

Supplementary Information

**Kelvin probe force microscopy to study electrostatic interactions  
of DNA with lipid-gemini surfactant monolayers  
for gene delivery**

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The following figures are supplied as additional information and data to supplement the main text.

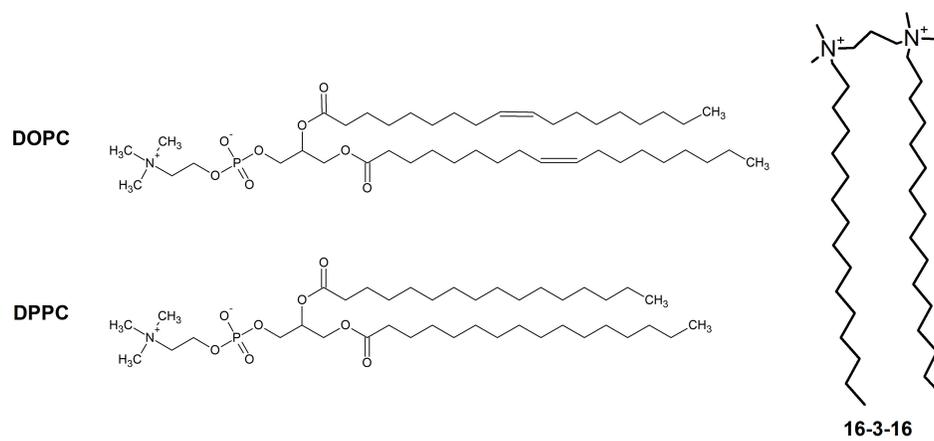


Figure S.1. Basic structures of the two lipids DOPC and DPPC, and the GS 16-3-16 used in this study.

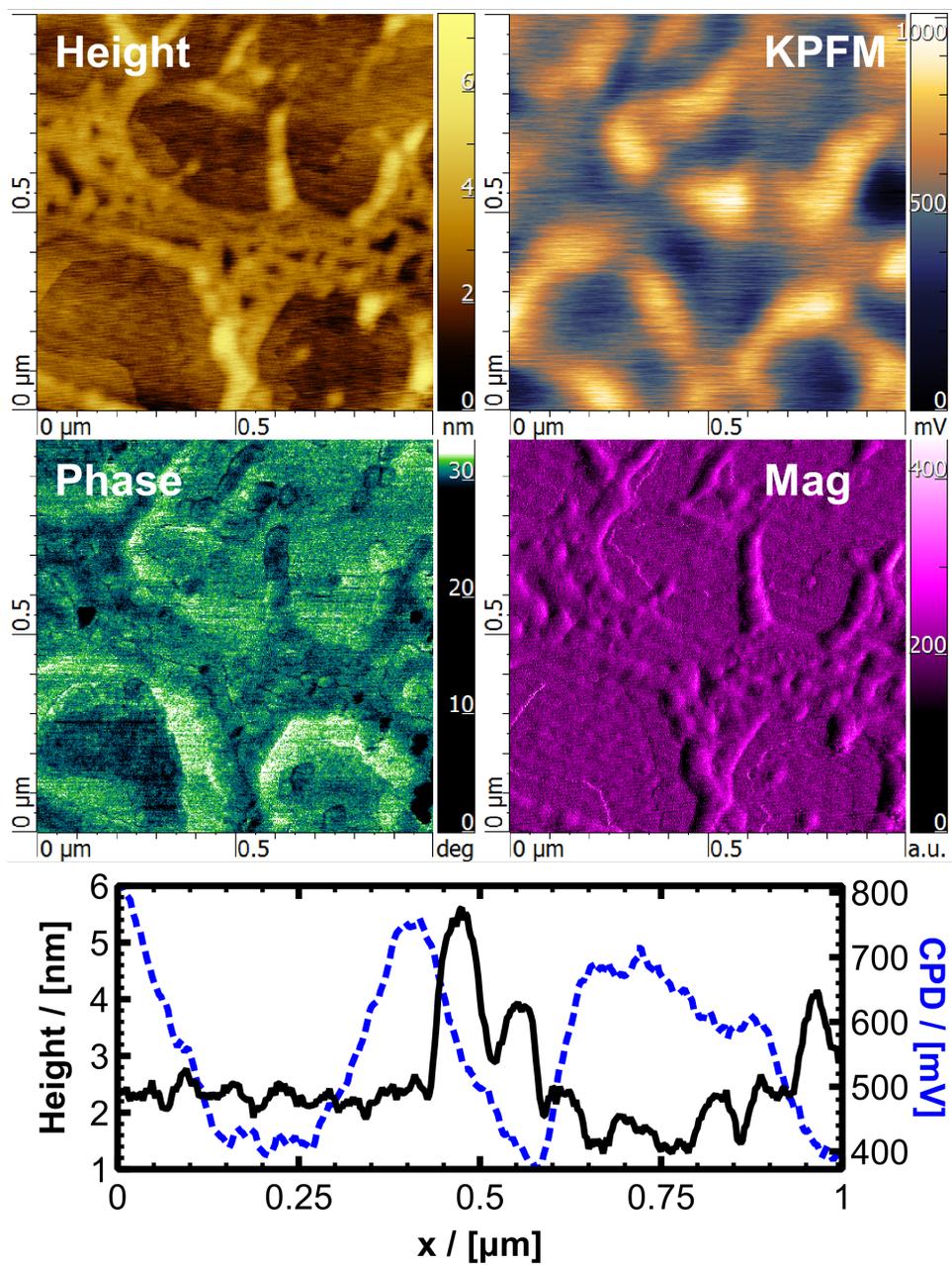


Figure S.2. Additional scan analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in FM mode. The cross section was taken at the  $0.2\mu\text{m}$  level.

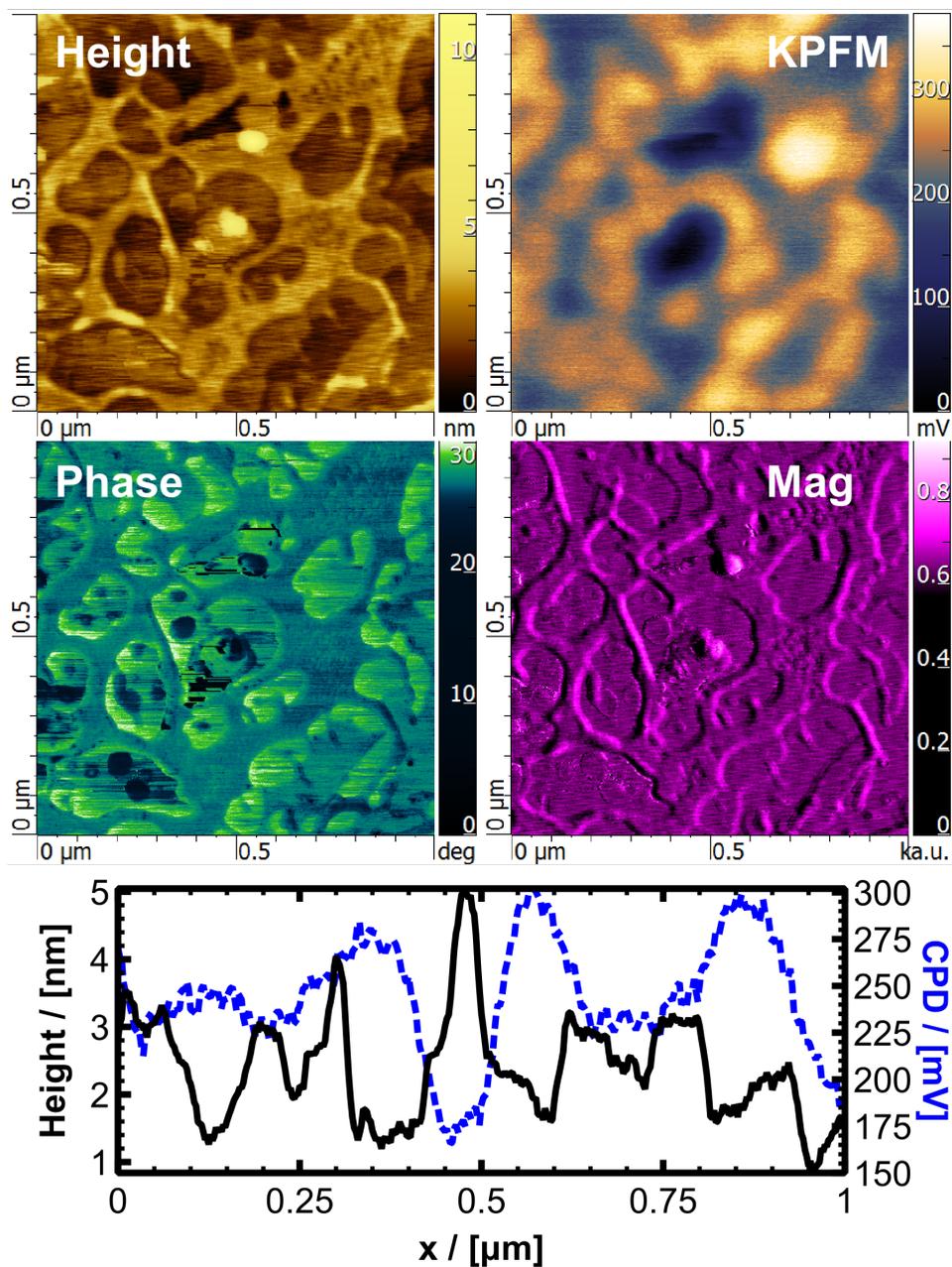


Figure S.3. Additional scan analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in AM mode. The cross section was taken at the 0.5 μm level.

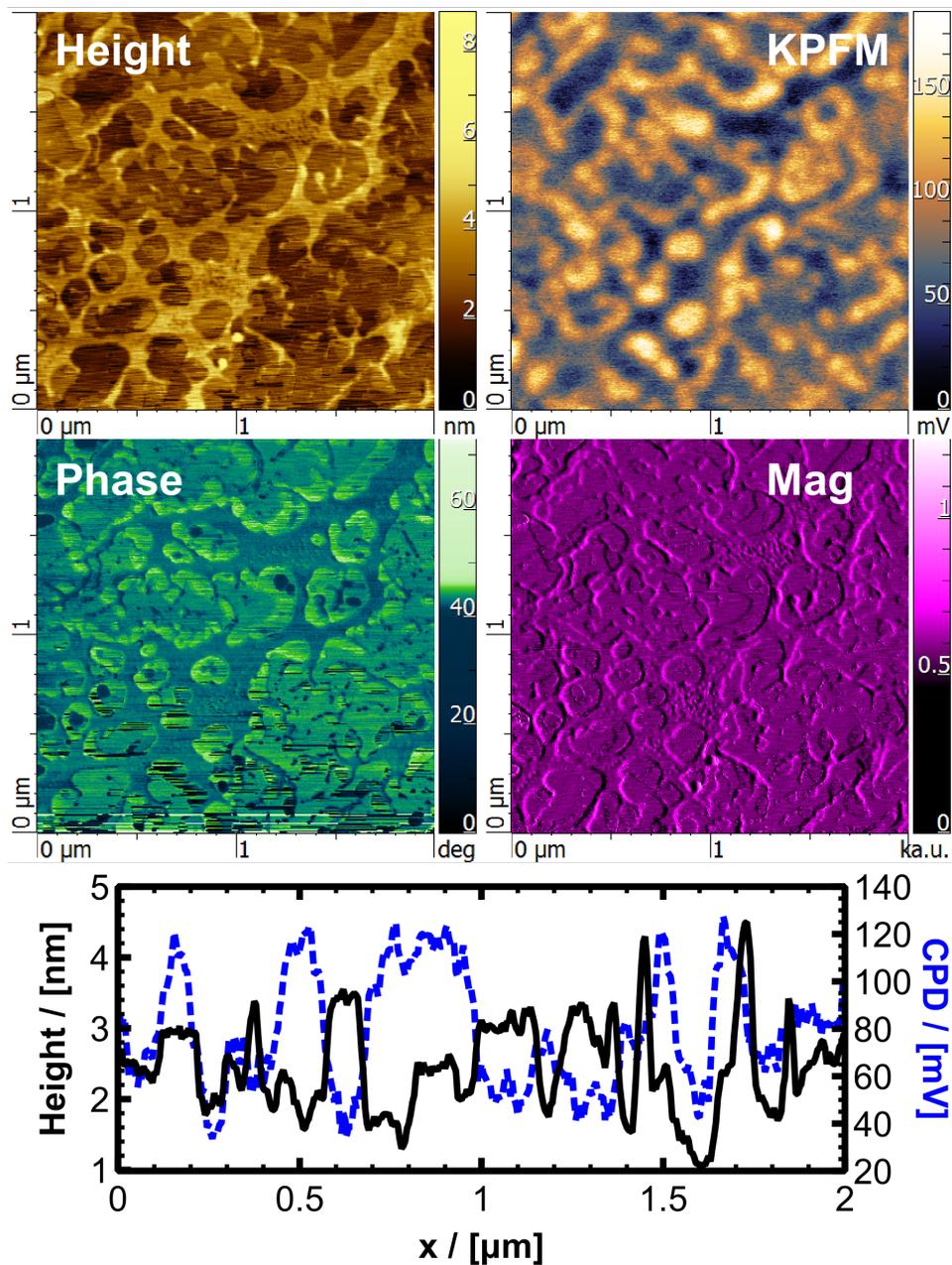


Figure S.4. Additional scan analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in AM mode. The cross section was taken at the  $1.5\mu\text{m}$  level.

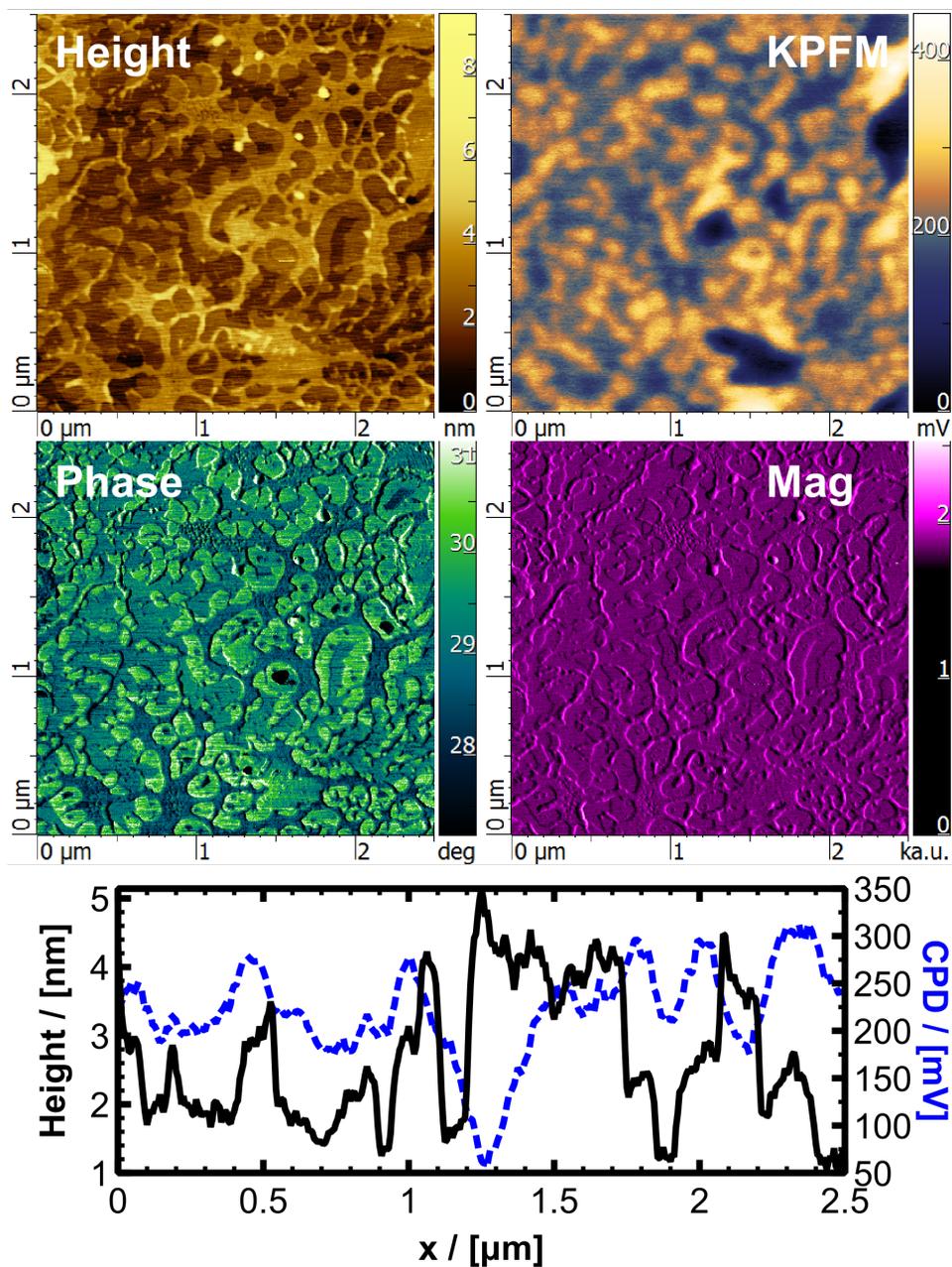


Figure S.5. Additional scan analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in AM mode. The cross section was taken at the  $1.1\mu\text{m}$  level.

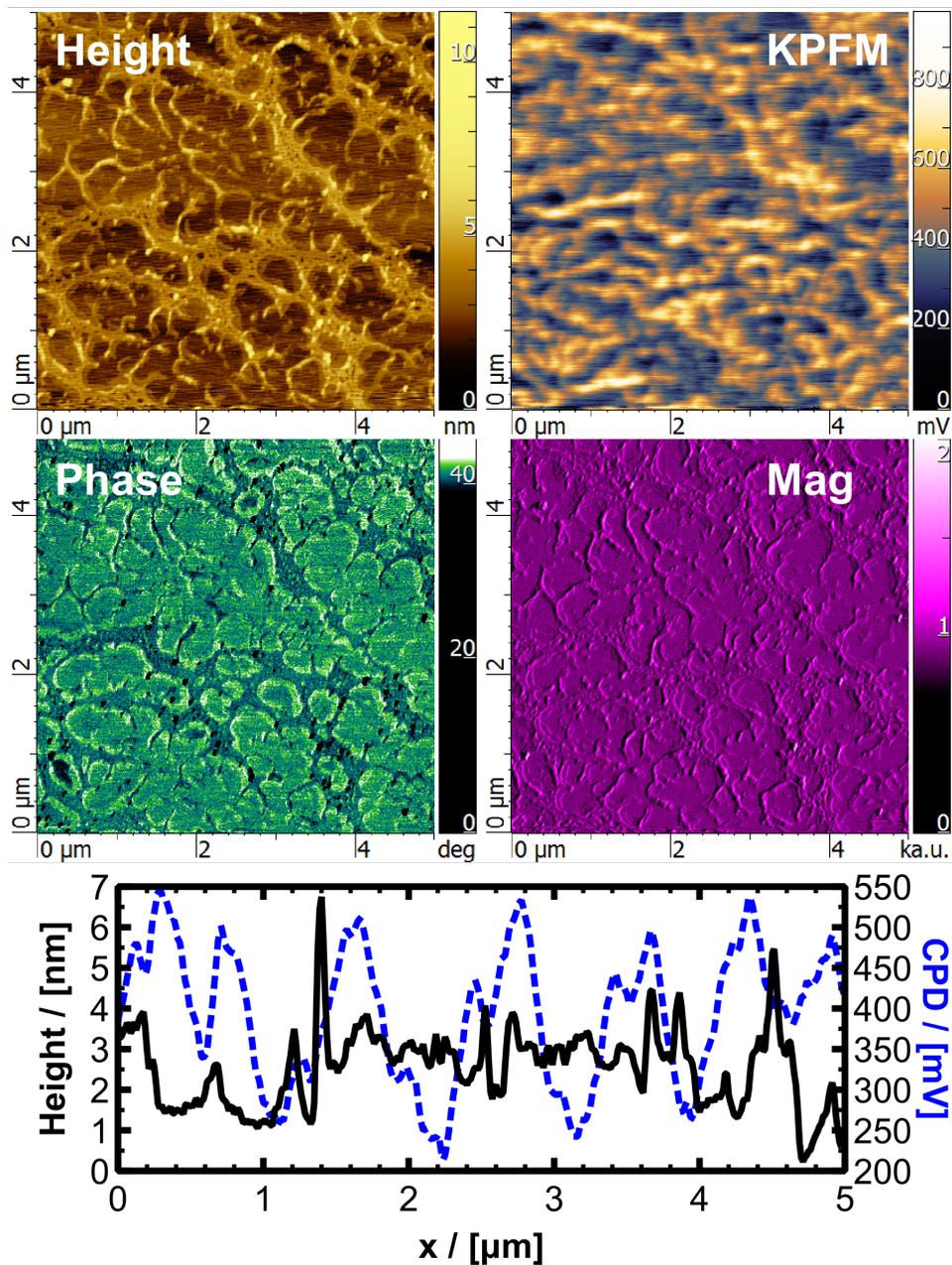


Figure S.6. Additional scan analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in FM mode. The cross section was taken at the  $2.0\mu\text{m}$  level.

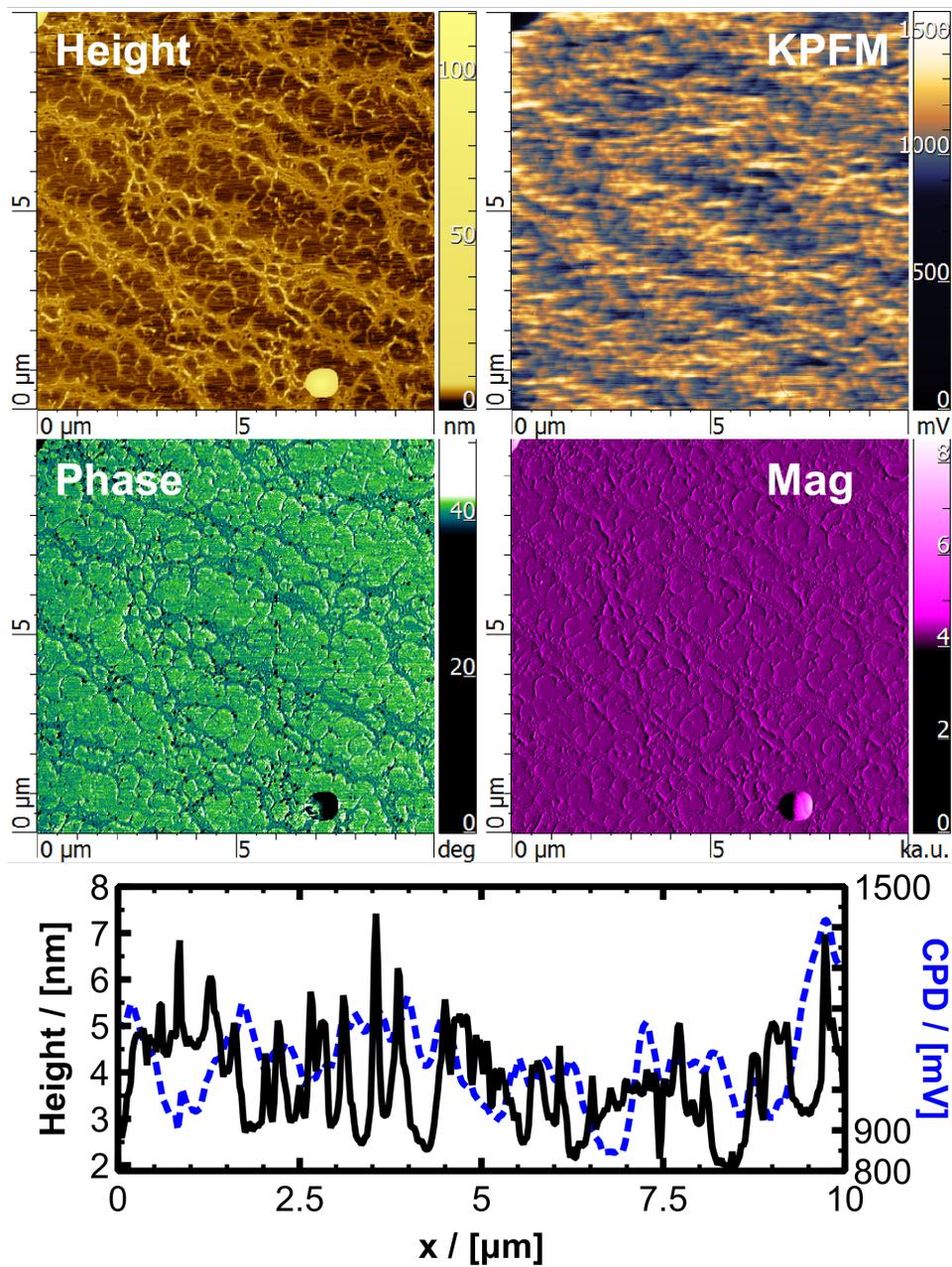


Figure S.7. Additional scan analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in FM mode. The cross section was taken at the  $5.0\mu\text{m}$  level.

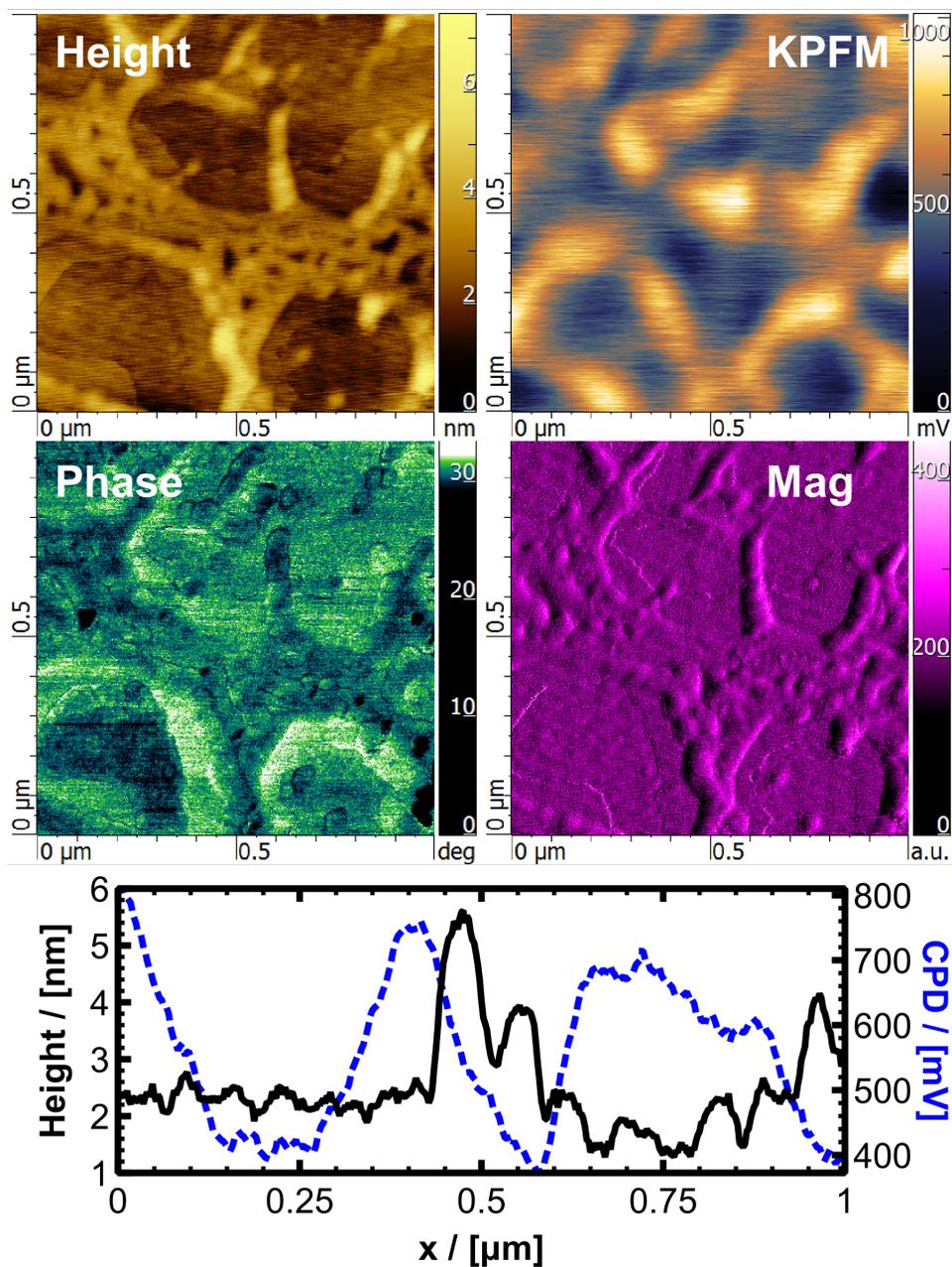


Figure S.8. Additional scan, repeated sample, analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in FM mode. The cross section was taken at the  $0.2\mu\text{m}$  level.

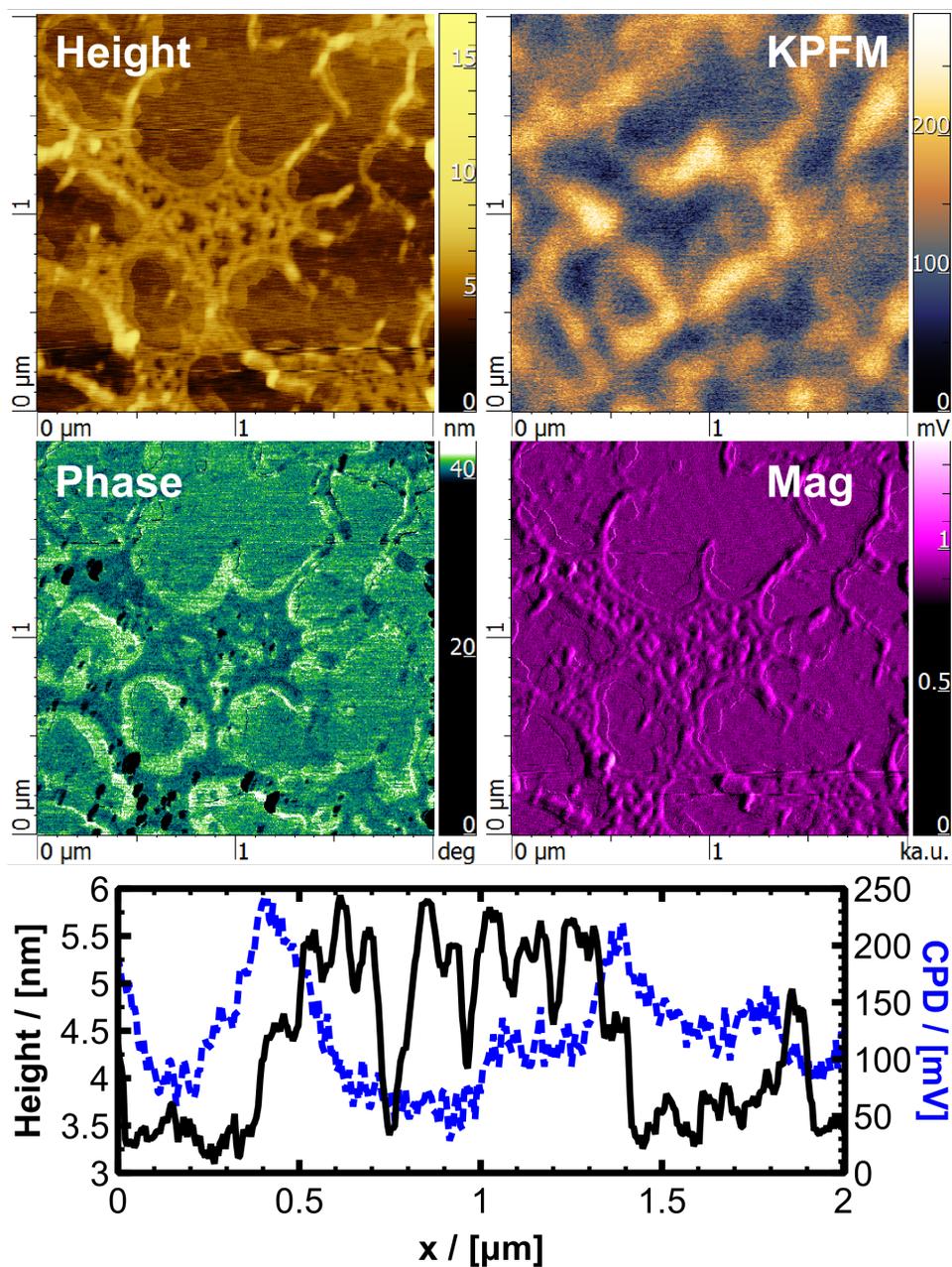


Figure S.9. Additional scan, repeated sample, analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 with DNA. The KPFM imaging was done in FM mode. The cross section was taken at the  $1.0\mu\text{m}$  level.

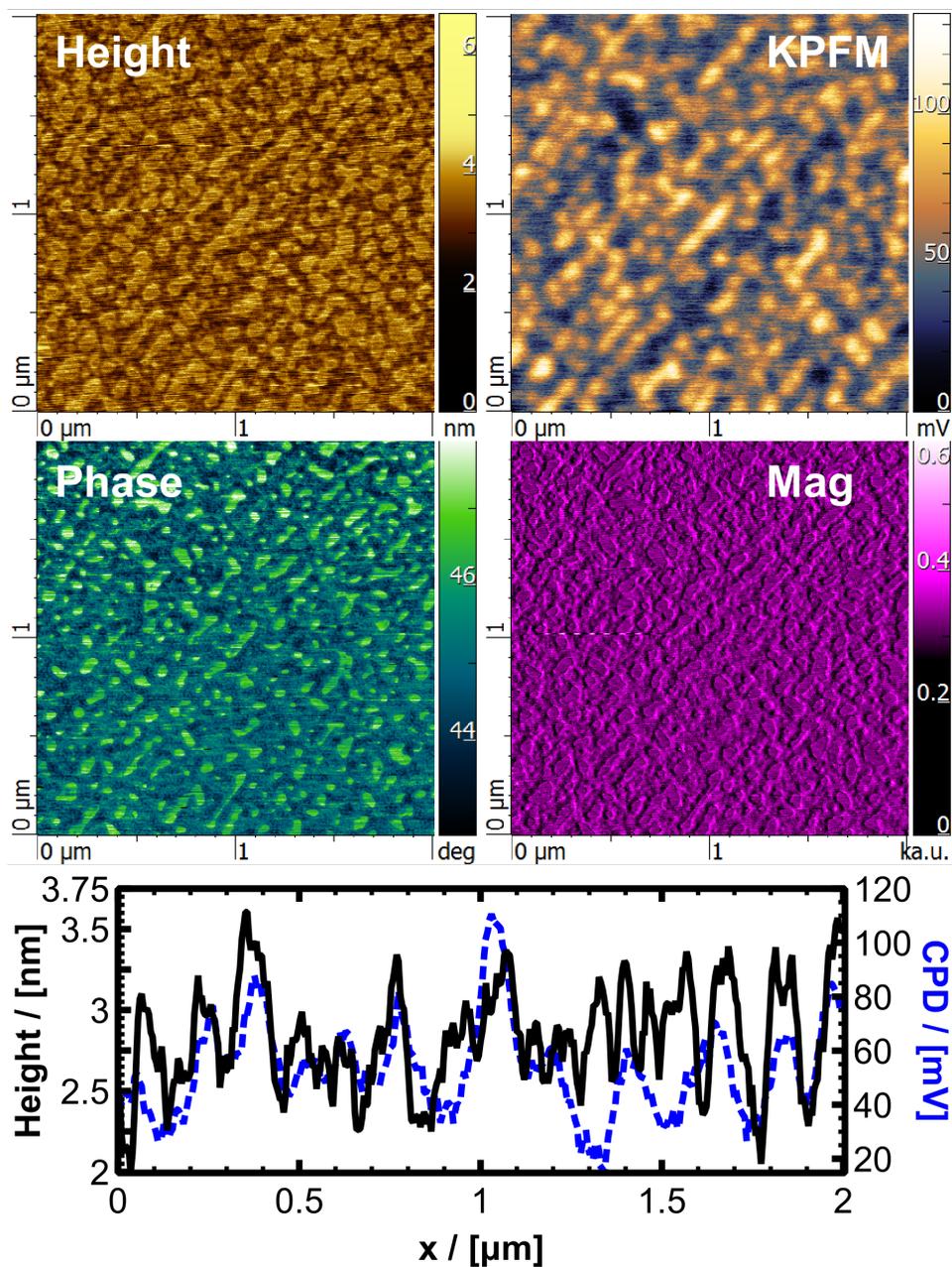


Figure S.10. Additional scan analogous to main text Fig. 3 with cross section. Here we have DOPC-DPPC-GS 16-3-16 without DNA. The KPFM imaging was done in AM mode. The cross section was taken at the  $1.0\mu\text{m}$  level.