Electronic Supplementary Information

Relation between Temperature Memory Effect and Multiple-Shape Memory Behaviors Based on Polymer Networks

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(a)

(b)

(c)

(d)

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Figure S1. Dual-shape memory properties of PMMA/PEG semi-IPN at different $T_d$. (a) $T_d = 50 \, ^\circ\text{C}$, $R_f = 85.1\%$, $R_r = 95.4\%$. (b) $T_d = 60 \, ^\circ\text{C}$, $R_f = 88.3\%$, $R_r = 89.2\%$. (c) $T_d = 70 \, ^\circ\text{C}$, $R_f = 93.9\%$, $R_r = 93.0\%$. (d) $T_d = 90 \, ^\circ\text{C}$, $R_f = 97.7\%$, $R_r = 93.9\%$. (e) $T_d = 100 \, ^\circ\text{C}$, $R_f = 97.7\%$, $R_r = 99.5\%$. 
Figure S2. Dual-shape memory properties of PMMA-PCL CPN at different $T_d$. (a) $T_d = 0$ °C, $R_f = 85.1\%$, $R_r = 91.3\%$. (b) $T_d = 10$ °C, $R_f = 90.5\%$, $R_r = 85.4\%$. (c) $T_d = 20$ °C, $R_f = 95.7\%$, $R_r = 93.6\%$. (d) $T_d = 40$ °C, $R_f = 97.9\%$, $R_r = 98.1\%$. (e) $T_d = 50$ °C, $R_f = 98.5\%$, $R_r = 97.8\%$. 