Supporting Information

Figure S1. The representative snapshots (side and top views) of $f_B=0.02$ and 0.08. The B beads are enlarged for clarity.
Figure S2. The oscillatory strain ($\varepsilon$) and stress ($\sigma$) are plotted against time for the frequency $\omega=0.04$ and grafting density $f_B=0.02$ by using the time step (a) 0.01 and (b) 0.005.