Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information

Tuning the structure and mechanical property of polymer nanocomposites by employing anisotropic nanoparticles as netpoints

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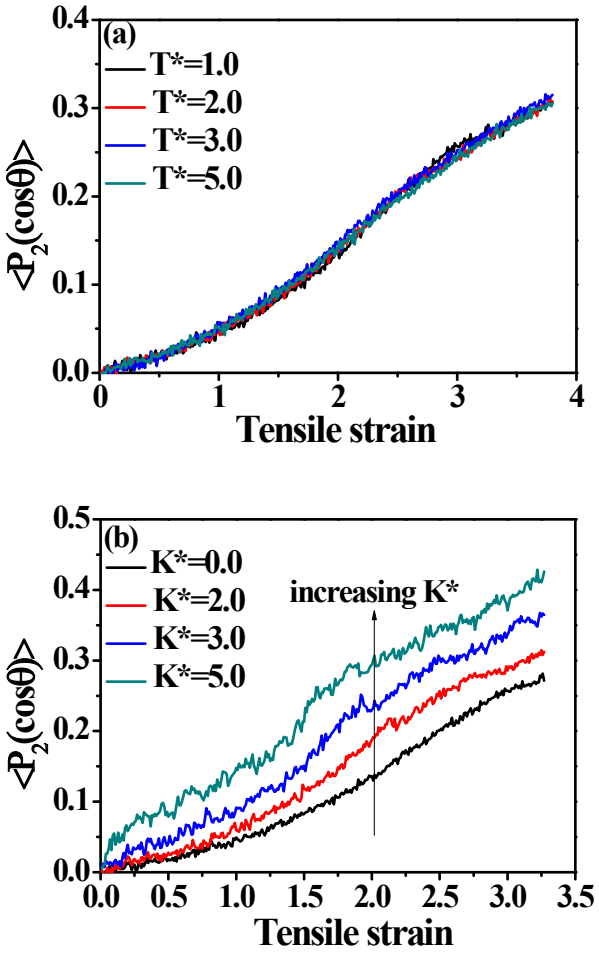

Fig. S1 The bond orientation of polymer chains as a function of the strain for (a) various temperatures and (b) various bending energy.

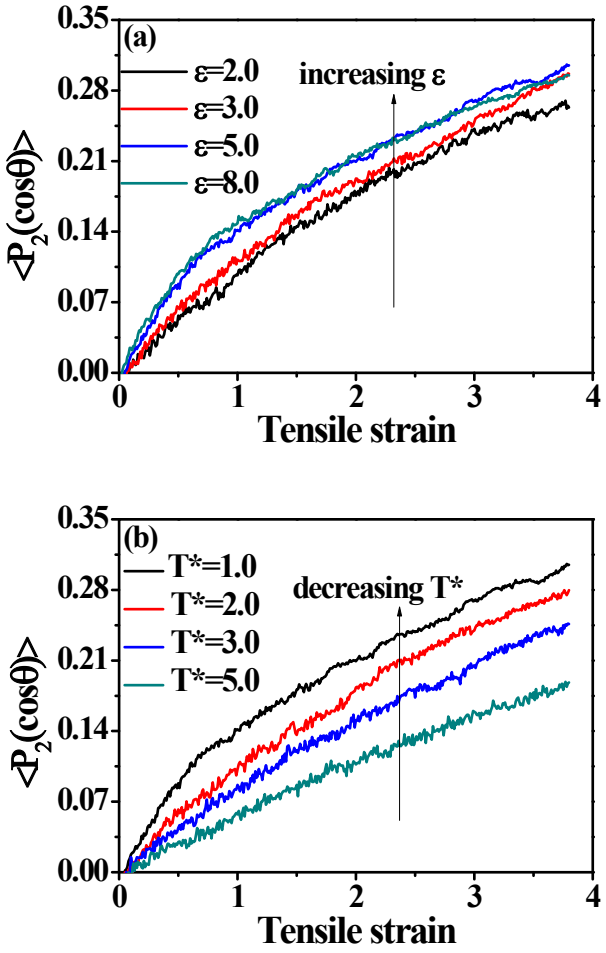

Fig. S2 The bond orientation of polymer chains as a function of the strain for (a) various interfacial interaction energy (b) different temperatures. We fix the reduced temperature T^*=1.0 when varying the interfacial interaction strength, and we fix the interfacial interaction strength ε=5.0 when changing the temperature. Note that there exist 300 polymer chains, each contains 46 beads. The mass fraction of the carbon nanotubes is equal to 8.5%.

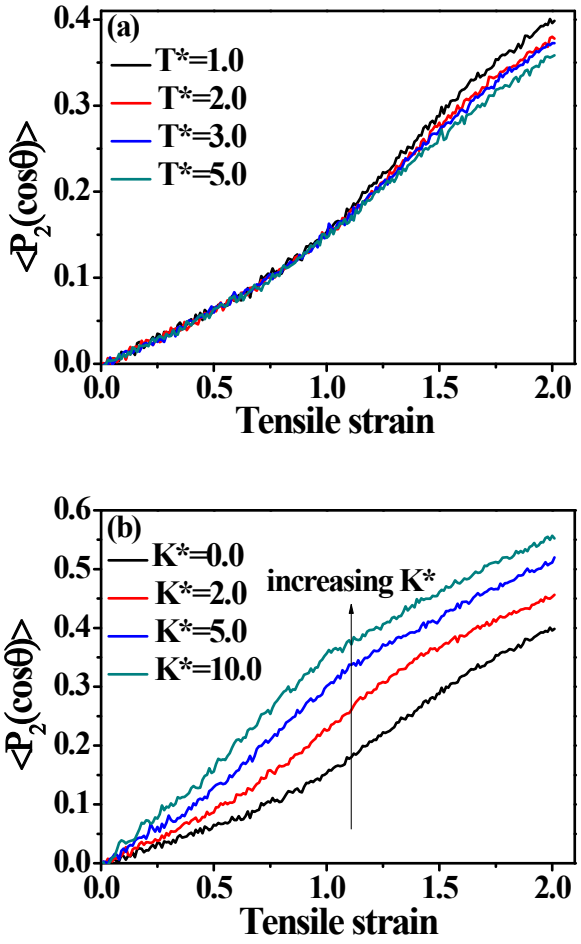

Fig. S3 The bond orientation of polymer chains as a function of the strain for (a) various temperatures and (b) various bending energy.

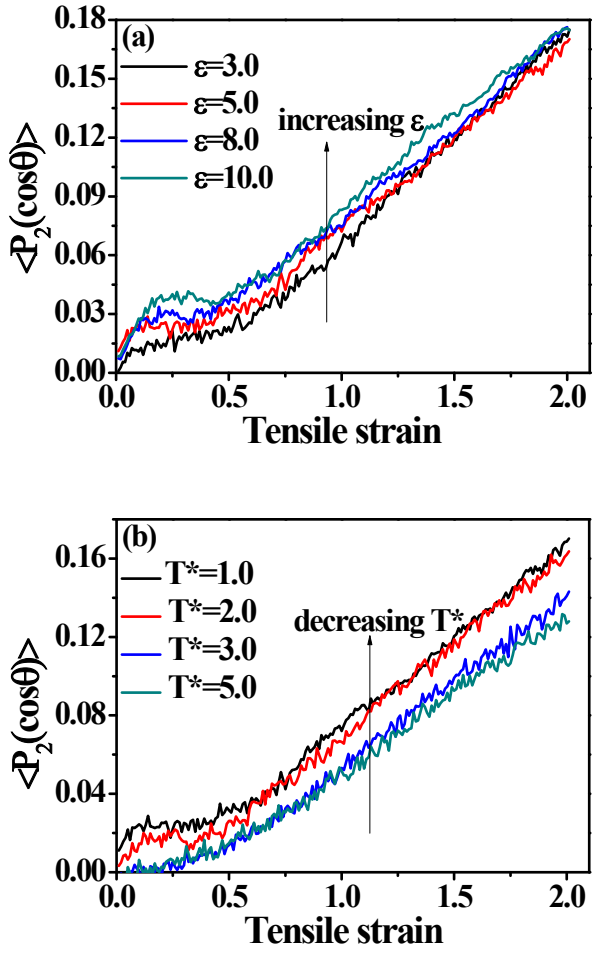

Fig. S4 The bond orientation of polymer chains as a function of the strain for (a) various interfacial interaction energy and (b) different temperature. We fix the reduced temperature T^*=1.0 when varying the interfacial interaction strength, and we fix the interfacial interaction strength ε=5.0 when changing the temperature.