

Supplementary Information for

Preparation and characterization of long chain branched polycarbonates with significantly enhanced environmental stress cracking behavior through gamma radiation with addition of difunctional monomer†

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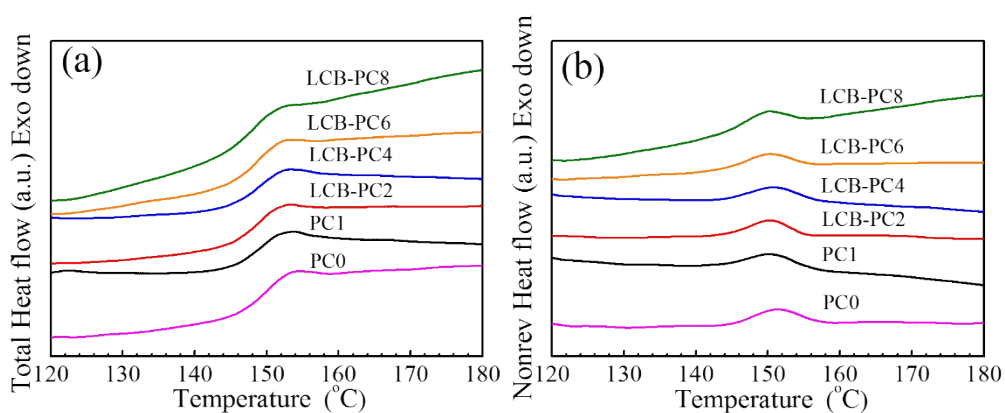


Fig. S1 (a) Total heat flow curves and (b) nonreversible heat flow curves for linear PCs and LCB-PCs without thermal annealing. MDSC heating rate is 5 °C/min with a

modulation amplitude of 0.5 °C in a period of 50 s. The curves are vertically shifted for clarity.

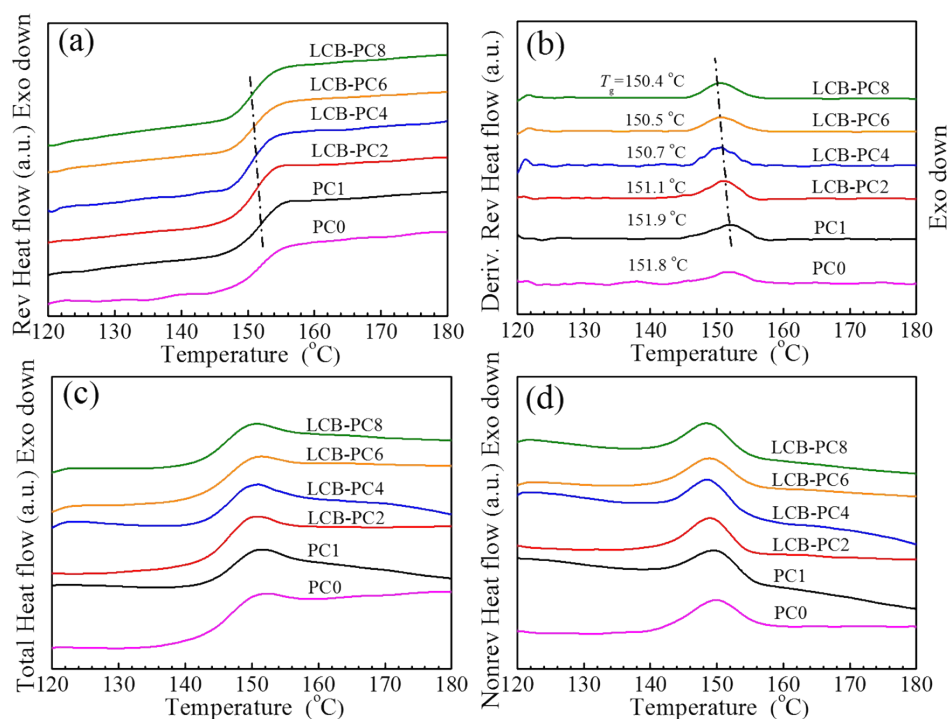


Fig. S2 (a) Reversible heat flow curves, (b) derivative reversible heat flow curves, (c) total heat flow curves and (d) nonreversible heat flow curves for linear PCs and LCB-PCs with the annealing time of 6 h. MDSC heating rate is 5 °C/min with a modulation amplitude of 0.5 °C in a period of 50 s. The curves are vertically shifted for clarity.

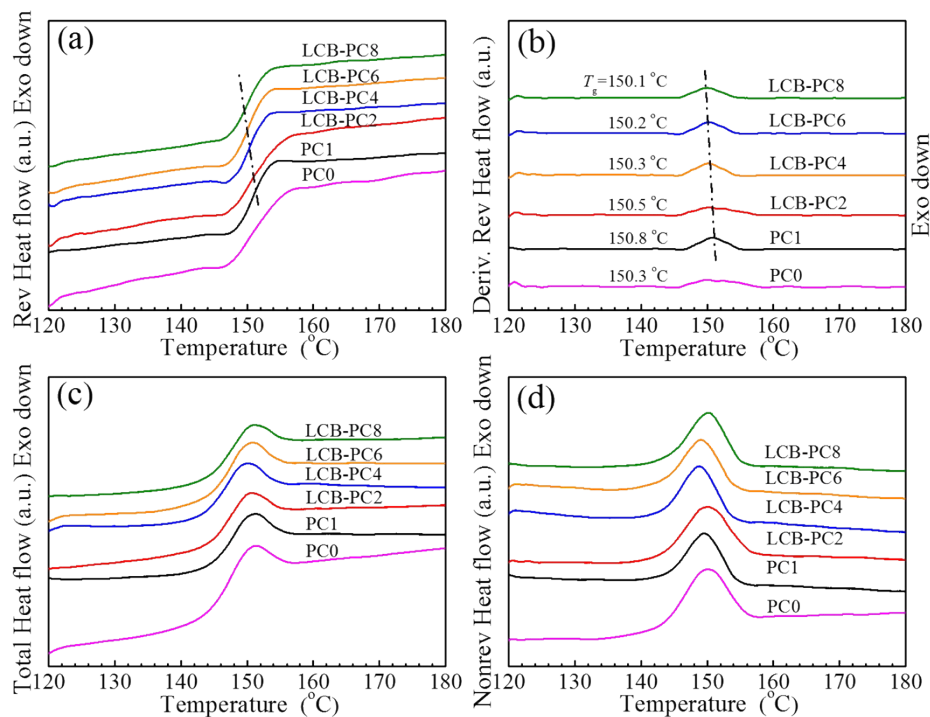


Fig. S3 (a) Reversible heat flow curves, (b) derivative reversible heat flow curves, (c) total heat flow curves and (d) nonreversible heat flow curves for linear PCs and LCB-PCs with the annealing time of 12 h. MDSC heating rate is 5 °C/min with a modulation amplitude of 0.5 °C in a period of 50 s. The curves are vertically shifted for clarity.

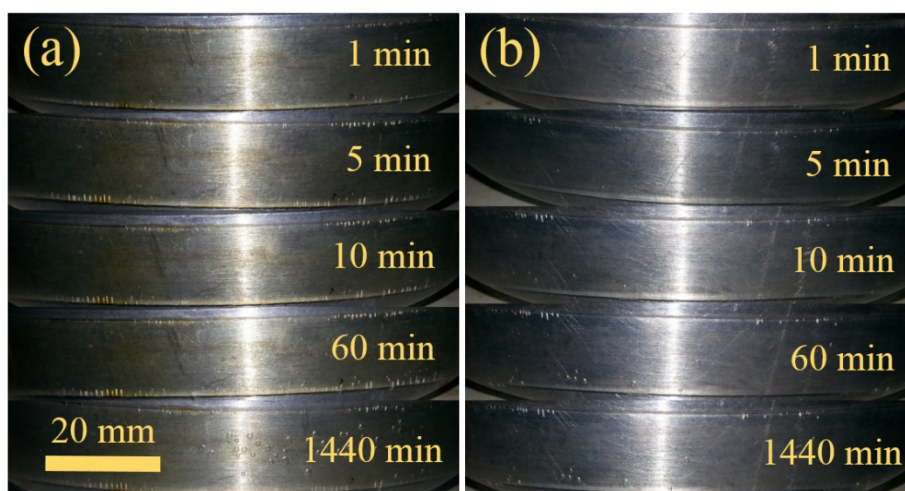


Fig. S4 Developments of crack with time for (a) PC1 and (b) LCB-PC4 at the applied strain of 0.015.