

Study on the diffusivity of polymer in crowded environments with periodically distributed nanoparticles

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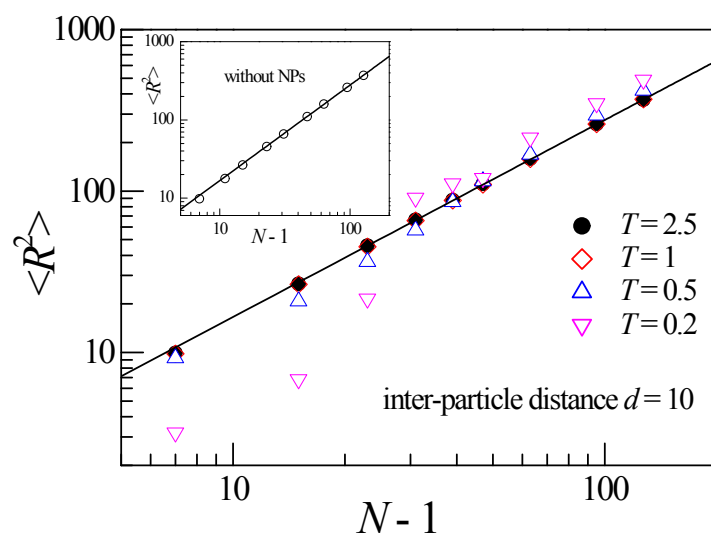


Fig. S1 Log-log plot of the mean square end-to-end distance $\langle R^2 \rangle$ on the number of bonds $N - 1$ for polymer in the system of inter-particle distance $d = 10$ at different temperatures. The straight solid line with the slope 1.22 is the best fit for $T = 2.5$. The inset presents the dependence of $\langle R^2 \rangle$ on $N - 1$ for the unperturbed polymer chain in solution.

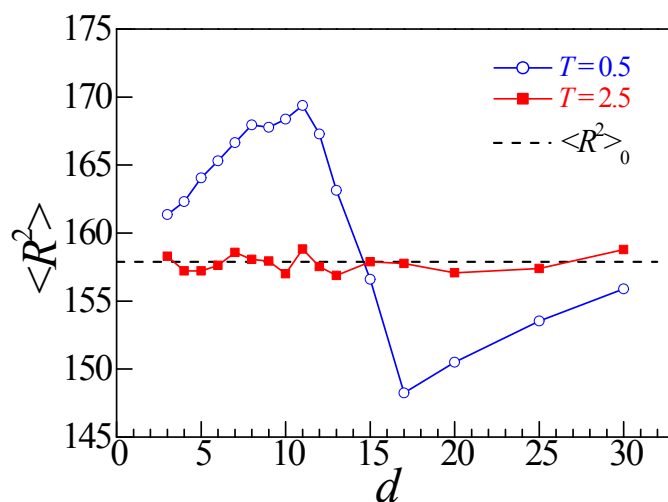


Fig. S2 Dependence of the mean square end-to-end distance $\langle R^2 \rangle$ on the inter-particle distance d at temperatures $T = 0.5$ and $T = 2.5$ for the polymer with $N = 64$. The straight dashed line represents $\langle R^2 \rangle_0$ of unperturbed polymer chain.