

Electronic Supplementary Information file 1 for the article

Nanotemplate-directed DNA segmental thermal motion

E. V. Dubrovin,^{a,b†} Marc Schächtele^b and T. E. Schäffer^b

^aLomonosov Moscow State University, Faculty of Physics, Leninskie gory, 1/2, 119991 Moscow, Russian Federation.

^bUniversity of Tübingen, Institute of Applied Physics, Auf der Morgenstelle 10, 72076 Tübingen, Germany.

[†]Corresponding author email: dubrovin@polly.phys.msu.ru

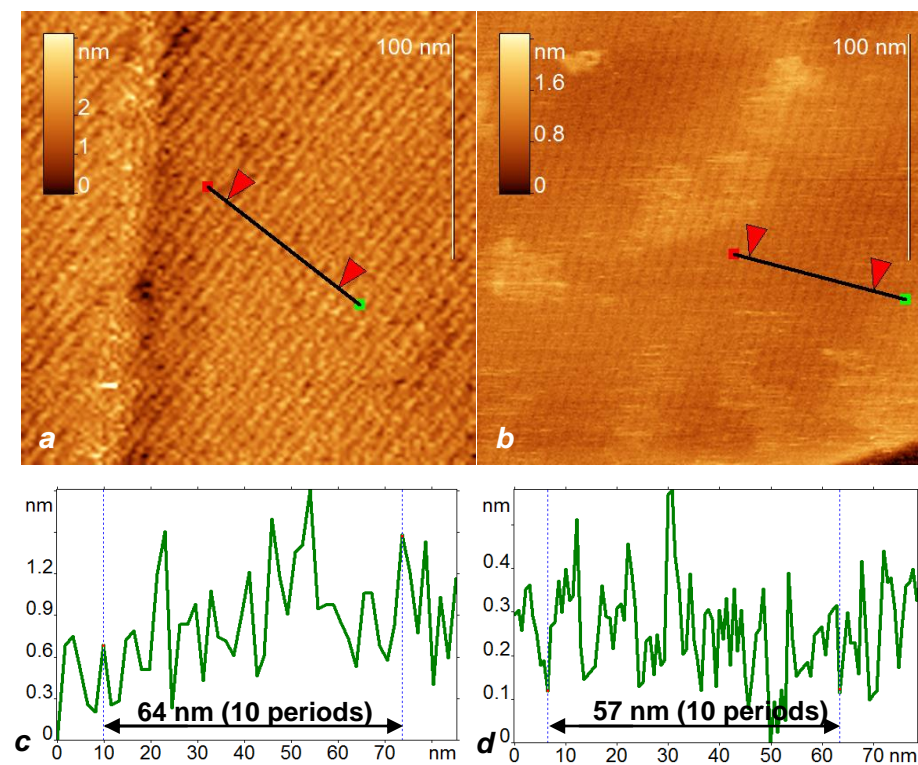


Figure S1. AFM height images of (a) stearylamine and (b) stearic acid nanotemplates on HOPG obtained in 5 mM NaCl solution; (c) and (d) cross-sections along the black line on the corresponding AFM images. The size of the images is 200×200 nm.

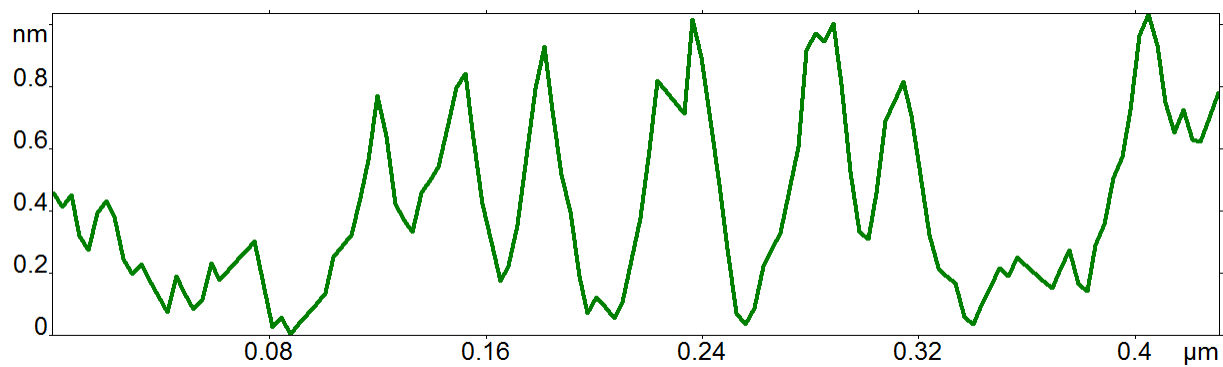
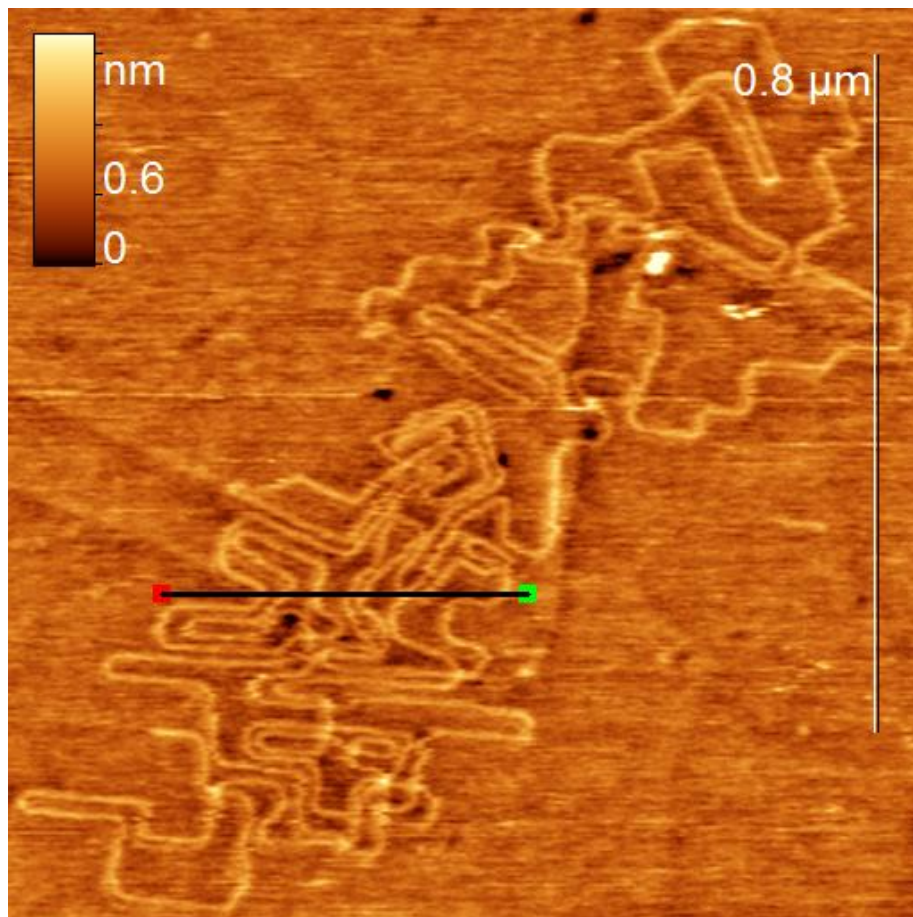


Figure S2. AFM height image of phage (top) T7 DNA fragment adsorbed onto stearylamine nanotemplate on HOPG from 5 mM NaCl solution and height profile (bottom) along the black line on the AFM image. The size of the image is $1 \times 1 \mu\text{m}$.

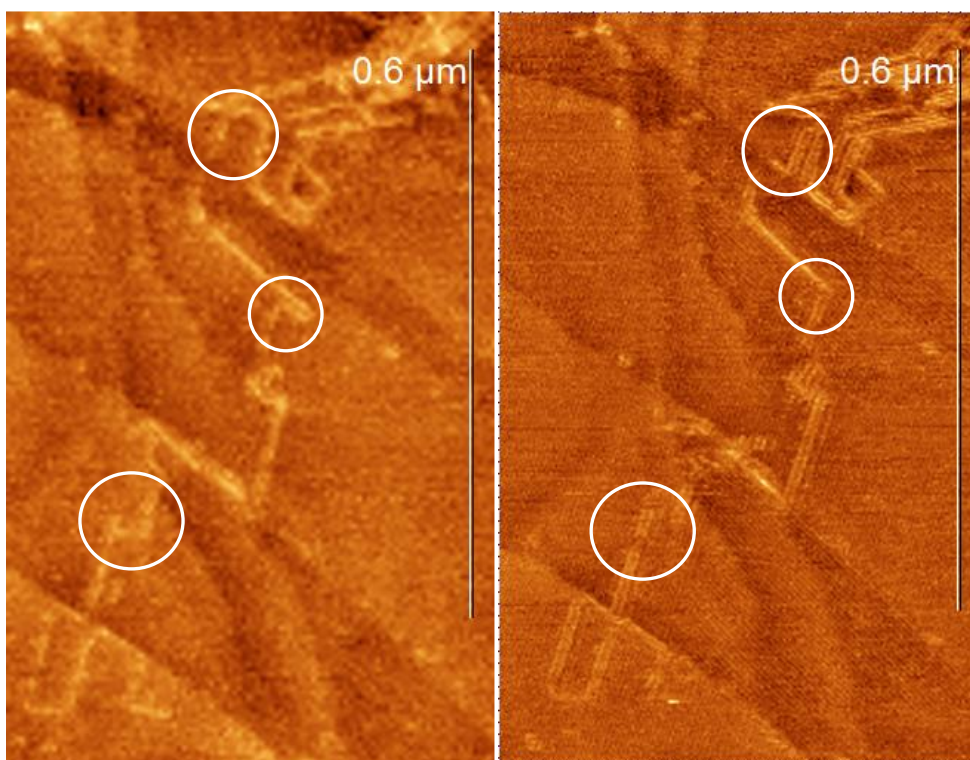


Figure S3. Two successive AFM height images of a phage T7 DNA fragment adsorbed on a stearylamine nanotemplate on graphite in 5 mM NaCl solution obtained in PeakForce mode. The time interval between acquisition of the AFM images was 9 minutes. Three regions with the most pronounced change of the position of DNA fragments are encircled.