

Article

Dissipative Particle Dynamics Study on Interfacial Properties of Symmetric Ternary Polymeric Blends

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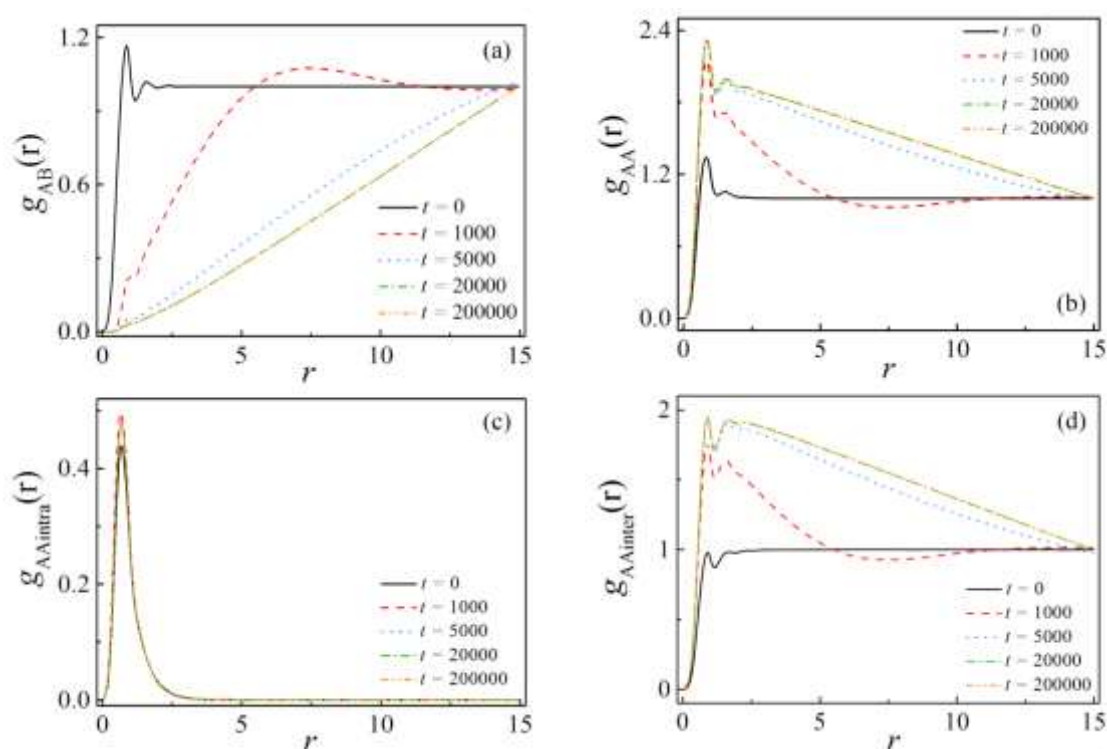


Figure S1. The radial distribution functions between (a) beads A and B [$g_{AB}(r)$] from homopolymers A_n and B_n , (b) beads A and A [$g_{AA}(r)$] of all homopolymers A_n , (c) beads A and A [$g_{AAintra}(r)$] within homopolymers A_n , and (d) beads A and A [$g_{AAinter}(r)$] within different homopolymers A_n for the case $A_8/A_4B_4/B_8$ at different simulation times. The copolymer concentration is set as $c_{cp} = 0.05$.

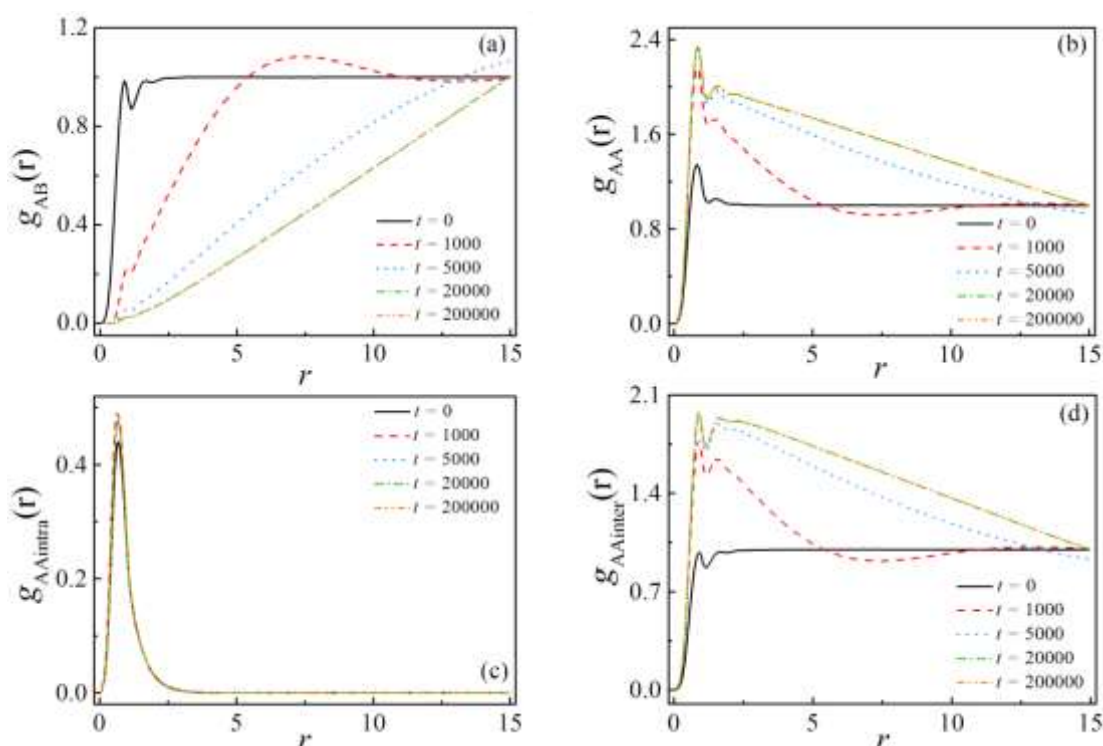


Figure S2. The radial distribution functions between (a) beads A and B [$g_{AB}(r)$] from homopolymers A_n and B_n , (b) beads A and A [$g_{AA}(r)$] of all homopolymers A_n , (c) beads A and A [$g_{AAintra}(r)$] within homopolymers A_n , and (d) beads A and A [$g_{AAinter}(r)$] with different homopolymers A_n for the case $A_8/A_2B_4A_2/B_8$ at different simulation times. The copolymer concentration is set as $c_{cp} = 0.05$.

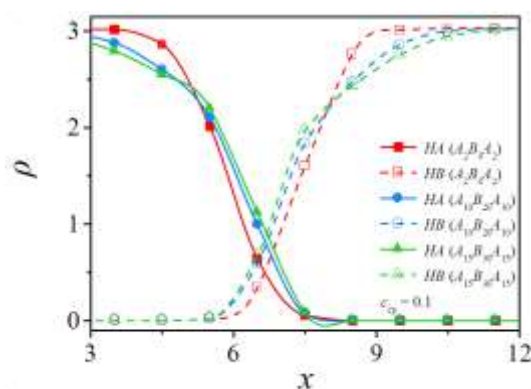


Figure S3. The zoom of Figure 5(a) at the interface.

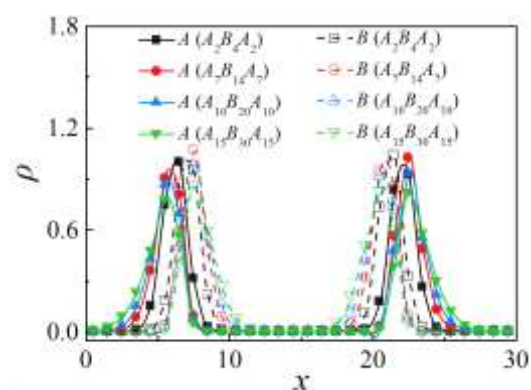


Figure S4. Density profiles of beads A, B of the triblock copolymer along the x -axis as a function of chain length of the copolymer at the copolymer concentration of $c_{cp} = 0.1$.

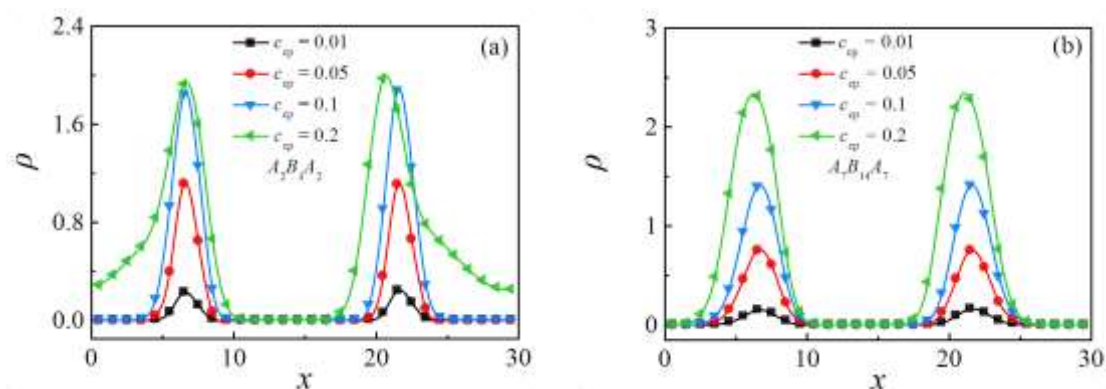


Figure S5. Density profiles of beads A + B of the triblock copolymer along the x -axis as a function of triblock copolymer concentration at the copolymer chain length (a) $N_{cp} = 8$, and (b) $N_{cp} = 28$.

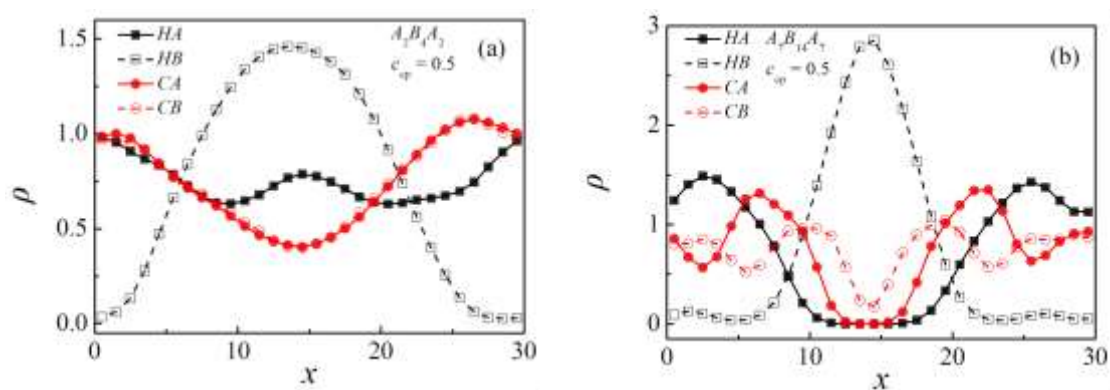


Figure S6. Density profiles of beads A and B of the homopolymers and triblock copolymer along the x -axis at the copolymer chain length (a) $N_{cp} = 8$, and (b) $N_{cp} = 28$ with triblock copolymer concentration $c_{cp} = 0.5$.

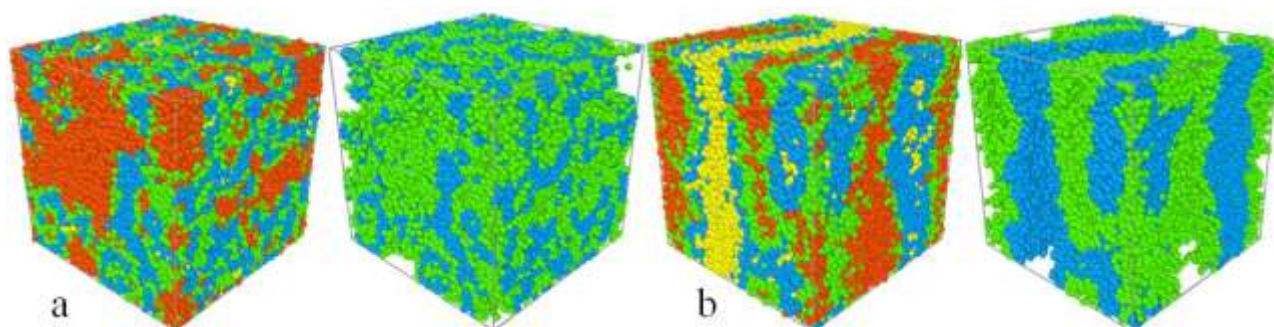


Figure S7. Representative morphology snapshots for ternary mixtures at triblock copolymer concentration $c_{cp} = 0.5$. The compositions are $A_8/A_2B_4A_2/B_8$ for (a), and $A_8/A_7B_{14}A_7/B_8$ for (b). The red and yellow spheres represent bead A and bead B of homopolymers, and the green and blue spheres represent beads A and B of the copolymers.