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SUPPORTING INFORMATION

Azobenzene-containing liquid crystalline polyester with π-π interactions: Diverse thermo- and photo-responsive behaviours

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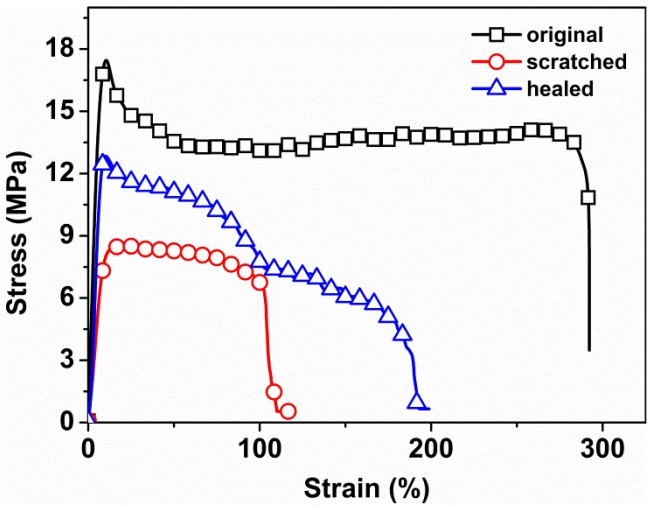

Fig. S1 Stress versus strain curves for the original, scratched and healed state of PBHPS. The tensile stress of the original PBHSP was 17.5 MPa; and the scratched one decreased to 8.5 MPa, where the testing sample fractured precisely at the scratch trace. After 5 hours healing process at 60 °C and without the compression stress, the tensile stress of the healed one could recover to 12.8 MPa, thus the healing efficiency was 73.5% (strength) and 66.3% (elongation) [1].

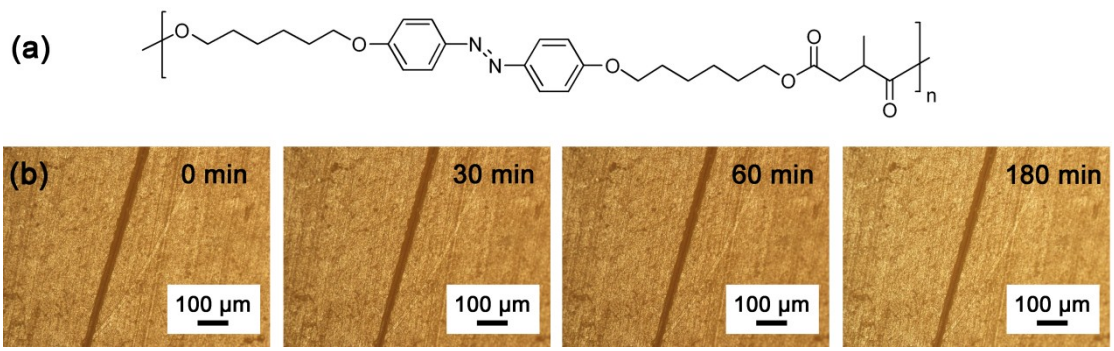

Fig. S2 (a) Chemical structure of poly(4,4'-bis(6-hydroxyhexyloxy)azobenzene methylsuccinate) (PBHMS). (b) Unsuccessful self-healing process of PBHMS at 60 °C under the POM. After isothermal process at 60 °C for 180 min, the scratched film remained un-healed.

Reference:

1 R. P. Wool and K. M. O'Connor. A theory of crack healing in polymers. *J. Appl. Phys.,* 1981, **52**, 5953.