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Supporting information
Charge-tunable absorption behavior of DNA on graphene

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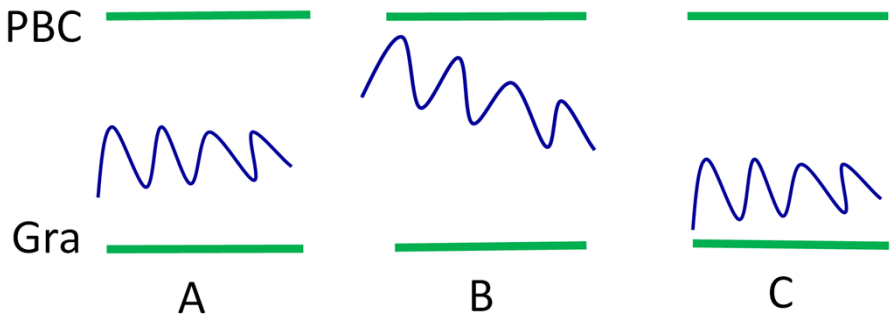

Figure S1. The schematic of DNA absorption on graphene layer (Gra) and the image of graphene layer in z direction. A: The initial simulation setup of DNA on the graphene layer; B: DNA tends to absorb on the image layer; C: DNA finally absorbed on the graphene layer.

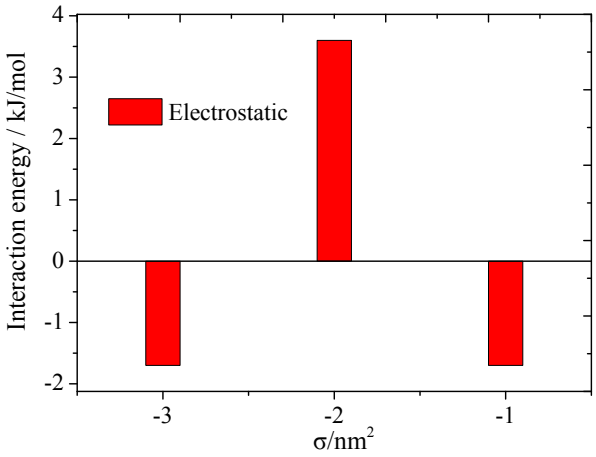

Figure S2. The electrostatic interaction between DNA molecule and graphene with different charge density varied from σ = -1 e/nm^2 to σ = -3 e/nm^2 is calculated from last 5 ns of simulations.