References

Description

- Attili, S. & Richter, R.P. Combining colloidal probe atomic force and reflection interference contrast microscopy to study the compressive mechanics of hyaluronan brushes. *Langmuir* 28, 3206-3216 (2012).
- Attili, S., Borisov, O.V. & Richter, R.P. Films of end-grafted hyaluronan are a prototype of a brush of a strongly charged, semi-flexible polyelectrolyte with intrinsic excluded volume. *Biomacromolecules***13**, 1466-1477 (2012).
- Bingen, P., Wang, G., Steinmetz, N.F., Rodahl, M. & Richter, R.P. Solvation effects in the quartz crystal microbalance with dissipation monitoring response to biomolecular adsorption. A phenomenological approach. *Analytical Chemistry* **80**, 8880-8890 (2008).
- Caruso, F., Furlong, D.N. & Kingshott, P. Characterization of Ferritin Adsorption onto Gold. *J Colloid Interface Sci* **186**, 129-140 (1997).
- Carton, I., Brisson, A.R. & Richter, R.P. Label-free detection of clustering of membrane-bound proteins. *Anal. Chem.* **82**, 9275-9281 (2010).
- Curtis, A.S. The Mechanism of Adhesion of Cells to Glass. A Study by Interference Reflection Microscopy. *J Cell Biol* **20**, 199-215 (1964).
- De Feijter, J.A., Benjamins, J. & Veer, F.A. Ellipsometry as a tool to study the adsorption behavior of synthetic and biopolymers at the air–water interface. *Biopolymers* **17**, 1759-1772 (1978).
- Eisele, N.B., Andersson, F.I., Frey, S. & Richter, R.P. Viscoelasticity of thin biomolecular films : a case study on nucleoporin phenylalanine-glycine repeats grafted to a histidine-tag capturing QCM-D sensor. *Biomacromolecules* **13**, 2322-2332 (2012).
- Fredriksson, C., Kihlman, S., Rodahl, M. & Kasemo, B. The Piezoelectric Quartz Crystal Mass and Dissipation Sensor : A Means of Studying Cell Adhesion. *Langmuir* **14**, 248-251 (1998).
- Fujiwara, H. Spectroscopic Ellipsometry : Principles and Applications (Wiley Interscience 2007).
- Goncalves, D.b. & Irene, E.A. Fundamentals and applications of spectroscopic ellipsometry. *Quimica Nova* **25**, 794-800 (2002).
- Hook, F., et al. Variations in coupled water, viscoelastic properties, and film thickness of a Mefp-1 protein film during adsorption and cross-linking : a quartz crystal microbalance with dissipation monitoring, ellipsometry, and surface plasmon resonance study. *Anal Chem* **73**, 5796-5804 (2001a).
- Höök, F., et al. Variations in Coupled Water, Viscoelastic Properties, and Film Thickness of a Mefp-1 Protein Film during Adsorption and Cross-Linking : A Quartz Crystal Microbalance with Dissipation Monitoring, Ellipsometry, and Surface Plasmon Resonance Study. *Anal. Chem.* 73, 5796-5804 (2001b).
- Höök, F., Ray, A., Norden, B. & Kasemo, B. Characterization of PNA and DNA Immobilization and Subsequent Hybridization with DNA Using Acoustic-Shear-Wave Attenuation Measurements. *Langmuir*17, 8305-8312 (2001c).
- Janshoff, A., Galla, H.J. & Steinem, C. Piezoelectric Mass-Sensing Devices as Biosensors-An Alternative to Optical Biosensors ? *Angew Chem Int Ed Engl* **39**, 4004-4032 (2000).
- Domack, A., et al. Swelling of a polymer brush probed with a quartz crystal resonator. *Physical Review E* **56**, 680-689 (1997).

- Kuhner, M. & Sackmann, E. Ultrathin Hydrated Dextran Films Grafted on Glass :  Preparation and Characterization of Structural, Viscous, and Elastic Properties by Quantitative Microinterferometry. *Langmuir* **12**, 4866-4876 (1996).
- Larsson, C., Rodahl, M. & Hook, F. Characterization of DNA immobilization and subsequent hybridization on a 2D arrangement of streptavidin on a biotin-modified lipid bilayer supported on SiO2. *Anal Chem* **75**, 5080-5087 (2003).
- Limozin, L. & Sengupta, K. Quantitative Reflection Interference Contrast Microscopy (RICM) in Soft Matter and Cell Adhesion. *ChemPhysChem* **10**, 2752-2768 (2009).
- Muratsugu, M., et al. Quartz crystal microbalance for the detection of microgram quantities of human serum albumin : relationship between the frequency change and the mass of protein adsorbed. *Anal Chem* **65**, 2933-2937 (1993).
- Pope, L.H., et al. Probing DNA Duplex Formation and DNAâ[^]Drug Interactions by the Quartz Crystal Microbalance Technique. *Langmuir* **17**, 8300-8304 (2001).
- Radler, J. & Sackmann, E. Functionalization of solids by ultrathin soft polymer films and polymer/lipid film composites : modeling of cell surfaces and cell recognition processes. *Current Opinion in Solid State and Materials Science* **2**, 330-336 (1997).
- Reviakine, I., Johannsmann, D. & Richter, R.P. Hearing what you cannot see and visualizing what you hear : interpreting quartz crystal microbalance data from solvated interfaces. *Anal Chem* 83, 8838-8848 (2011).
- Reimhult, E., Larsson, C., Kasemo, B. & Hook, F. Simultaneous surface plasmon resonance and quartz crystal microbalance with dissipation monitoring measurements of biomolecular adsorption events involving structural transformations and variations in coupled water. *Anal Chem* 76, 7211-7220 (2004).
- Reiss, B.r., Janshoff, A., Steinem, C., Seebach, J. & Wegener, J. Adhesion Kinetics of Functionalized Vesicles and Mammalian Cells:A Comparative Study. *Langmuir* 19, 1816-1823 (2002). Retour ligne automatique Richter, R.P., et al. Membrane-grafted hyaluronan films : A well-defined model system of

glycoconjugate cell coats. Journal of the American Chemical Society **129**, 5306-+ (2007).

- Richter, R.P., Mukhopadhyay, A. & Brisson, A. Pathways of lipid vesicle deposition on solid surfaces : a combined QCM-D and AFM study. *Biophys. J.* **85**, 3035-3047 (2003).
- Salamon, Z. & Tollin, G. Optical Anisotropy in Lipid Bilayer Membranes : Coupled Plasmon-Waveguide Resonance Measurements of Molecular Orientation, Polarizability, and Shape. *Biophysical Journal* **80**, 1557-1567 (2001).
- Schilling, J.r., Sengupta, K., Goennenwein, S., Bausch, A.R. & Sackmann, E. Absolute interfacial distance measurements by dual-wavelength reflection interference contrast microscopy. *Physical Review* E 69, 021901 (2004).
- Sengupta, K., et al. Mimicking Tissue Surfaces by Supported Membrane Coupled Utrathin Layer of Hyaluronic Acid. *Langmuir* **19**, 1775-1781 (2003).
- Svedhem, S., et al. Patterns of DNA-labeled and scFv-antibody-carrying lipid vesicles directed by material-specific immobilization of DNA and supported lipid bilayer formation on an Au/SiO2 template. *Chembiochem* 4, 339-343 (2003a).
- Svedhem, S., et al. In Situ Peptide-Modified Supported Lipid Bilayers for Controlled Cell Attachment. *Langmuir* **19**, 6730-6736 (2003b).
- Takahashi, R., Kubota, K., Kawada, M. & Okamoto, A. Effect of molecular weight distribution on the solution properties of sodium hyaluronate in 0.2M NaCl solution. *Biopolymers* 50, 87-98 (1999).
- Voinova, M.V., et al. Viscoelastic Acoustic Response of Layered Polymer Films at Fluid-Solid

Interfaces : Continuum Mechanics Approach. Physica Scripta 59, 391-396 (1999).