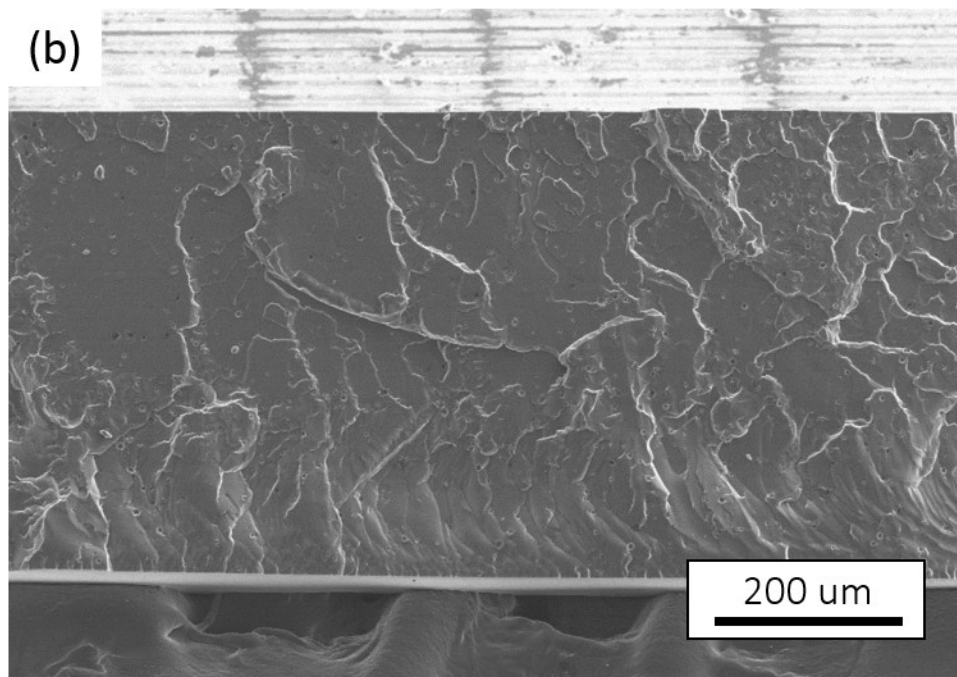
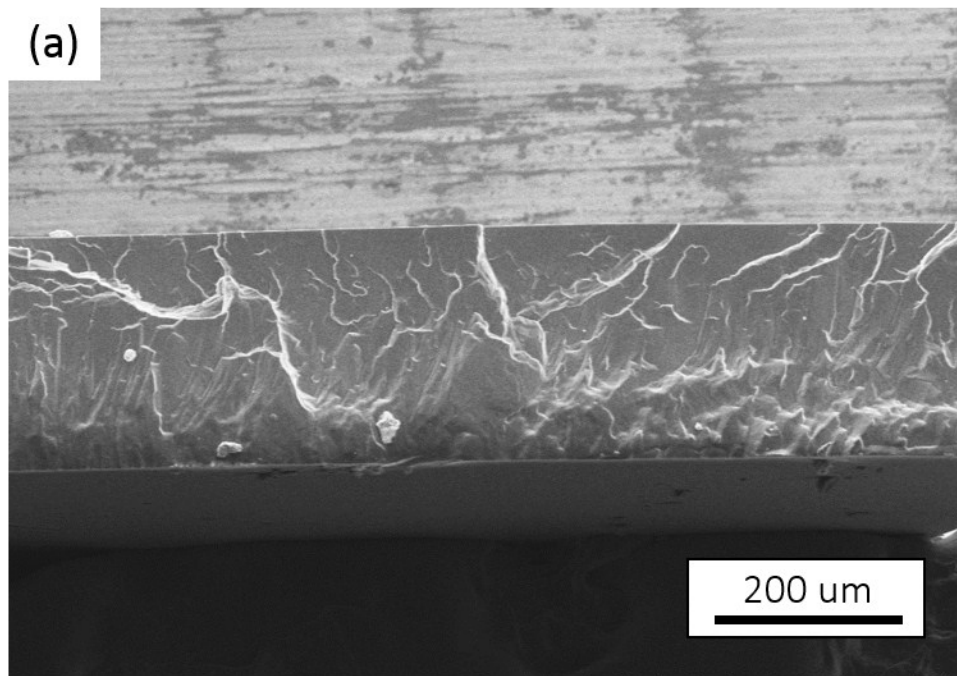


Figure S3. Cross-sectional FE-SEM images of (a) pure polydimethylsiloxane (PDMS) and (b) thermochromic ink-blended PDMS

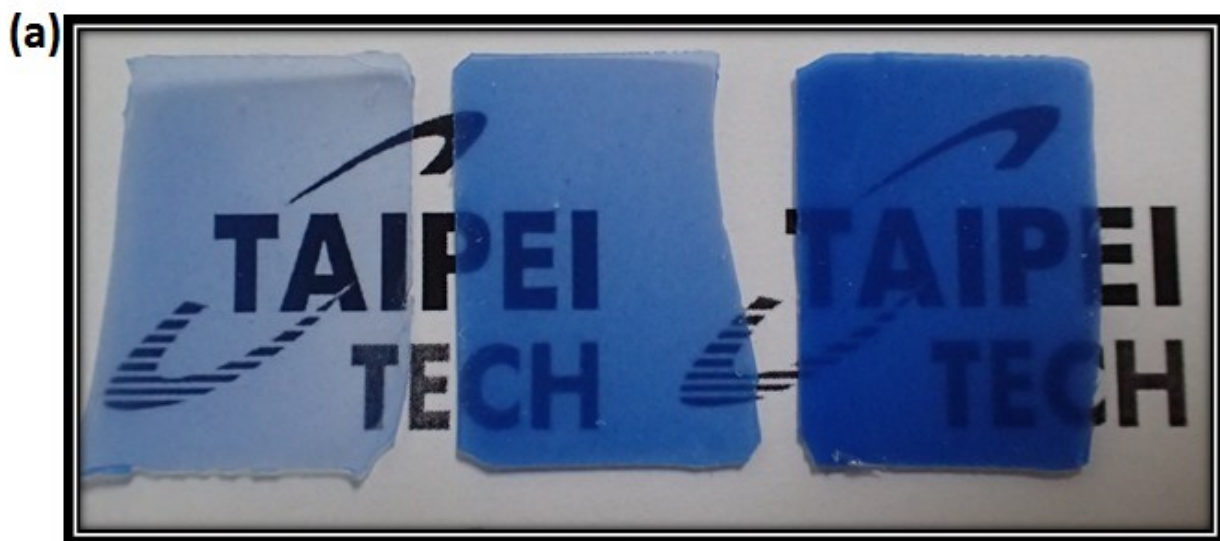


Figure S4. Photographs of variegated weight ratios for thermochromic ink blended with polydimethylsiloxane

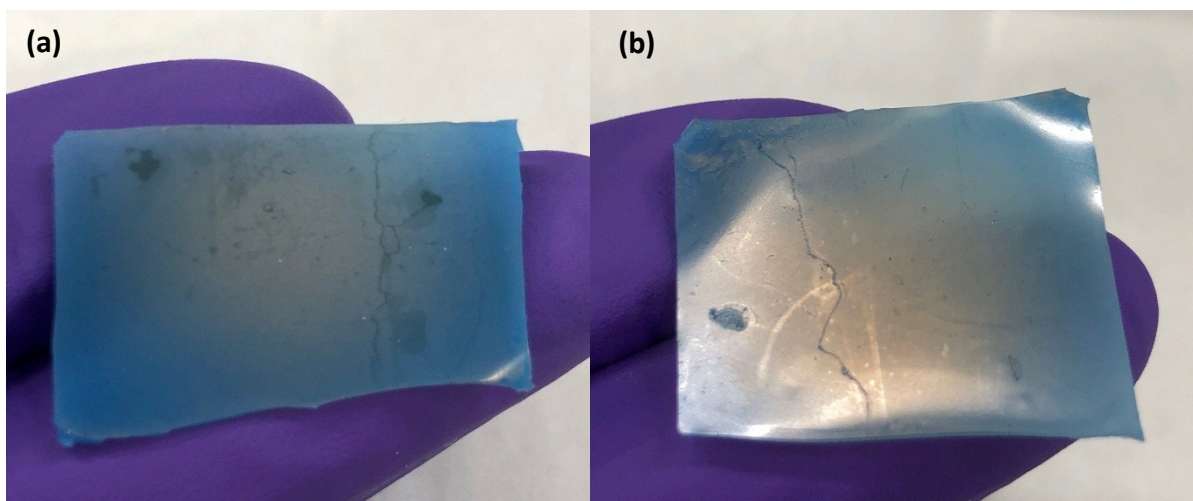


Figure S5. Observed cracks on 30-s and 60-s spray-coated devices after stretching

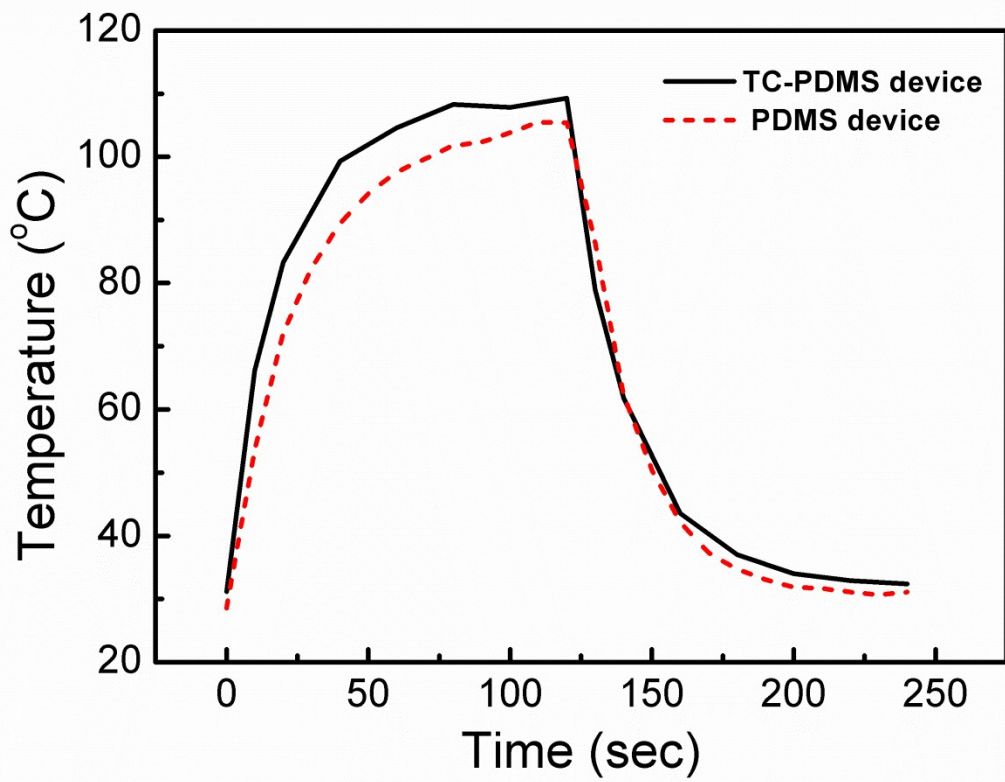


Figure S6. Heating performance comparison b/w the PDMS and TC-PDMS based device.

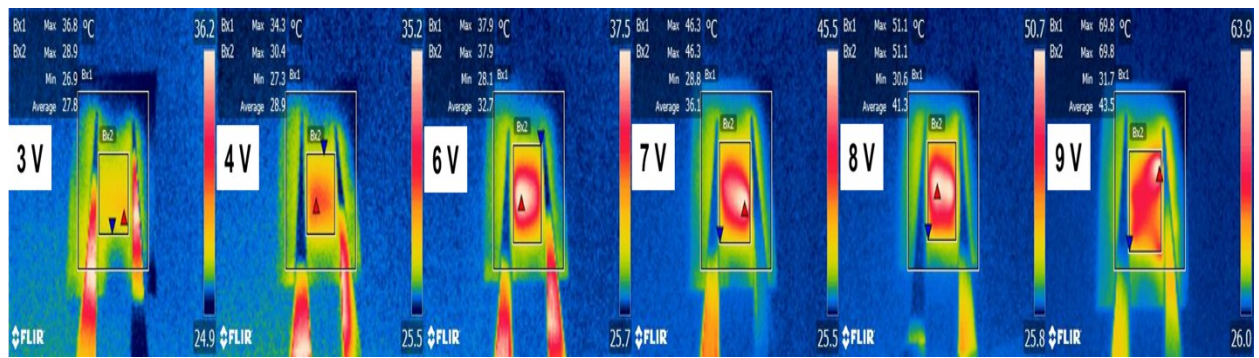


Figure S7. IR camera image of PBH device subject to various biases.

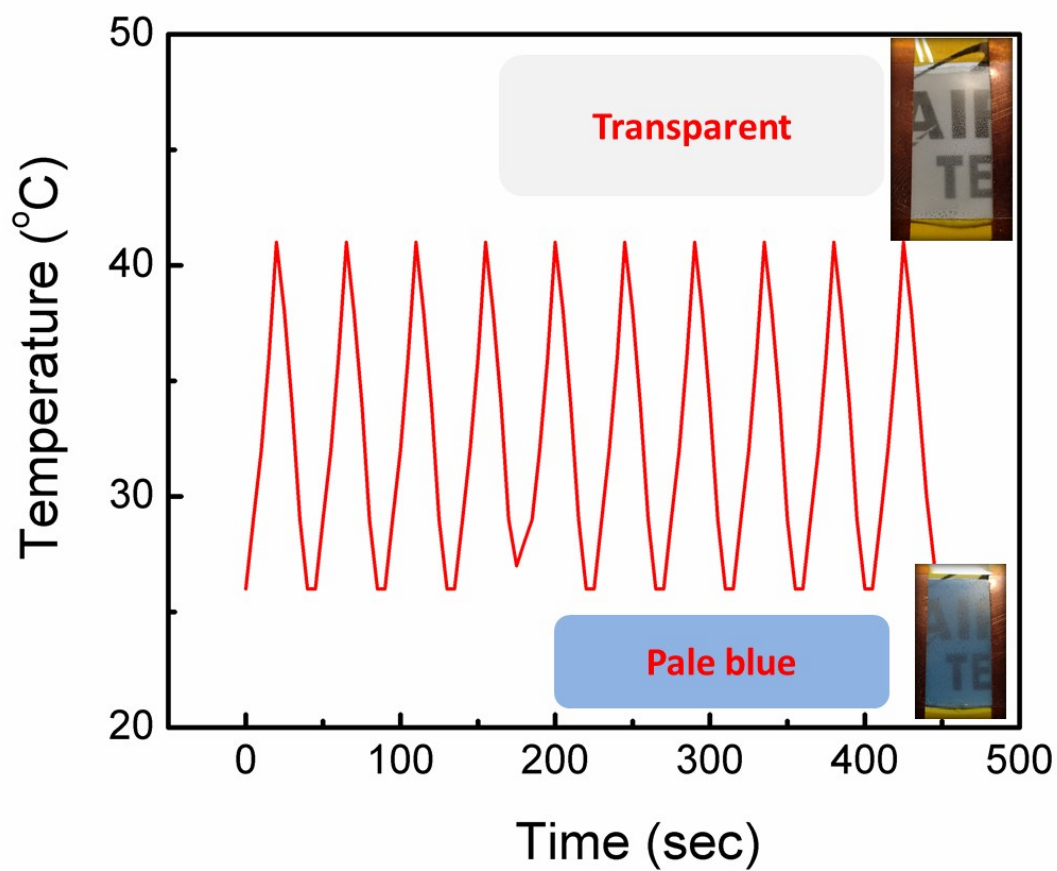


Figure S8. Reversibility test carried out with the PBH device 10 repetitive cycles featuring the unique thermochromic behavior.