

Supplementary Materials

Adsorption of Ferritin at Nanofaceted Al₂O₃ Surfaces

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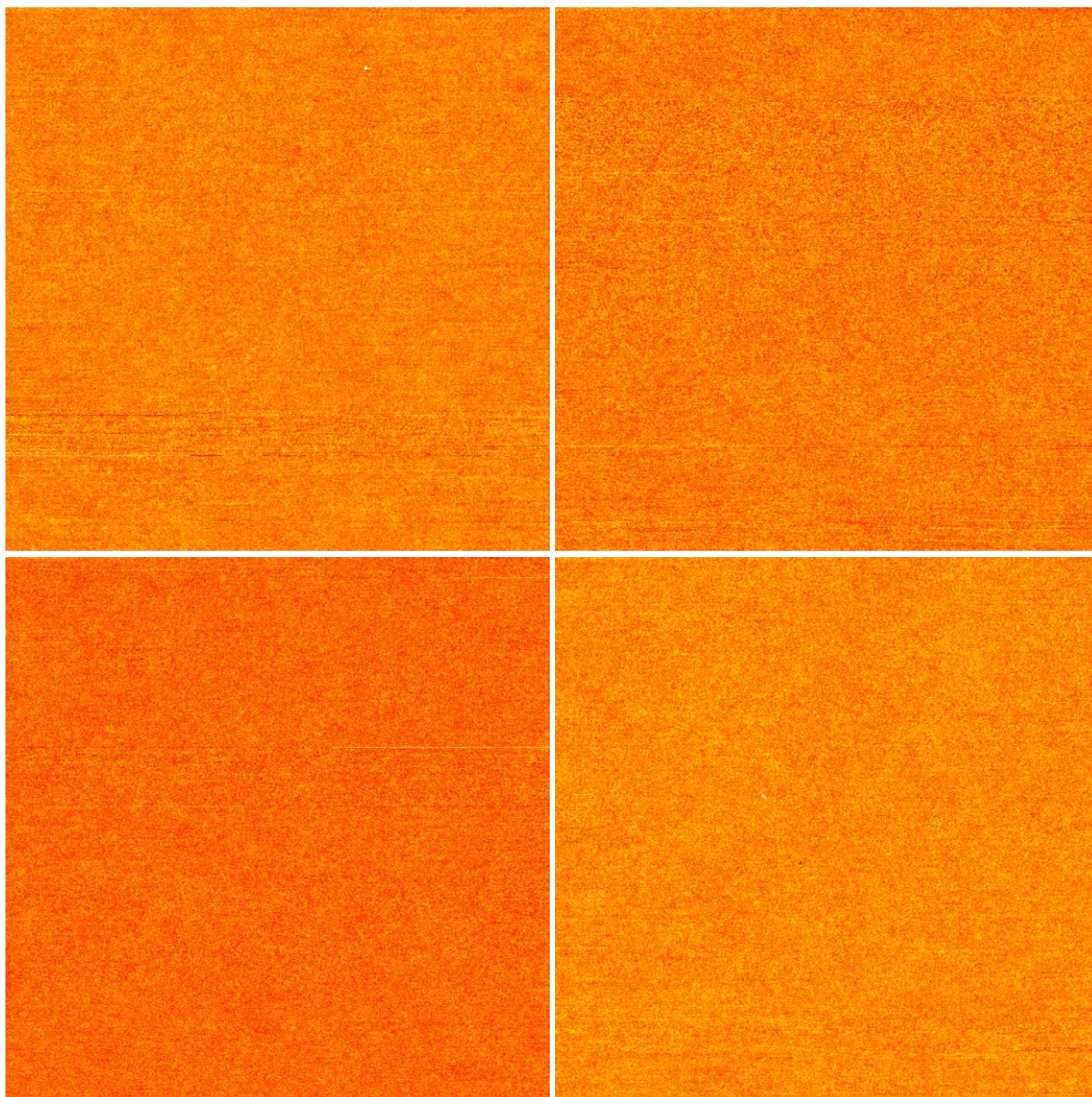


Figure S1: Additional AFM topography images of flat Al_2O_3 substrates before ferritin adsorption. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 4 nm.

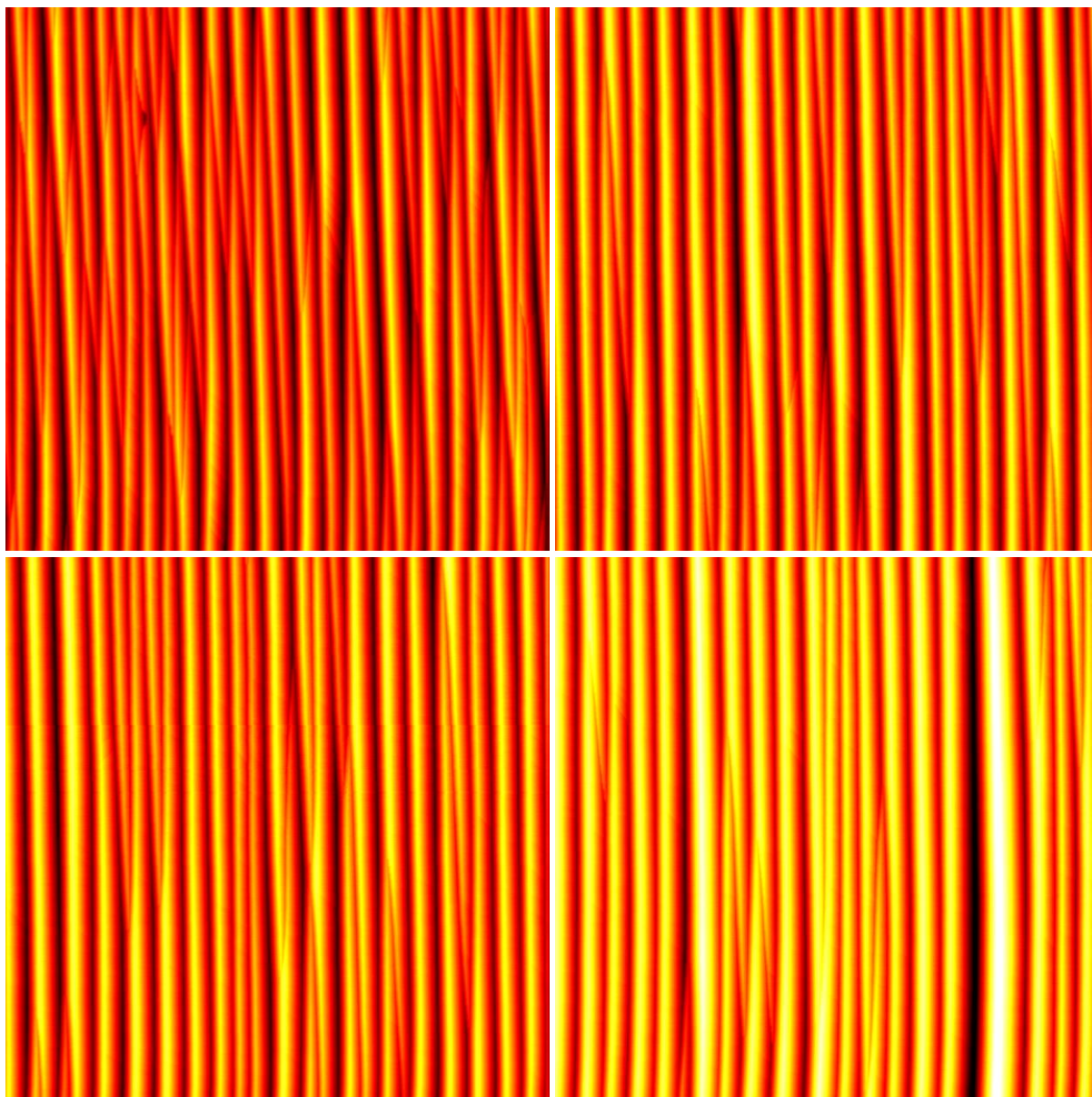


Figure S2: Additional AFM topography images of nanofaceted Al₂O₃ substrates annealed at 1300 °C before ferritin adsorption. The images have a size of 3 x 3 μm^2 and the maximum of the height scales is 50 nm.

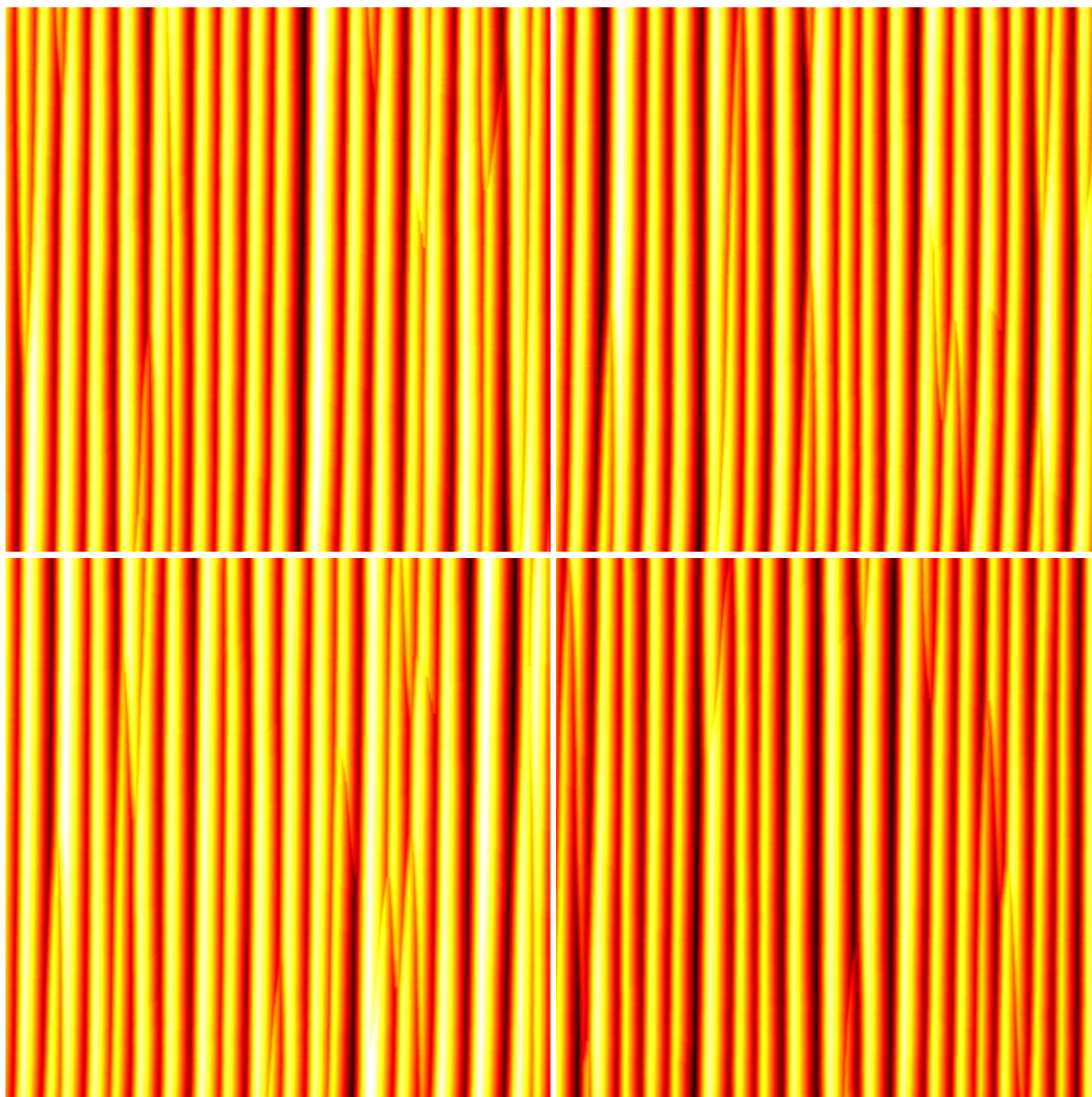


Figure S3: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at $1400\text{ }^\circ\text{C}$ before ferritin adsorption. The images have a size of $3 \times 3\text{ }\mu\text{m}^2$ and the maximum of the height scales is 50 nm .

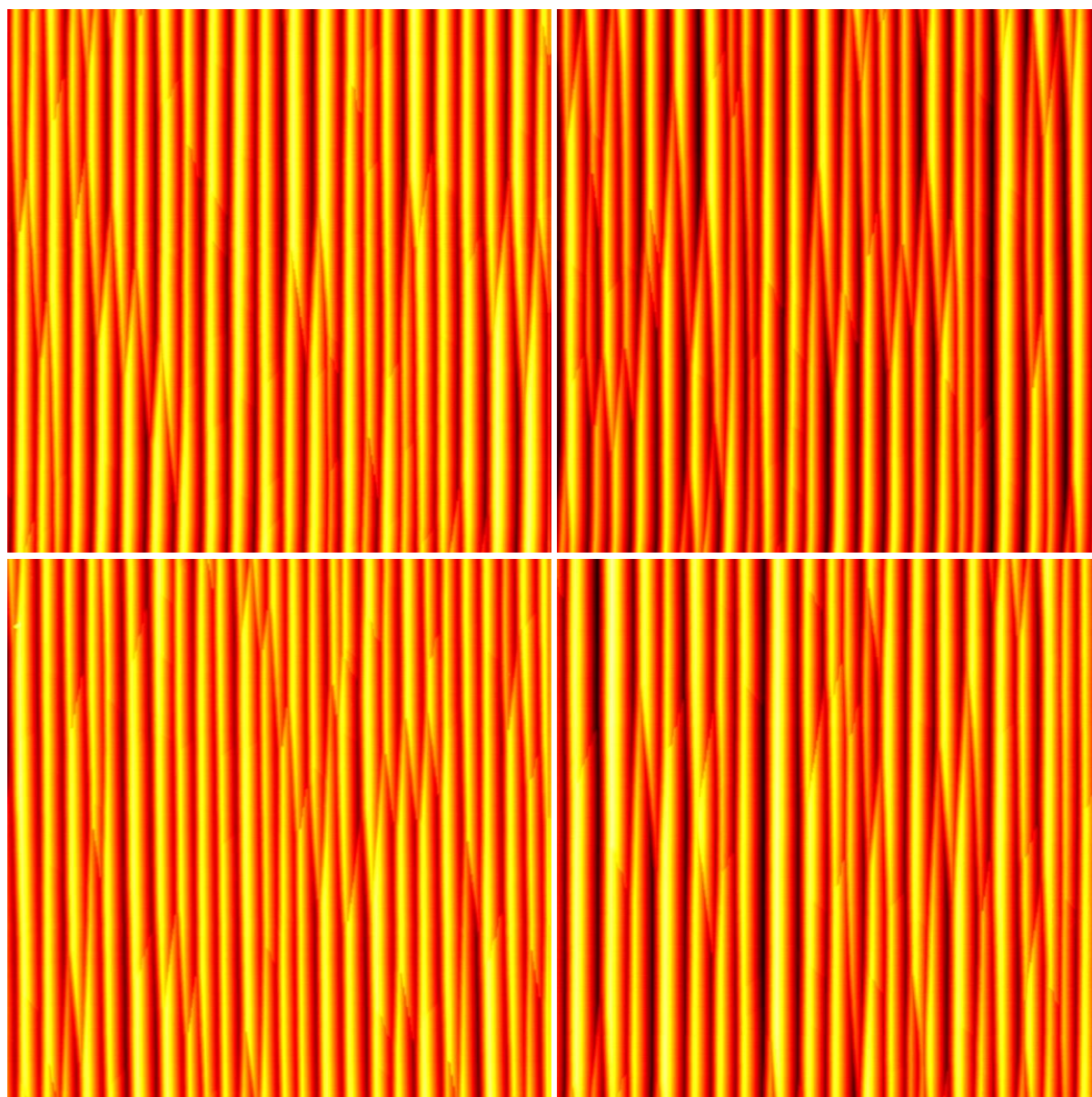


Figure S4: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at 1500 °C before ferritin adsorption. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 50 nm.

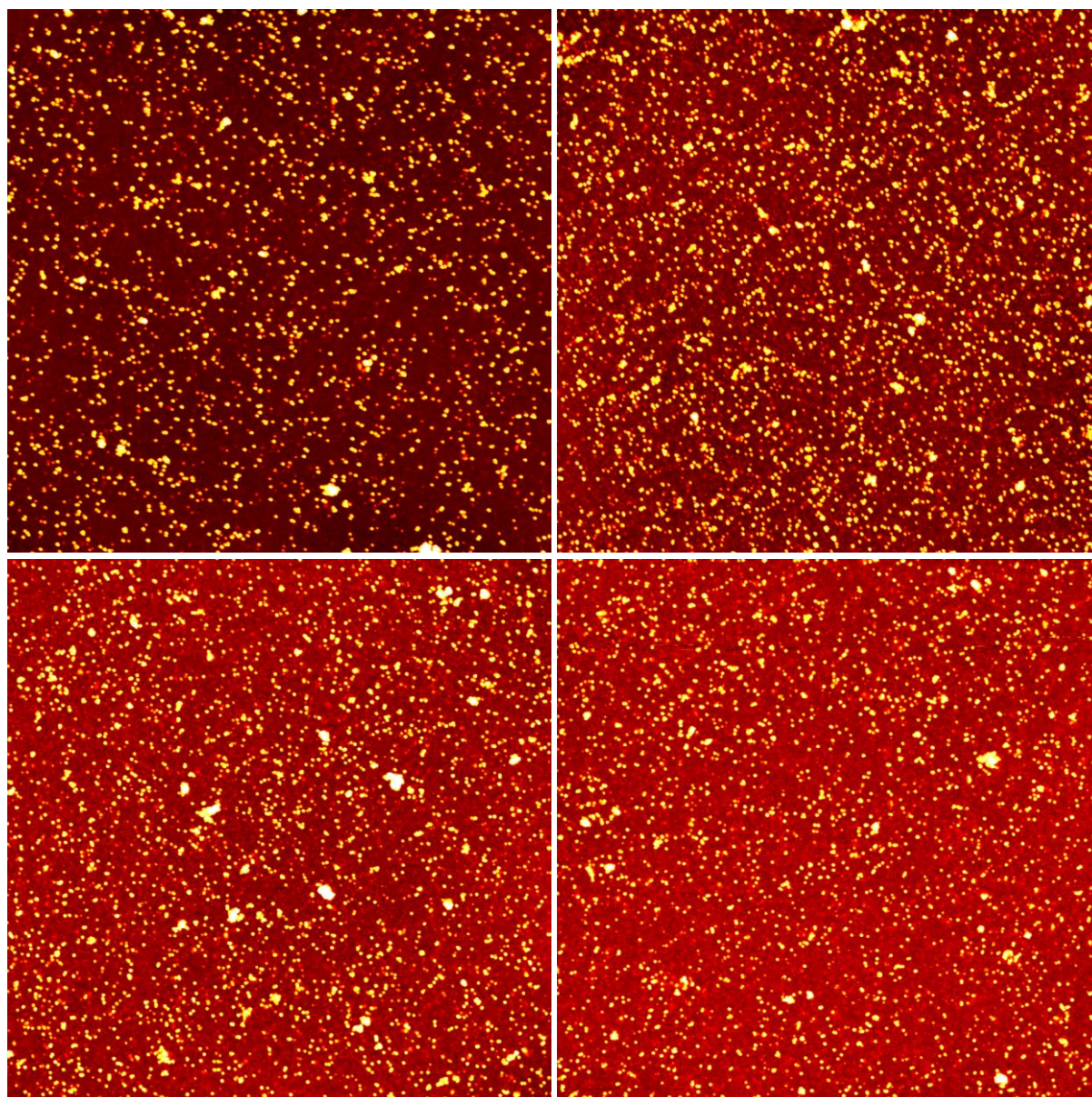


Figure S5: Additional AFM topography images of flat Al₂O₃ substrates after ferritin adsorption at 10 mg/ml. The images have a size of 3 x 3 μm^2 and the maximum of the height scales is 12 nm.

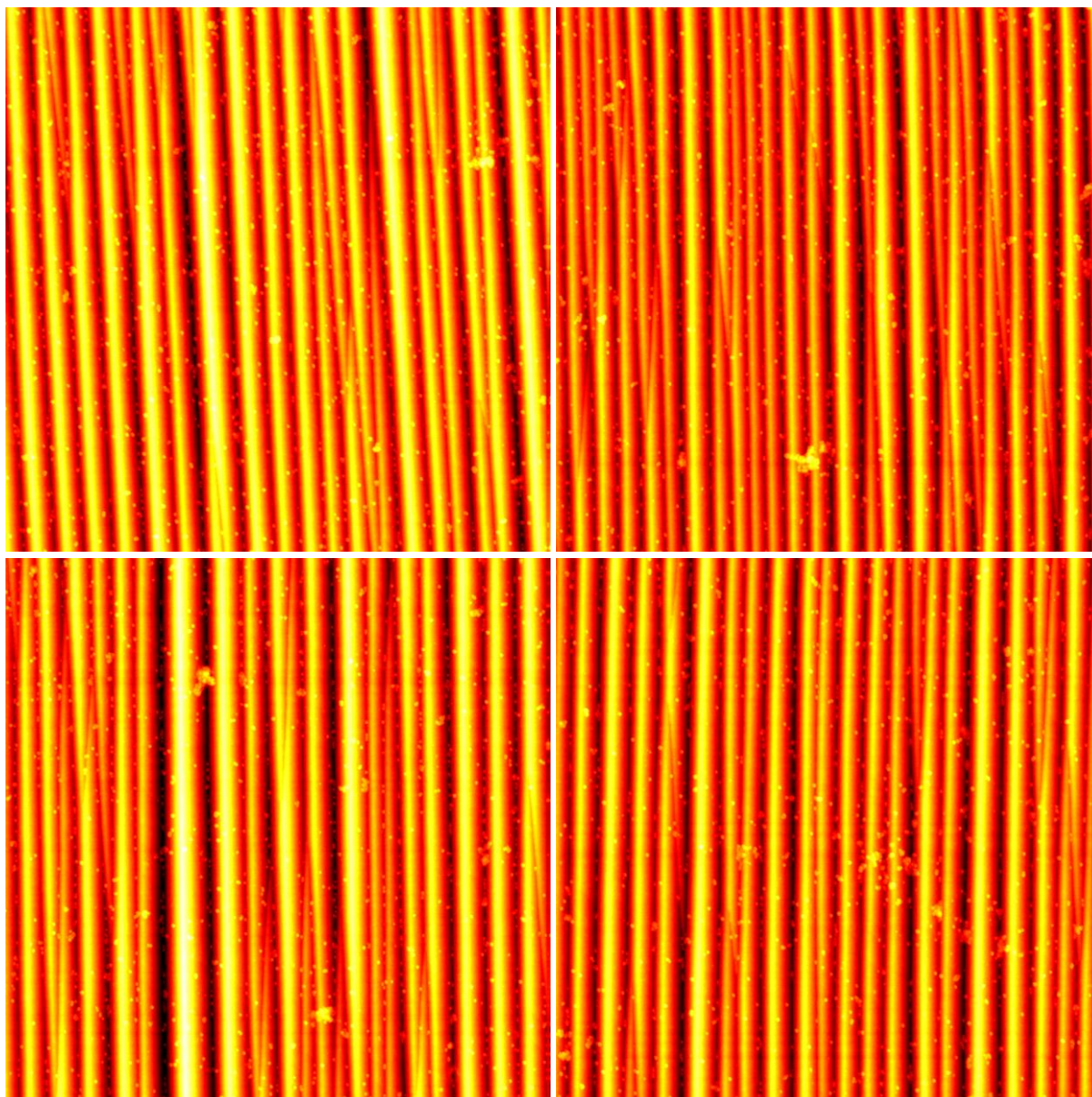


Figure S6: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at 1300 °C after ferritin adsorption at 10 mg/ml. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 50 nm.

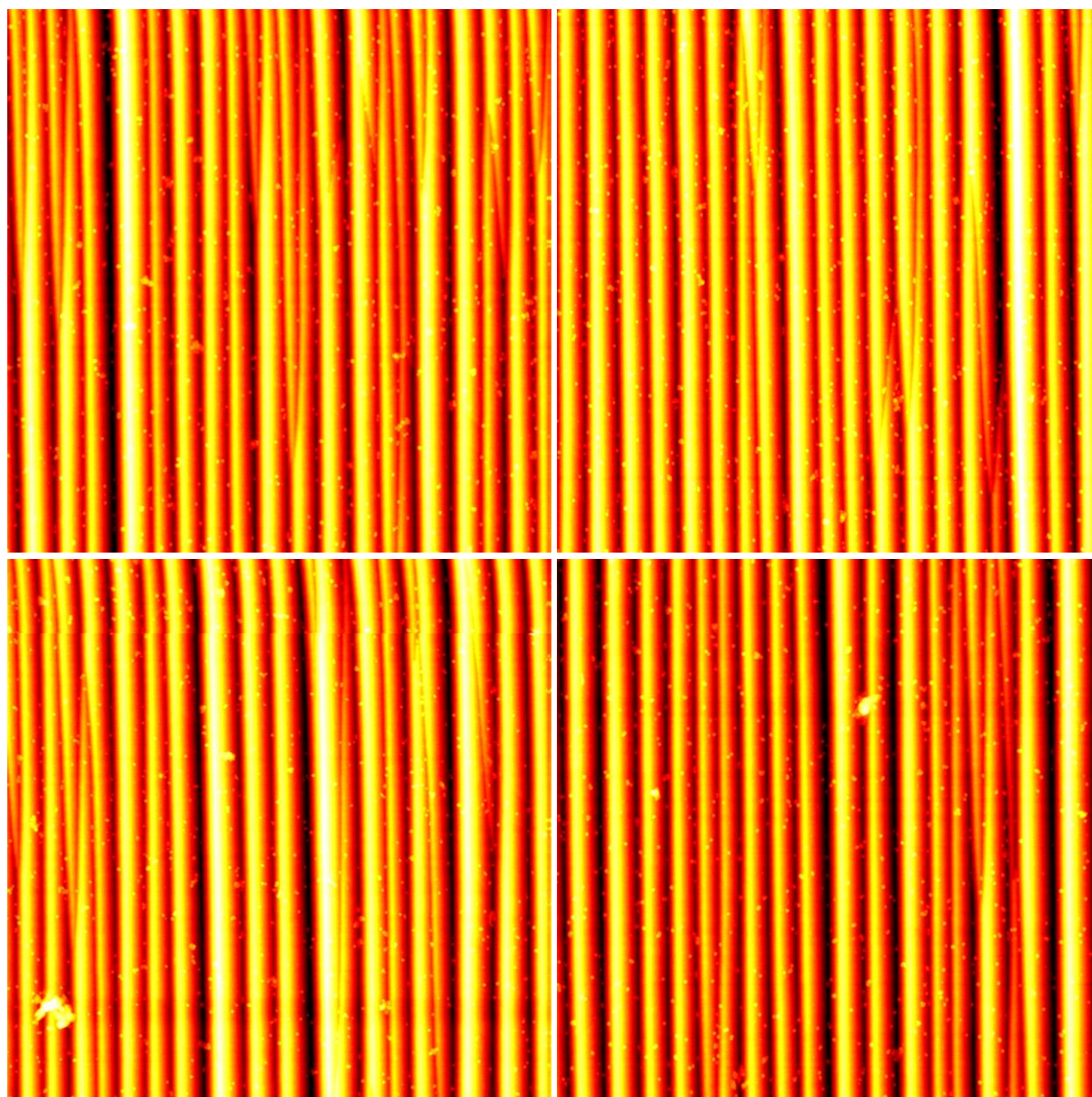


Figure S7: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at $1400\text{ }^\circ\text{C}$ after ferritin adsorption at 10 mg/ml . The images have a size of $3 \times 3\text{ }\mu\text{m}^2$ and the maximum of the height scales is 50 nm .

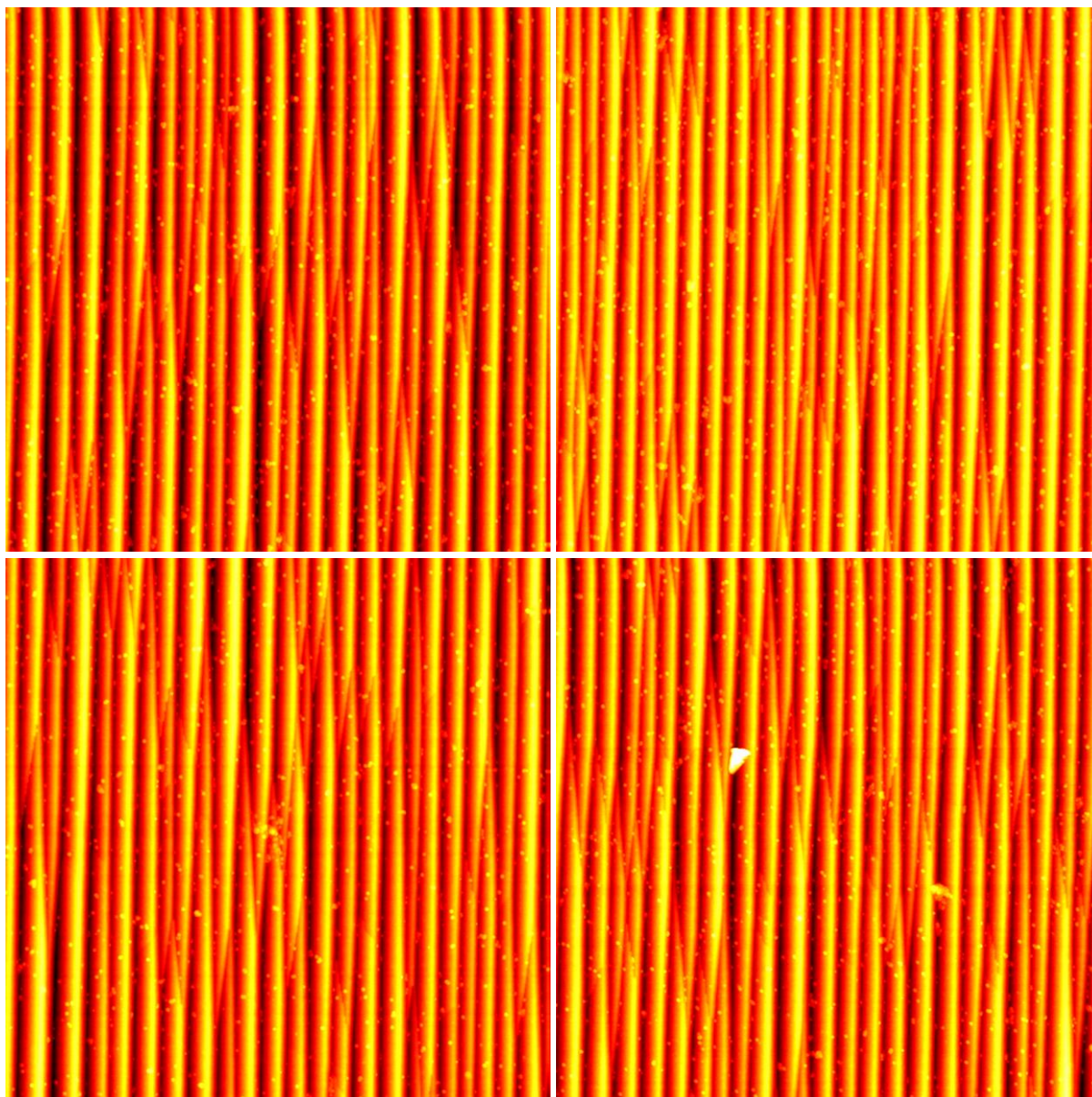


Figure S8: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at 1500 °C after ferritin adsorption at 10 mg/ml. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 50 nm.

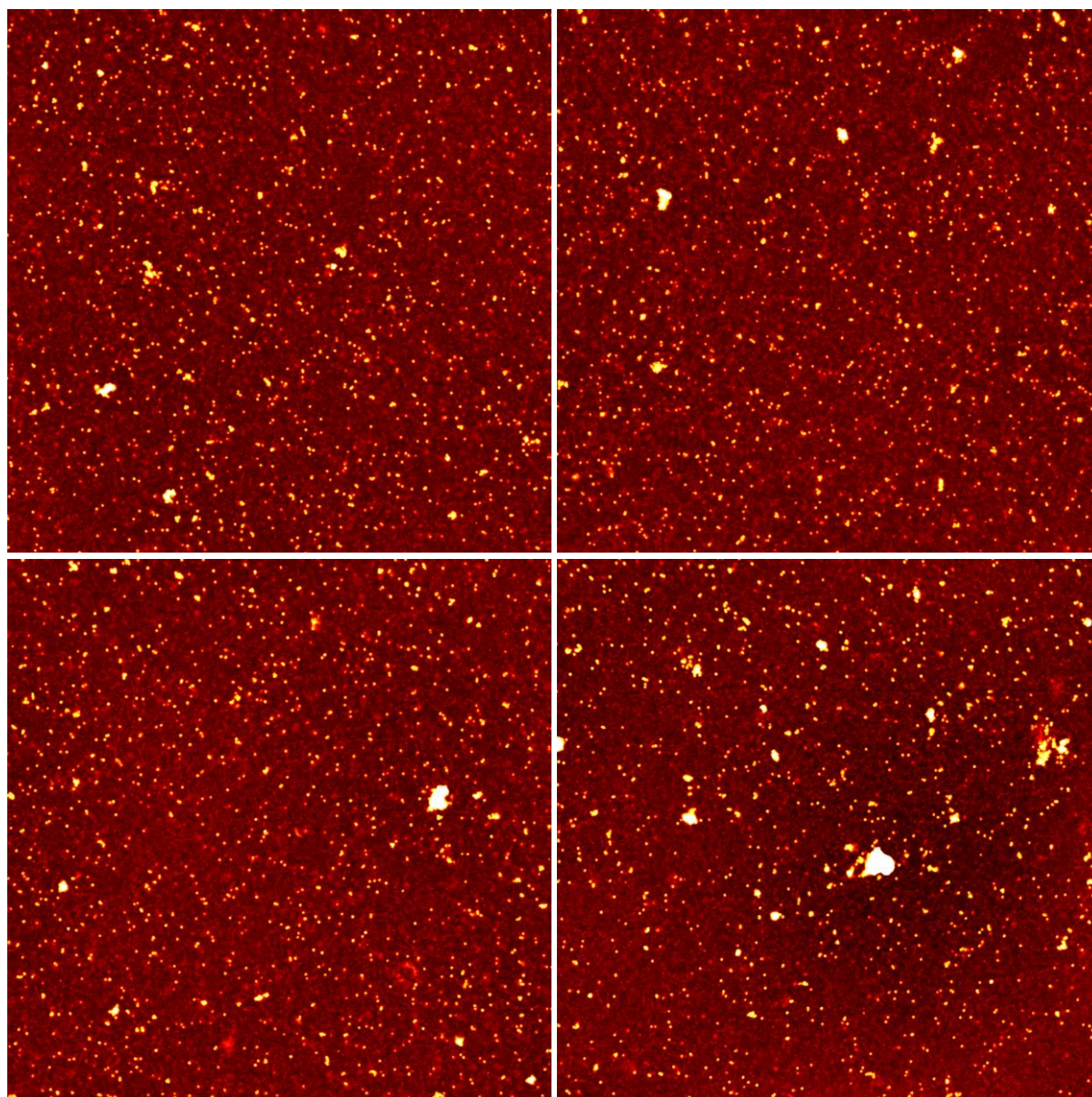


Figure S9: Additional AFM topography images of flat Al_2O_3 substrates after ferritin adsorption at 30 mg/ml. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 12 nm.

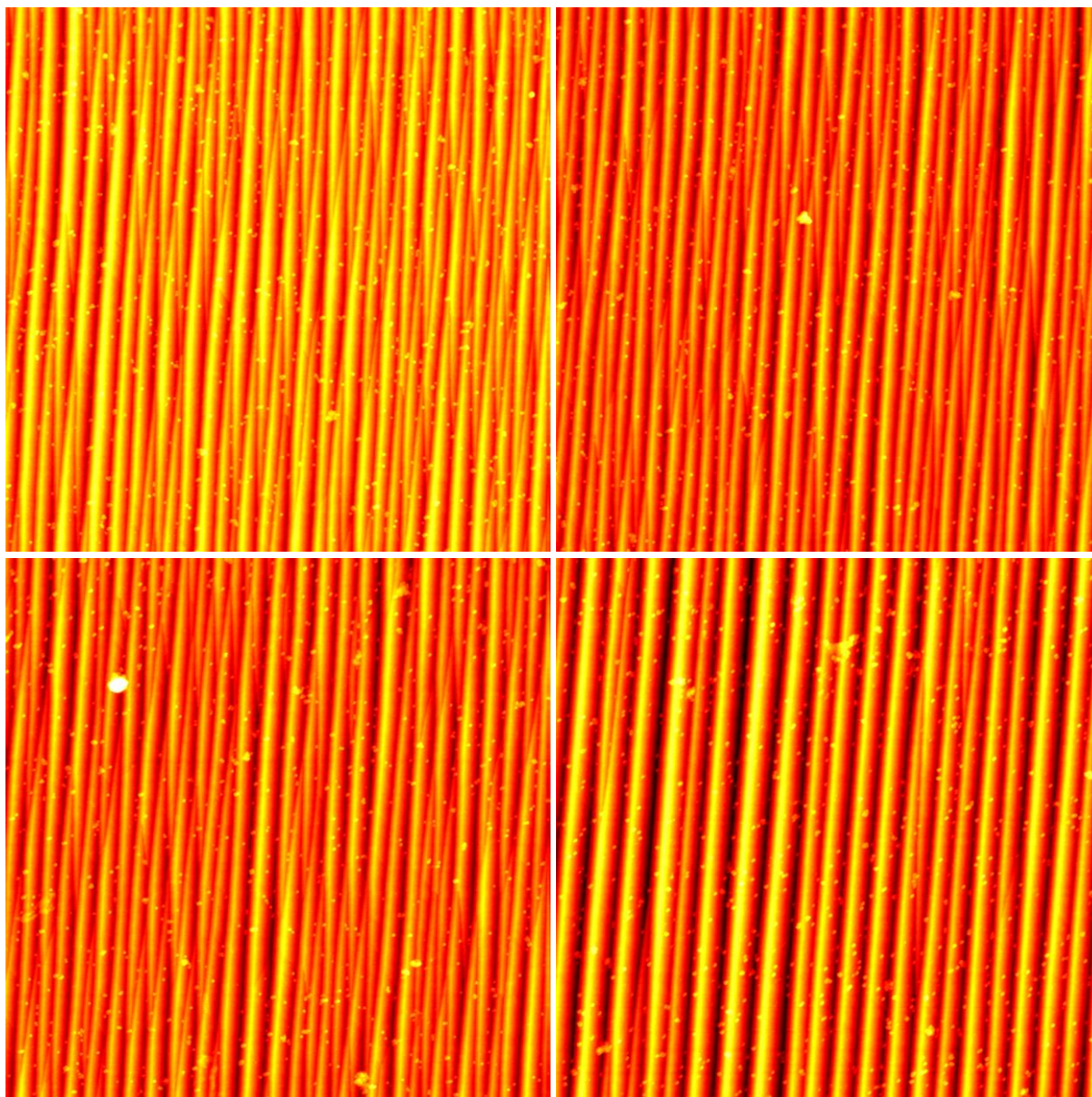


Figure S10: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at 1300 °C after ferritin adsorption at 30 mg/ml. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 50 nm.

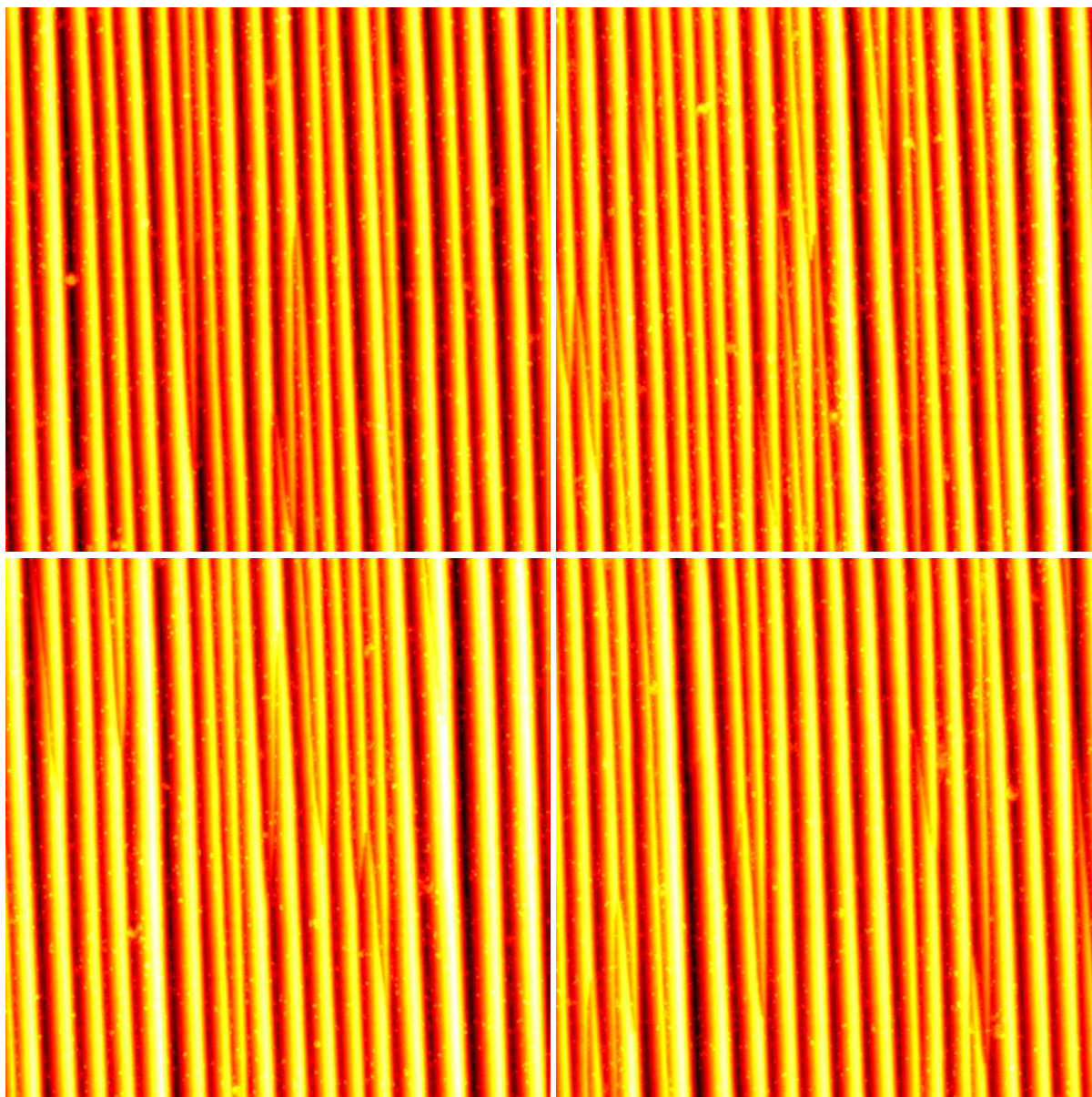


Figure S11: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at 1400 °C after ferritin adsorption at 30 mg/ml. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 50 nm.

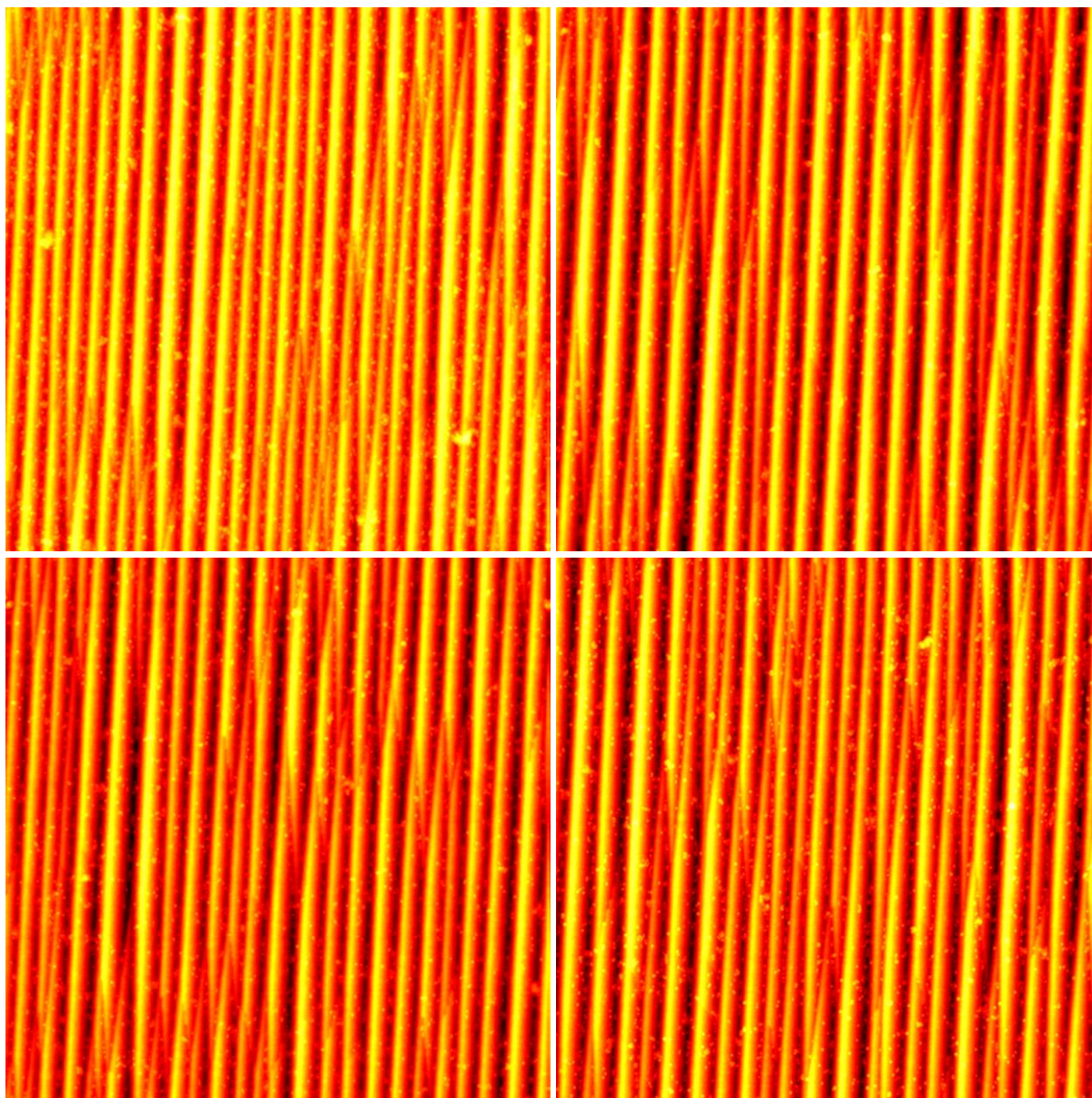


Figure S12: Additional AFM topography images of nanofaceted Al_2O_3 substrates annealed at 1500 °C after ferritin adsorption at 30 mg/ml. The images have a size of $3 \times 3 \mu\text{m}^2$ and the maximum of the height scales is 50 nm.

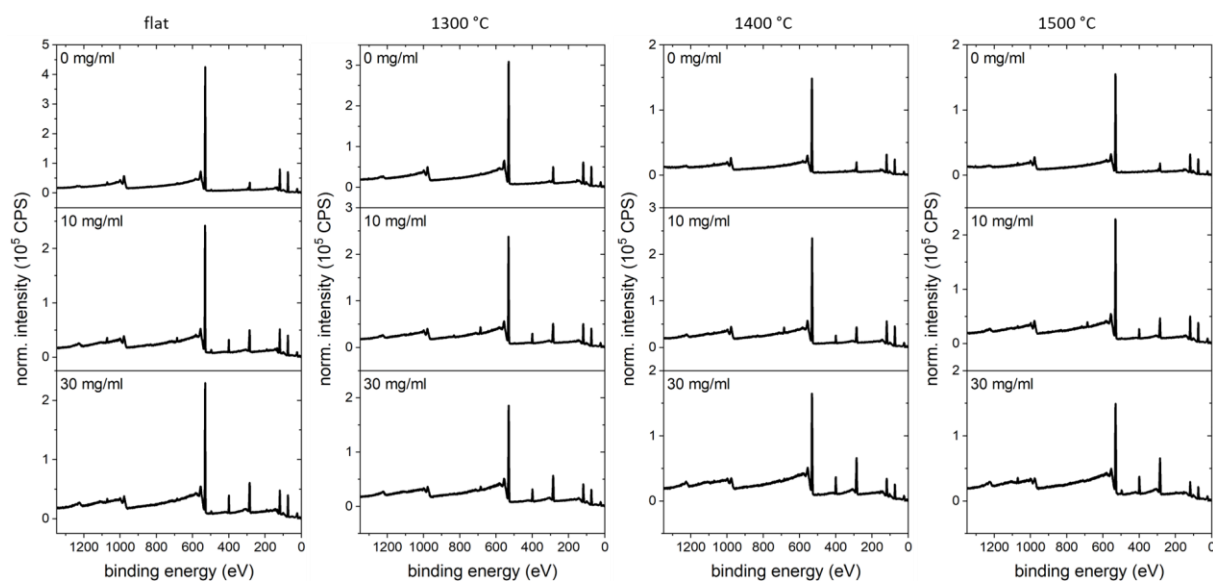


Figure S13: Survey spectra of the four Al_2O_3 substrate surfaces before and after ferritin adsorption at 10 and 30 mg/ml, respectively.

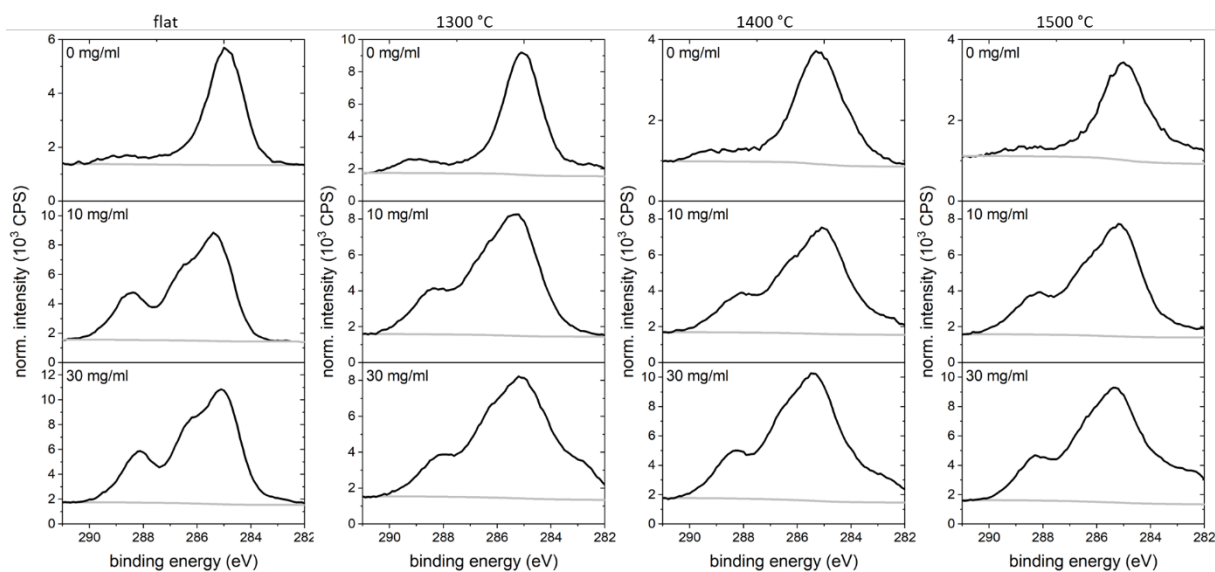


Figure S14: High-resolution C 1s spectra of the four Al_2O_3 substrate surfaces before and after ferritin adsorption at 10 and 30 mg/ml, respectively. The background used for quantification is indicated in grey.

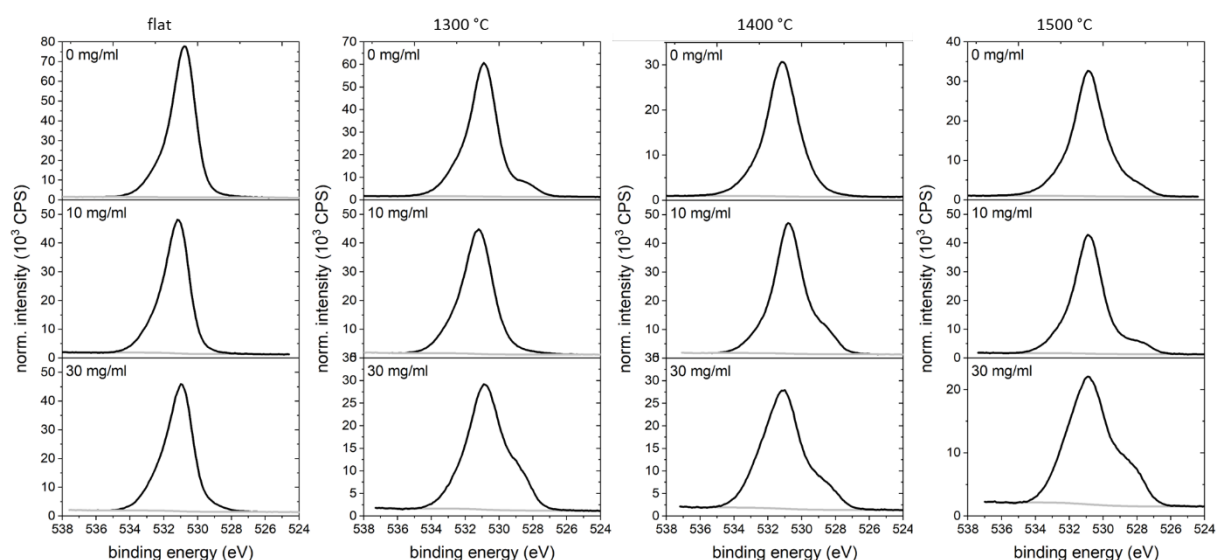


Figure S15: High-resolution O 1s spectra of the four Al₂O₃ substrate surfaces before and after ferritin adsorption at 10 and 30 mg/ml, respectively. The background used for quantification is indicated in grey.

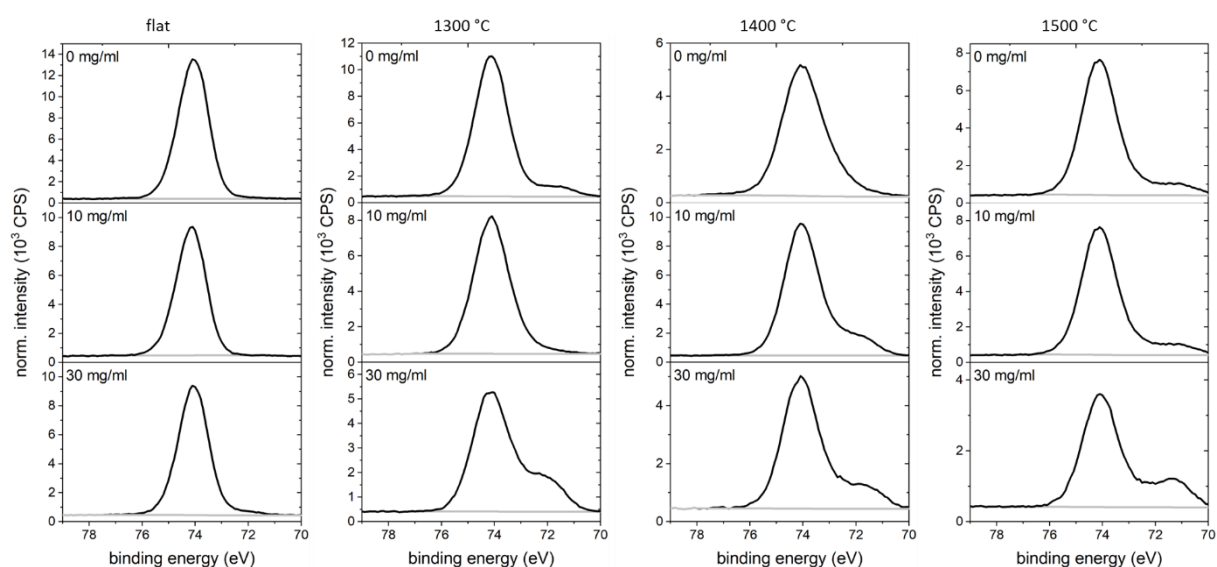


Figure S16: High-resolution Al 2p spectra of the four Al₂O₃ substrate surfaces before and after ferritin adsorption at 10 and 30 mg/ml, respectively. The background used for quantification is indicated in grey.

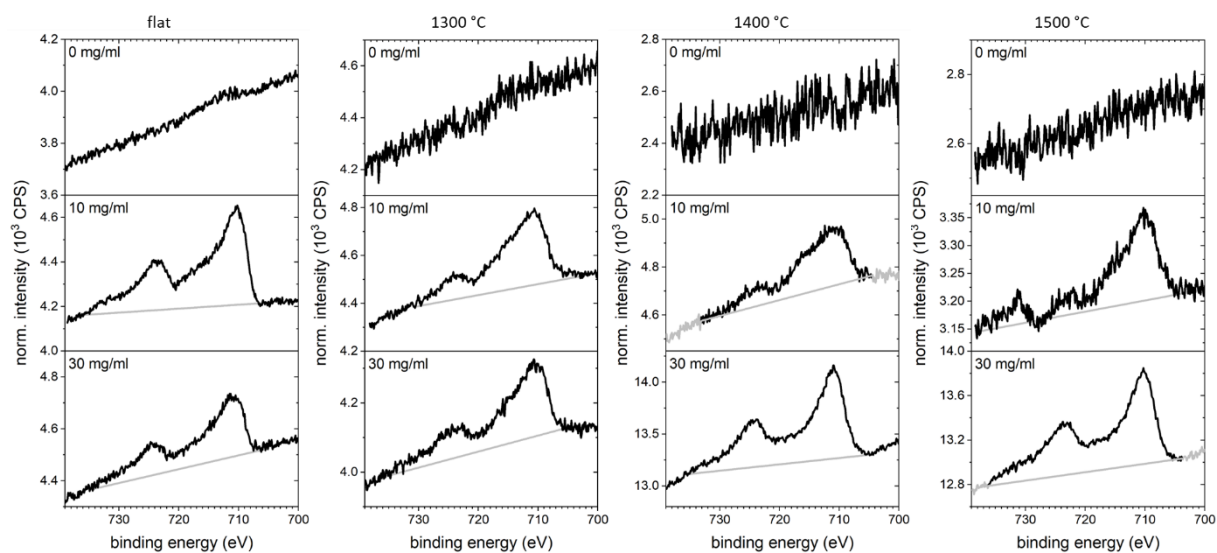


Figure S17: High-resolution Fe 2p spectra of the four Al₂O₃ substrate surfaces before and after ferritin adsorption at 10 and 30 mg/ml, respectively. The background used for quantification is indicated in grey.