

Supplementary Information

Chemistry of aromatic polythioesters and polydithioesters

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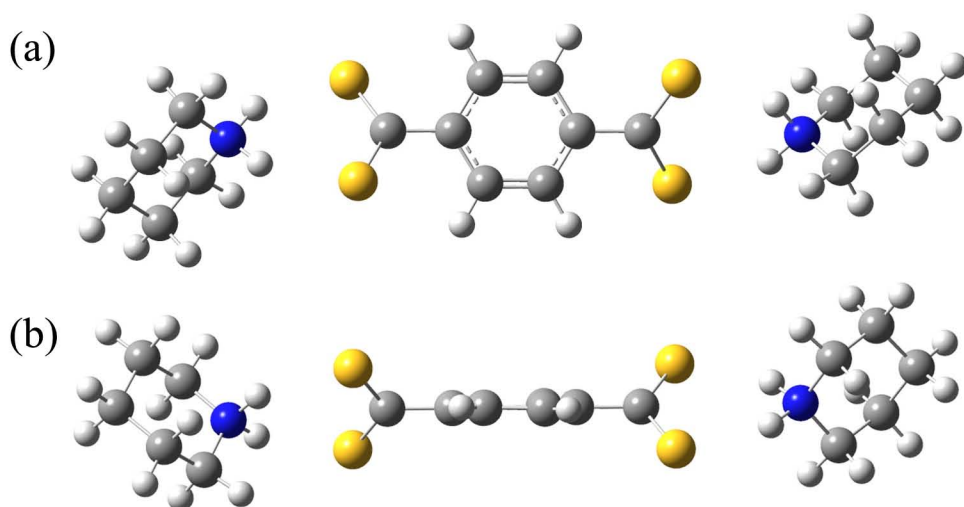


Fig. S1 The optimized structure of the S_4 TPA-Pip complex:
 (a) top and (b) side views with respect to the benzene ring.
 The H-N-H and S-C-S triangles lie in a plane, the N-H and C-S lengths and the N-H...S-C distance are, respectively, 1.04, 1.71, and 2.32 Å, the N-N-H and S-C-S angles are, respectively, 100.1 and 125.1°, and the two S-C-S triangles make an angle of 78°.

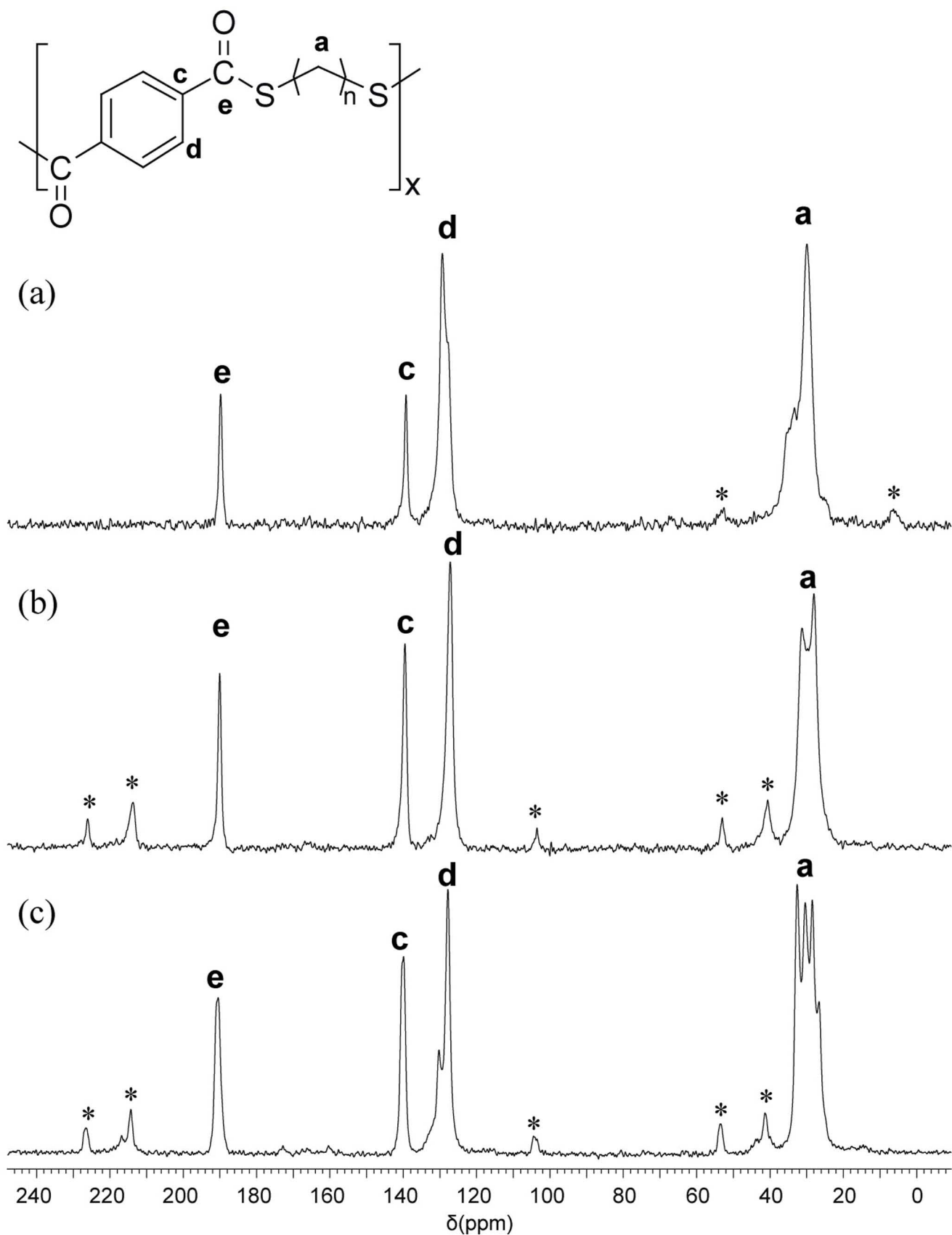


Fig. S2 Solid state ^{13}C CP/MAS NMR spectra: (a) P3TS₂ ; (b) P4TS₂ ; (c) P5TS₂ . The peaks were assigned as indicated. The asterisks represent spinning side bands.

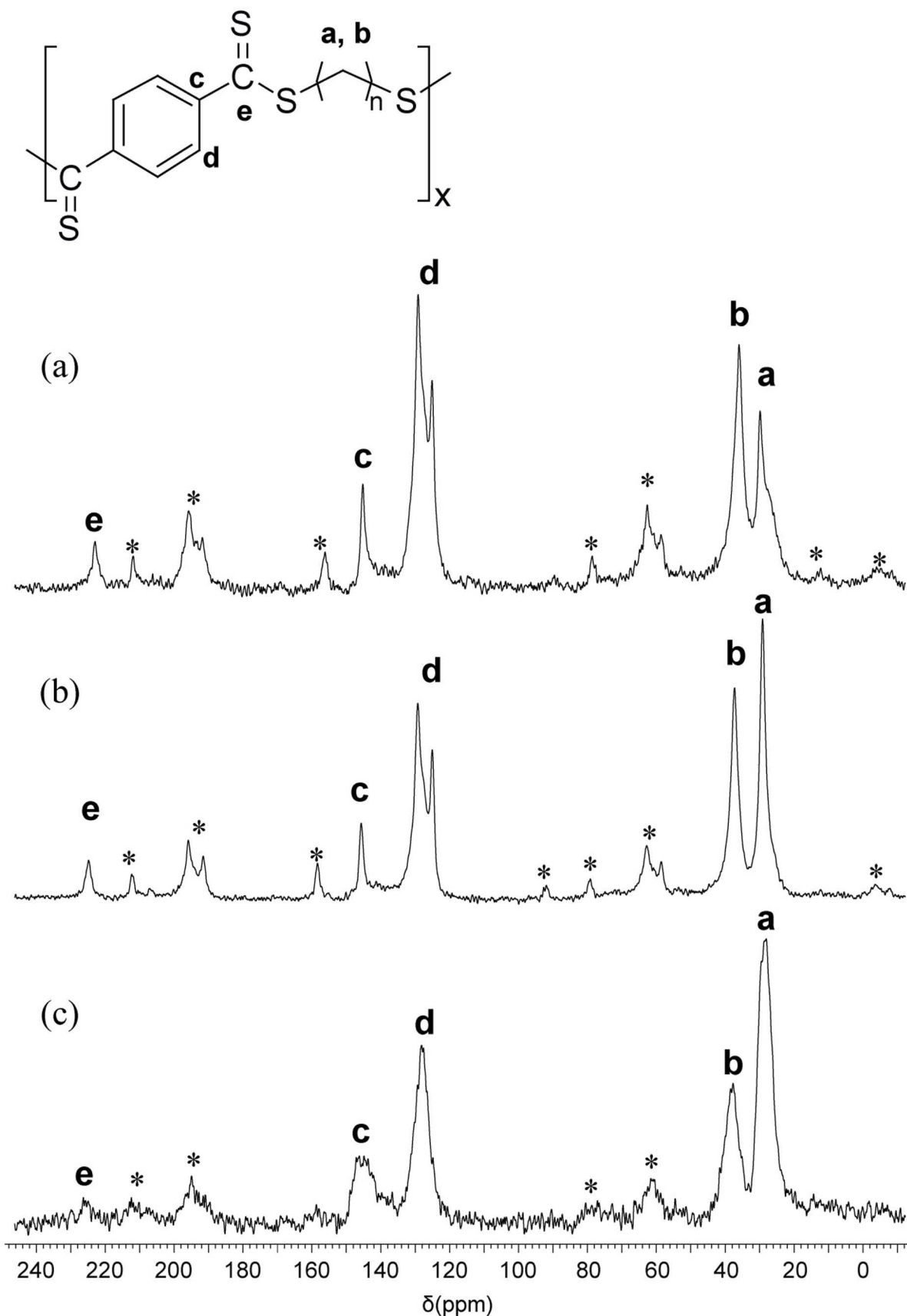


Fig. S3 Solid state ^{13}C CP/MAS NMR spectra: (a) P3TS₄ ; (b) P4TS₄ ; (c) P5TS₄ . The peaks were assigned as indicated. The asterisks represent spinning side bands.

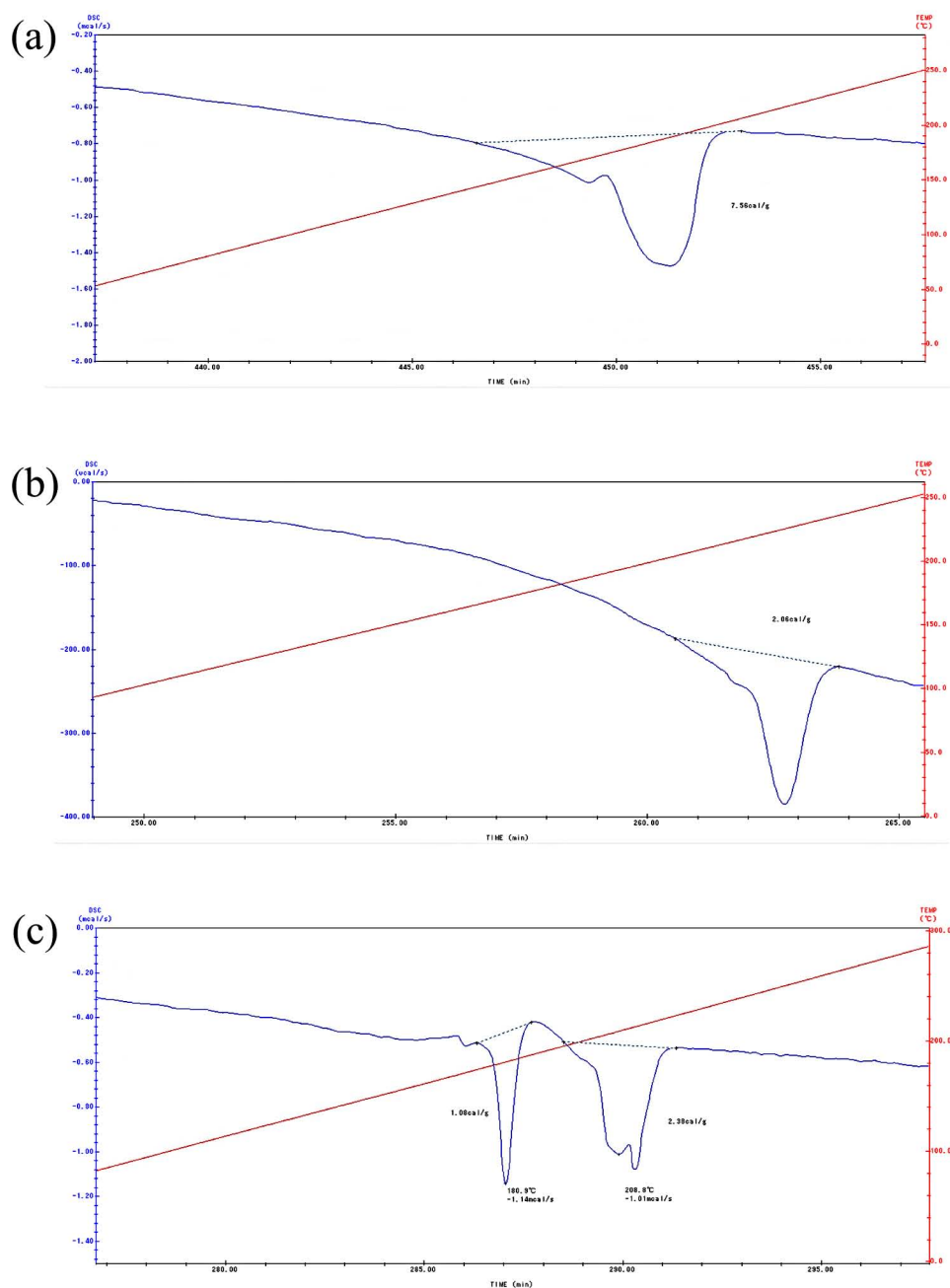


Fig. S4 DSC charts of P_yTS₂: (a) P3TS₂; (b) P4TS₂; (c) P5TS₂.

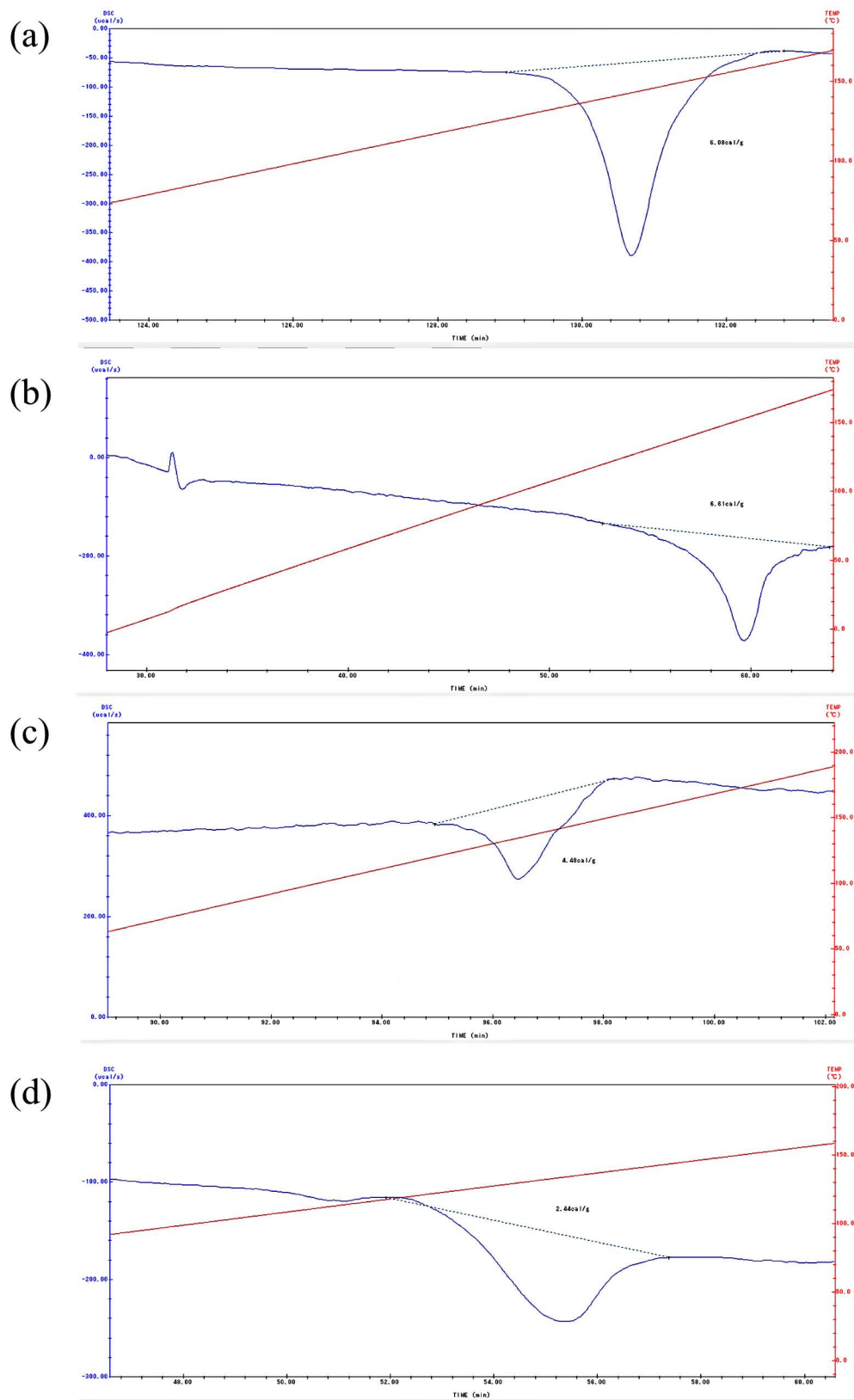


Fig. S5 DSC charts of PyTS₄: (a) P3TS₄ (DMF); (b) P3TS₄ (DMSO); (c) P4TS₄ (DMF); (d) P4TS₄ (DMSO). The polymerization solvent is written in the parenthesis.

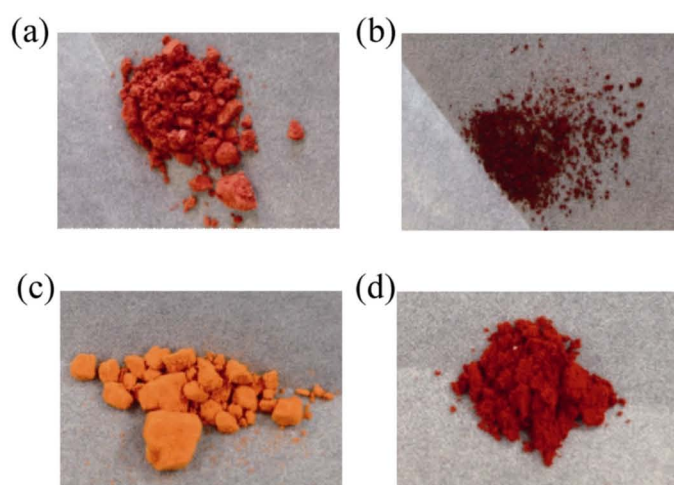


Fig. S6 P3TS₄ and P4TS₄ : (a) as-precipitated P3TS₄ ; (b) annealed P3TS₄ ; (c) as-precipitated P4TS₄ ; (d) annealed P4TS₄ . The annealing was carried out at 150 °C for 2 h.