

Strain-Dependent Adsorption of *Pseudomonas aeruginosa*-Derived Adhesin-like Peptides at Abiotic Surfaces

Yu Yang, Sabrina Schwiderek, Guido Grundmeier and Adrian Keller *

Technical and Macromolecular Chemistry, Paderborn University, Warburger Str. 100,
33098 Paderborn, Germany

* Correspondence: adrian.keller@uni-paderborn.de, Tel.: +49-5251-60-5722

XPS characterization of the oxide surfaces

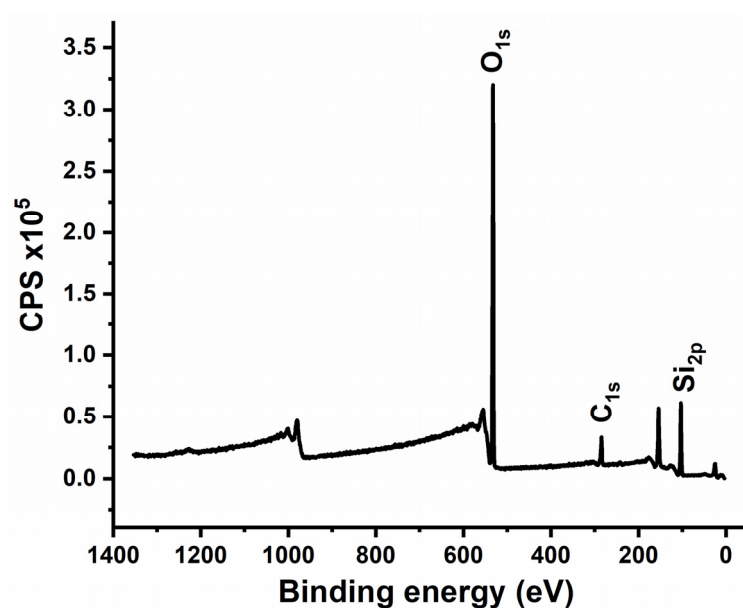


Figure S1. Ex-situ XPS survey of the SiO₂ film.

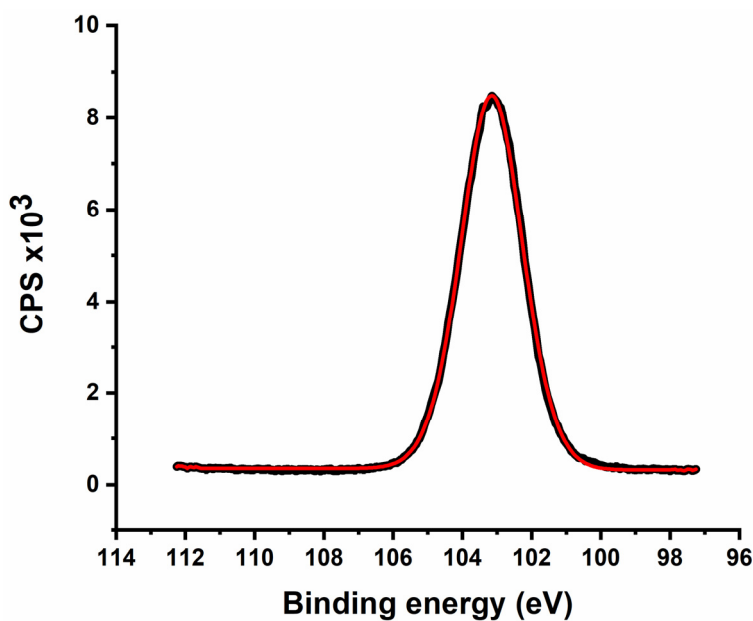


Figure S2. Ex-situ XPS Si_{2p} high-resolution spectrum of the SiO₂ film.

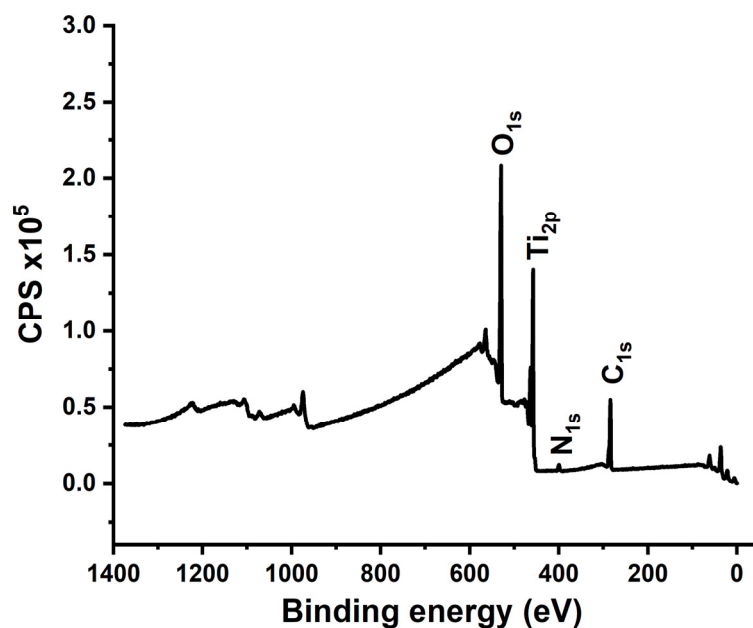


Figure S3. Ex-situ XPS survey of the TiO_x/Ti film.

Table S1. XPS quantification results for the SiO₂ and TiO_x/Ti films.

Sample	C1s / at. %	O1s / at. %	Si2p / at. %	Ti2p / at. %
SiO ₂	10.8 ± 0.8	52.6 ± 0.3	36.6 ± 0.5	-
TiO _x /Ti	40.7 ± 1.1	42.8 ± 0.3	-	16.5 ± 0.8

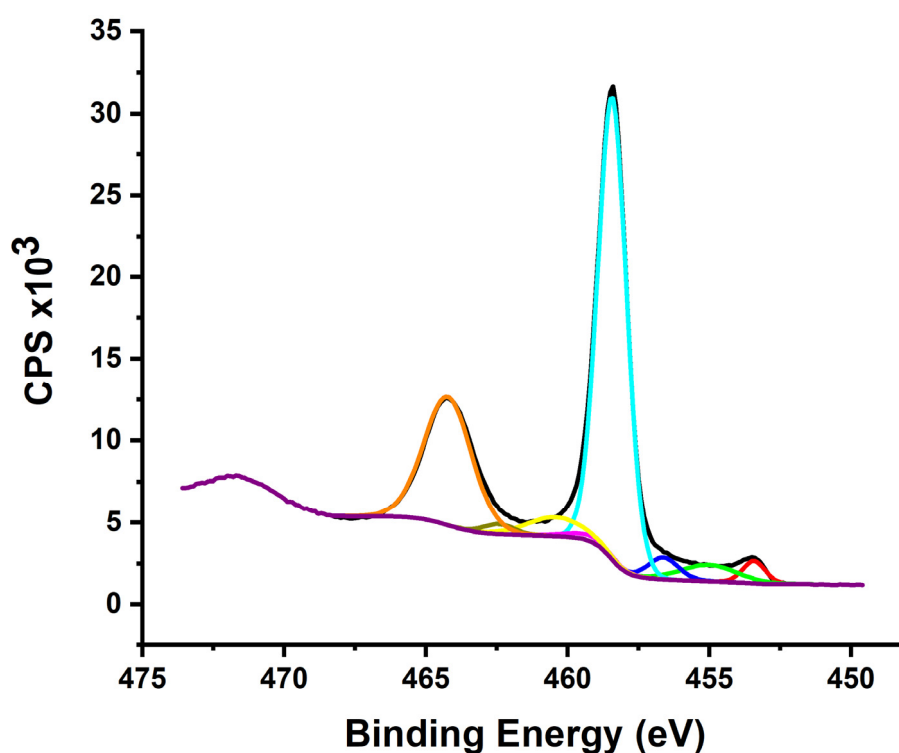


Figure S4. Ex-situ XPS Ti2p high-resolution spectrum of the TiO_x/Ti film.

Table S2. Results of the Ti 2p deconvolution.

Ti 0+	Ti 2+	Ti 3+	Ti 4+
2.2 ± 1.6	6.7 ± 1.7	4.7 ± 0.4	86.3 ± 3.0

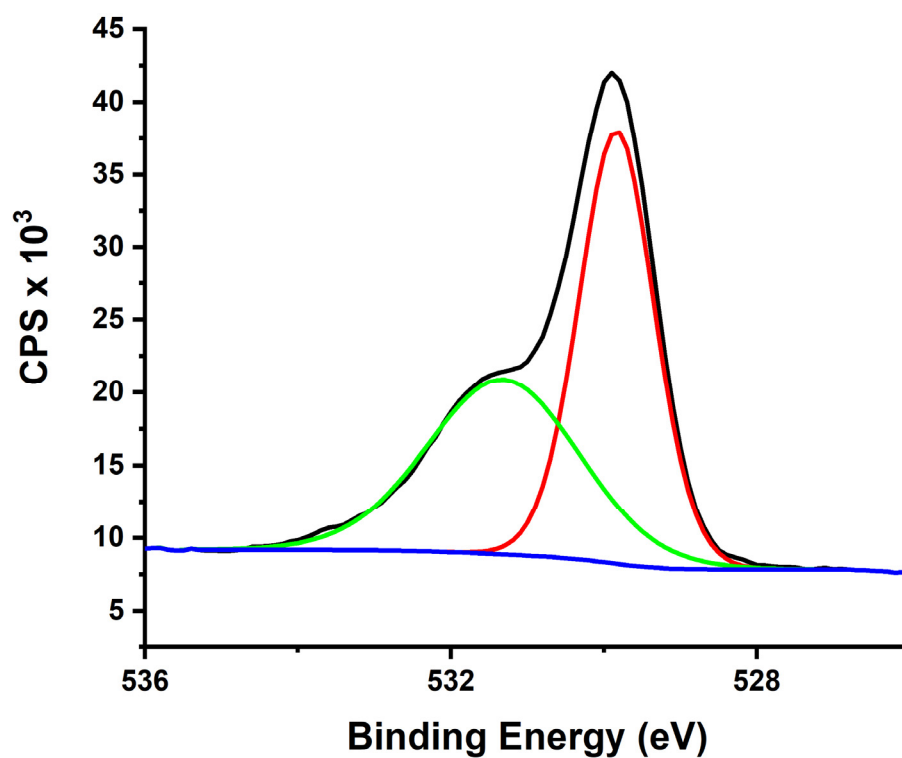


Figure S5. Ex-situ XPS O1s high-resolution spectrum of the TiO_x/Ti film.

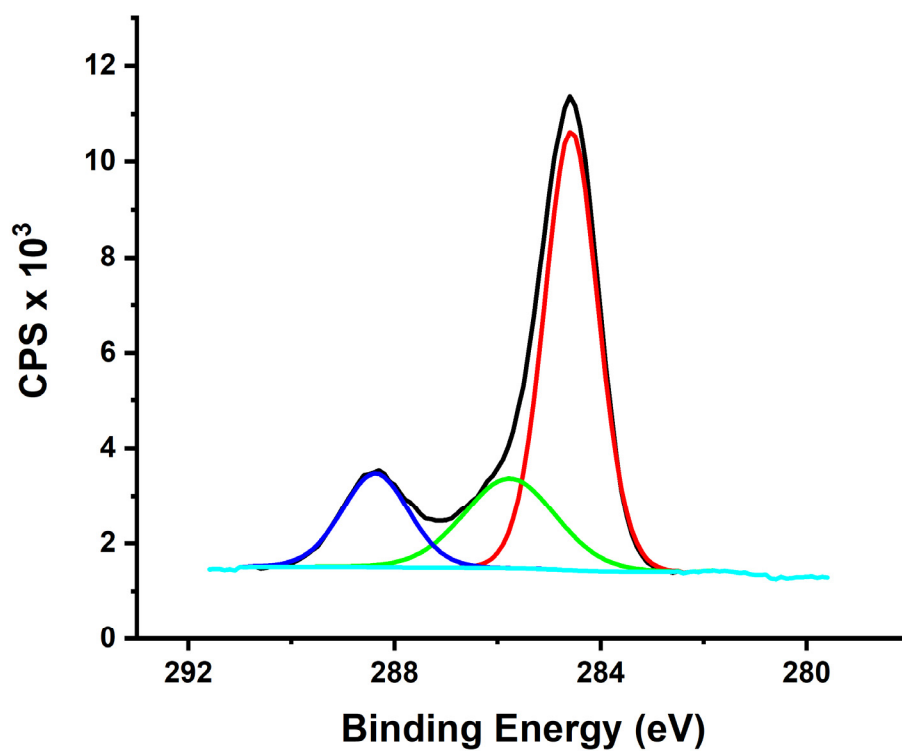


Figure S6. Ex-situ XPS C1s high-resolution spectrum of the TiO_x/Ti film.

QCM-D measurements: overtones 3 to 9

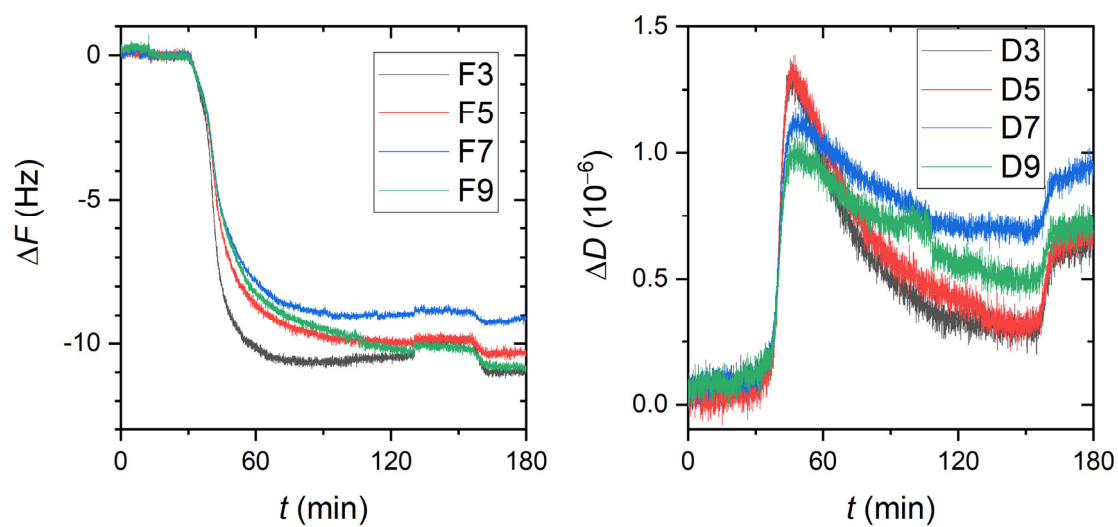


Figure S7. QCM-D results (overtones 3 to 9) for PAK(128-144) adsorption at the Au surface.

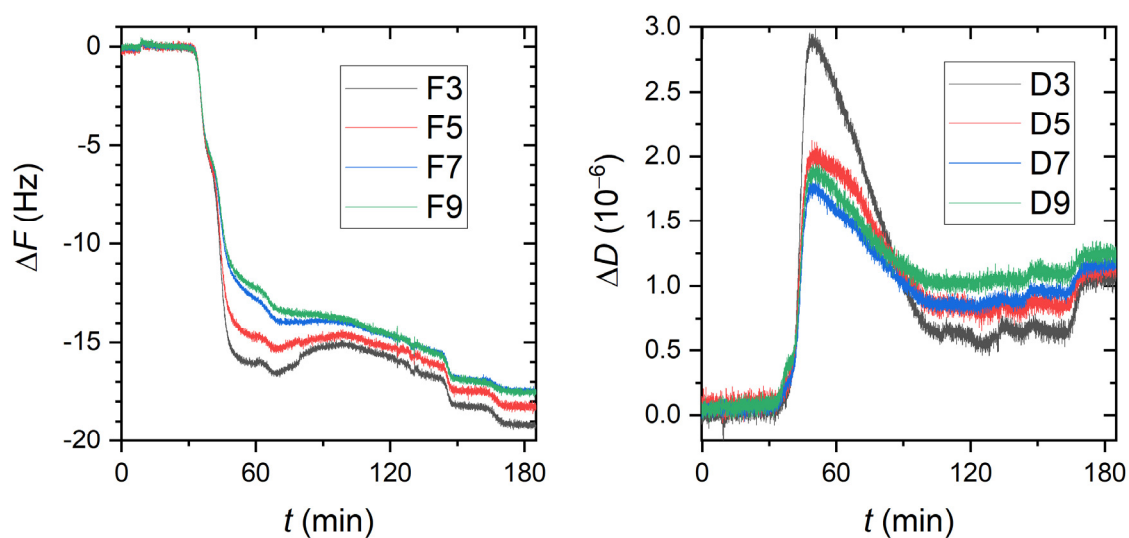


Figure S8. QCM-D results (overtones 3 to 9) for PAO(128-144) adsorption at the Au surface.

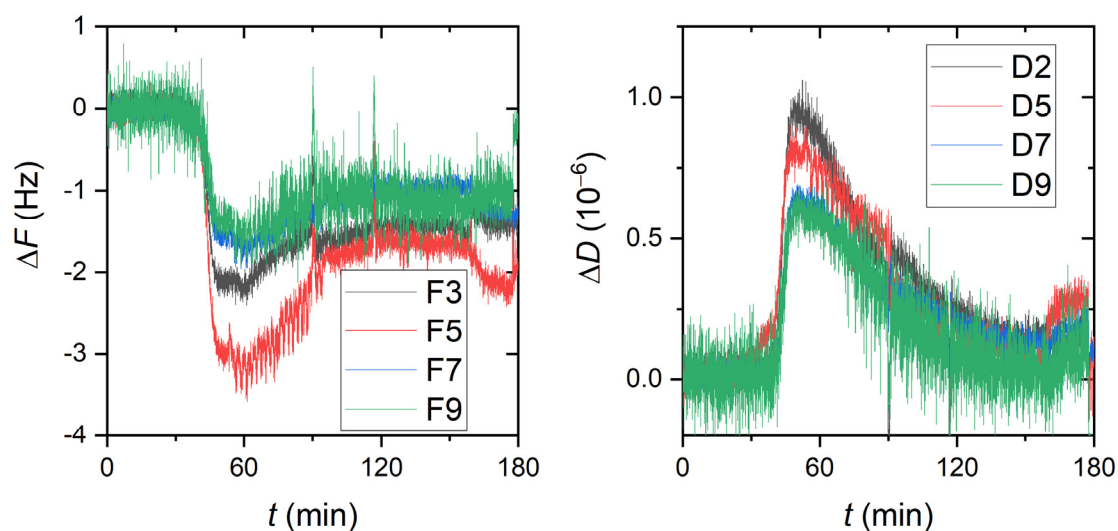


Figure S9. QCM-D results (overtones 3 to 9) for PAK(128-144) adsorption at the SiO₂ surface.

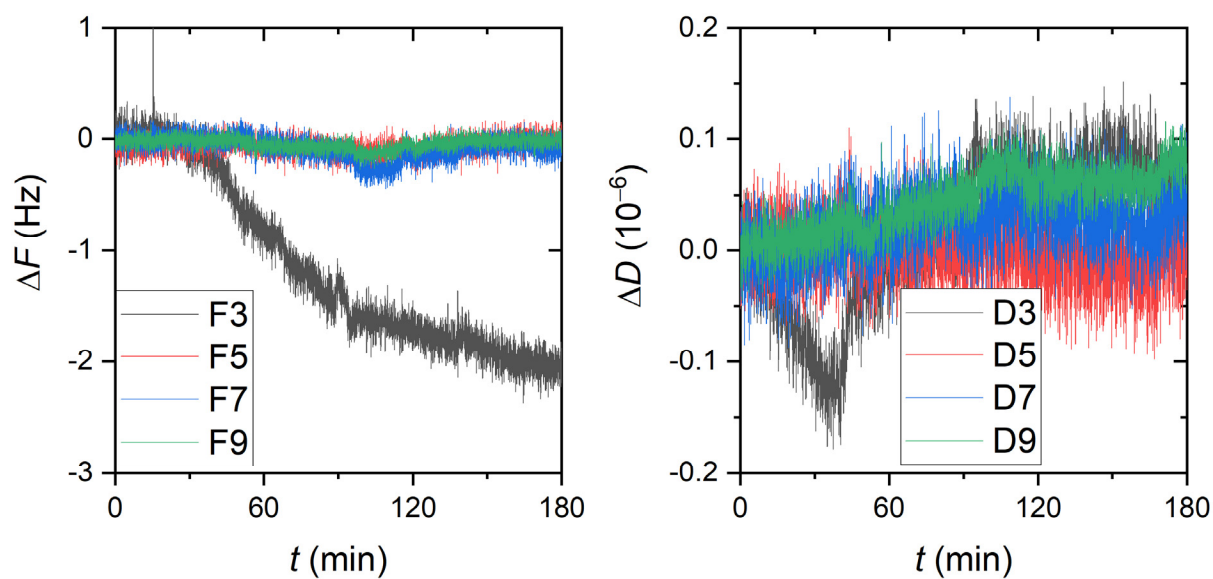


Figure S10. QCM-D results (overtones 3 to 9) for PAO(128-144) adsorption at the SiO₂ surface.

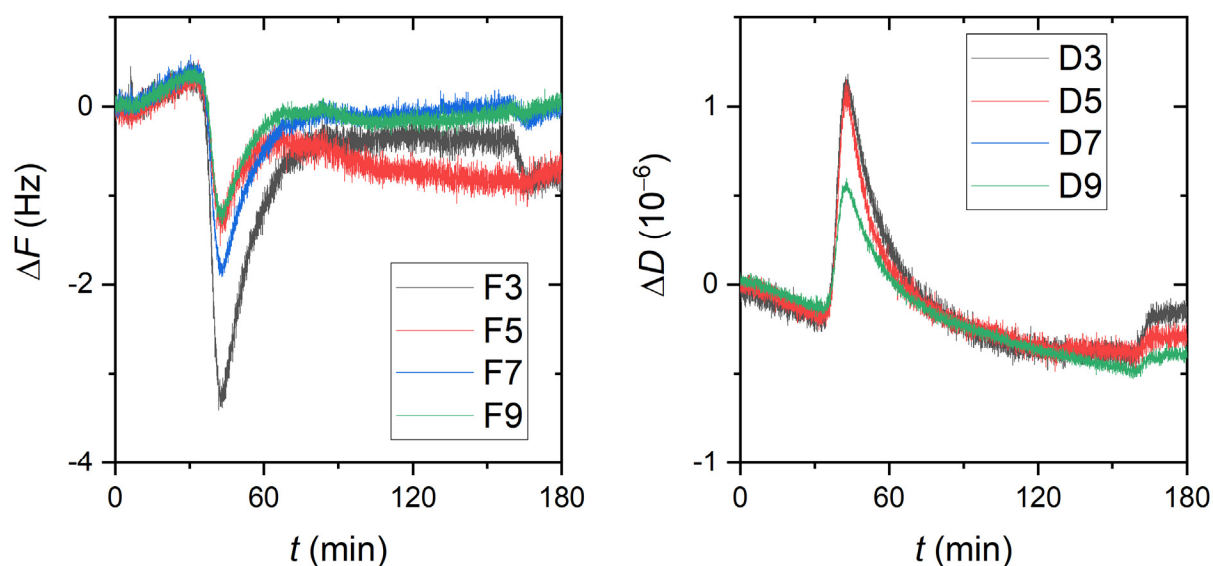


Figure S11. QCM-D results (overtones 3 to 9) for PAK(128-144) adsorption at the TiO_x/Ti surface.

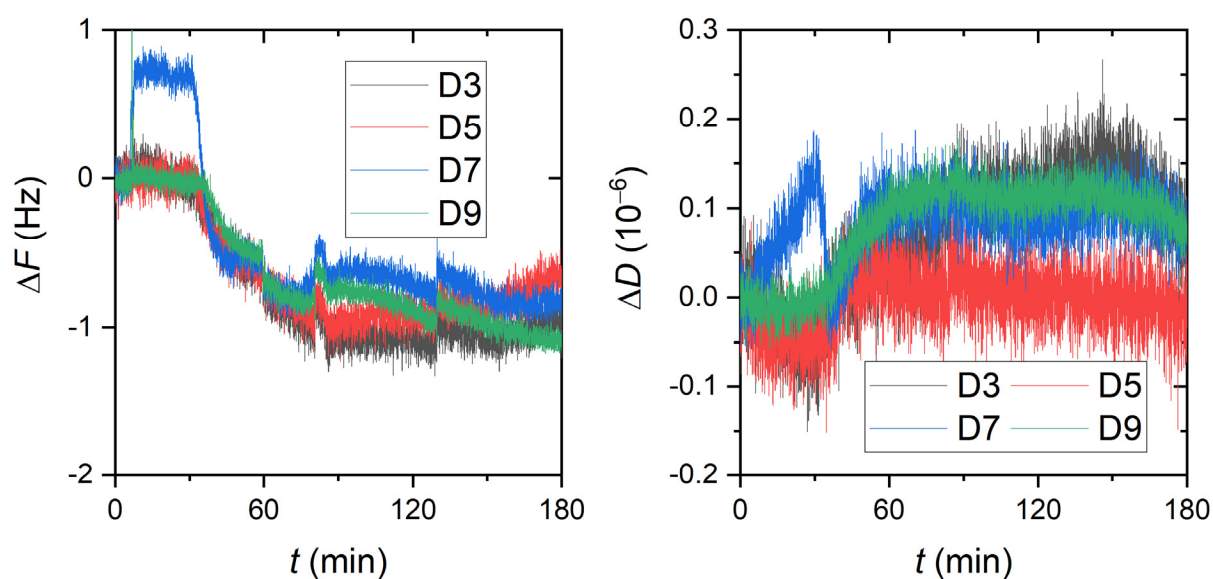


Figure S12. QCM-D results (overtones 3 to 9) for PAO(128-144) adsorption at the TiO_x/Ti surface.