

Peer-reviewed publications, Arjan P. Quist, PhD.

1. Lal, R., Lin, H., **Quist, A.P.** Amyloid beta ion channel: 3D structure and relevance to amyloid channel paradigm. **BBA – Biomembranes**: 2007, doi: 10.1016/j.bbamem.2007.04.021 (Invited Review)
2. **Quist, A. P.**, Chand, A., Ramachandran, S., Daraio, C. Jin, S. Lal, R. Atomic force microscopy imaging and electrical recording of lipid bilayers supported over microfabricated silicon chip nanopores: Lab-on-a-Chip system for lipid membranes and ion channels. **Langmuir** **23(3)**: 1375-1380, 2007.
3. **Quist A.P.**, Chand A., Ramachandran S., Cohen D., Lal R. Piezoresistive cantilever based nanoflow and viscosity sensor for microchannels. **Lab on a Chip** **6**: 1450-1454, 2006.
4. Chen I-C., Chen L-H., Orme C., **Quist A.P.**, Lal R., Jin S. Fabrication of high-aspect-ratio carbon nanocone probes by electron beam induced deposition patterning. **Nanotechnology** **17**: 4322-4326, 2006.
5. Ramachan S., **Quist A.P.**, Kumar S., Lal R. Cisplatin nanoliposomes for cancer therapy: AFM and fluorescence imaging of cisplatin encapsulation, stability, cellular uptake and toxicity. **Langmuir** **22**: 8156-8162, 2006.
6. Chen I-C., Chen L-H., Ye X.R., Daraio C., Jin S., **Quist A.P.**, Lal R. Extremely sharp carbon nanocone probes for atomic force microscopy imaging. **Applied Physics Letters** **88**: 153102-3, 2006.
7. **Quist A.P.**, Doudevski, I., Lin, H., Ng, D., Frangione, B., Ghiso, J., Lal, R. Amyloids form membrane pores: a common structural substrate for protein-misfolding disease. **Proceedings of the National Academy of Sciences** **102**: 10427-10432, 2005.
8. **Quist A.P.**, Pavlovic E., Oscarsson S. Recent advances in microcontact printing. **Analytical and Bioanalytical Chemistry** **381**: 591-600, 2005. (Invited Review)
9. Felton S., Gunnarsson K., Roy P. E., Svedlindh P., **Quist A.** MFM imaging of micron-sized permalloy ellipses. **Journal of Magnetism and Magnetic Materials** **280**: 202-207, 2004.
10. Pavlovic E., Oscarsson S., **Quist A.P.** Nanoscale site-specific immobilization of proteins through electroactivated disulfide exchange. **Nano Letters** **3**: 779-781, 2003.
11. Pavlovic E., **Quist A.P.**, Nyholm L., Pallin A., Gelius U., Oscarsson S. Patterned generation of reactive thiolsulfonates/thiolsulfonates on silicon oxide by electrooxidation using electro-microcontact printing. **Langmuir** **19**: 10267-10270, 2003.
12. Pavlovic E., **Quist A.P.**, Gelius U., Nyholm L., Oscarsson S. Generation of thiolsulfonates/thiolsulfonates by electrooxidation of thiols on silicon surfaces for reversible immobilization of molecules. **Langmuir** **19**: 4217-4221, 2003.
13. Pavlovic E., **Quist A.P.**, Gelius U., Oscarsson S. Surface functionalization of silicon oxide at room temperature and atmospheric pressure. **Journal of Colloid and Interface Science** **254**: 200-203, 2002.
14. Baranov I., Hakansson P., Kirillov S., Kopniczky, J., Novikov, A., Obnorskii, V., Pchelintsev, A., **Quist, A. P.**, Torzo, G., Yarmiyuchuk, S., Zennaro, L. Desorption of nanoclusters (2-40 nm) from nanodispersed metal and semiconductor layers by swift heavy ions. **Nuclear Instruments & Methods in Physics Research B193**: 798-803, 2002.
15. Ledung G., Bergkvist M., **Quist A.P.**, Gelius U., Carlsson J. and Oscarsson S. A novel method for preparation of disulfides on silicon. **Langmuir** **17**: 6056-6058, 2001. (corresponding author)

16. **Quist A.P.**, Rhee S. K., Lin H., Lal R.. Physiological role of gap-junctional hemichannels: extracellular calcium-dependent isosmotic volume regulation. **Journal of Cell Biology** **148(5)**: 1063-1074, 2000.
17. Reimann C.T., Sullivan P.A., Axelsson J., **Quist A.P.**, Altmann S., Roepstorff P., Velazquez I., Tapia O.. Conformation of highly-charged gas-phase lysozyme revealed by energetic surface imprinting. **Journal of the American Chemical Society** **120**: 7608-7616, 1998.
18. Rhee S.K., **Quist A.P.**, Lal R. Amyloid beta protein (1-42) forms calcium permeable, Zn²⁺ sensitive channel. **Journal of Biological Chemistry** **273(22)**: 13379-13382, 1998. (one of two primary authors)
19. **Quist A.P.**, Petersson Å., Reimann C.T., Bergman A.A., Daya D.D.N.B., Hallén A., Carlsson J., Oscarsson S.O., Sundqvist B.U.R. Site-selective molecular adsorption at nanometer-scale mev-atomic-ion-induced surface defects. **Journal of Colloid and Interface Science** **189**: 184-187, 1997.
20. Sullivan P.A., Axelsson J., Altmann S., **Quist A.P.**, Sundqvist B.U.R., Reimann C.T. Defect formation on surfaces bombarded by energetic multiply-charged proteins: implications for the conformation of gas-phase electrosprayed ions. **Journal of the American Society for Mass Spectrometry** **74**: 329-341, 1996.
21. **Quist A.P.**, Bergman A.A., Reimann C.T., Oscarsson S.O., Sundqvist B.U.R. Imaging of single antigens, antibodies, and specific immunocomplex formation by scanning force microscopy. **Scanning Microscopy** **9**: 395-400, 1995.
22. **Quist A.P.**, Björck L.P., Reimann C.T., Oscarsson S.O., Sundqvist B.U.R. A scanning force microscopy study of human serum albumin and porcine pancreas trypsin adsorption on mica surfaces. **Surface Science** **325**: L406-L412, 1995.
23. Reimann C.T., Sullivan P.A., Tuerpitz A., Altmann S., **Quist A.P.**, Bergman A., Oscarsson S.O., Sundqvist B.U.R., Håkansson P. keV-Polyatomic-ion-impact-nucleated oxidative etch pitting in highly-oriented pyrolytic graphite. **Surface Science** **341**: L1019-L1024, 1995.
24. **Quist A.P.**, Ahlbom J., Reimann C.T., Sundqvist B.U.R. Scanning force microscopy studies of surface defects induced by incident energetic macromolecular ions. **Nuclear Instruments and Methods in Physics Research B88**: 164-169, 1994.
25. Reimann C.T., **Quist A.P.**, Kopniczky J., Sundqvist B.U.R., Erlandsson R. and Tengvall P. Impacts of polyatomic ions on surfaces: conformation and degree of fragmentation of molecular ions determined by lateral dimensions of impact features. **Nuclear Instruments and Methods in Physics Research B88**: 29-34, 1994.
26. **Quist A.P.**, Huth-Fehre T., Sundqvist B.U.R. Total yield measurements in matrix assisted laser desorption using a quartz crystal microbalance. **Rapid Communications in Mass Spectrometry** **8**: 149-154, 1994.

Peer-reviewed Conference Proceedings :

1. Oscarsson, S., Pavlovic, E., **Quist, A.**, Nyholm, L., Pallin, A. and Gelius, U. Electrochemical Microcontact Printing of Thiolated Silicon Surfaces by Generation of Reactive Thiolsulfonates/Sulfonates. **Proceedings of the 7th World Biomaterials Congress**, Sydney, May 17-21, 2004
2. **Quist A.P.**, Pavlovic E., and Oscarsson S. Surface Nanobiotechnology I: Methods and Techniques for Activation of Surfaces and Specific Immobilization of Macromolecules. **Proceedings of the International School on Advanced Material Science and Technology**, Jesi (Ancona), Italy, 2 - 6 September 2002.
3. **Quist A.P.**, Bergkvist M., and Oscarsson S. Surface Nanobiotechnology II: Orientation and Conformation of Macromolecules using Scanning Probe microscopy. **Proceedings of the International School on Advanced Material Science and Technology**, Jesi (Ancona), Italy, 2 - 6 September 2002.
4. **Quist A.P.**, Oscarsson S. Surface Modifications of Biomaterials. **Proceedings of the International School on Advanced Material Science and Technology**, Jesi (Ancona), Italy, 27 - 31 September 2001.
5. Ledung G., Bergkvist M., **Quist A.P.**, Gelius U., Oscarsson S. A Novel Method for preparation of Highly Reactive Disulphides on Silicon. **Proc. 8th Ann. Int. Conf. on Composite Engineering**, Tenerife, Spain August 5-11, 2001.
6. Huth-Fehre T., **Quist A.P.**, Linder S-O., Sundqvist B.U.R. Development of a simple and highly sensitive microbalance for measurements of total particle yield in matrix assisted laser desorption. **Materials Research Society Symposium Proceedings 285** (1993) 181-186.

Other (non peer-reviewed) Publications :

1. Quist A.P. Probing Biomolecular Structure with Scanning Force Microscopy. **Acta Univ. Ups., comprehensive summaries of Uppsala Dissertations from the Faculty of Science and Technology 270**: 36pp, Uppsala, ISBN 91-554-3944-6. (PhD thesis, 1997)
2. **Quist A.P.**, Bergman A.A., Reimann C.T., Oscarsson S.O., Sundqvist B.U.R Direct measurement of immunocomplex formation by atomic force microscopy. **Application Note, Digital Instruments Inc.**, Santa Barbara CA, USA (1996)
3. **Quist A.P.**, Bergman A.A., Reimann C.T., Oscarsson S.O. and Sundqvist B.U.R Direct measurement of immunocomplex formation by atomic force microscopy. **Biomedical Products, Tools and Techniques** (December 1996) 8.