

Publications

Review Articles

1. Lambert, A.G.; Davies, P.B.; Neivandt, D.J. "Implementing the Theory of Sum Frequency Generation Vibrational Spectroscopy: A Tutorial Review", *Applied Spectroscopy Reviews* **40**, 103 (2005)
2. Prudovsky, I. ; Tarantini, F. ; Landriscina, M. ; Neivandt, D. ; Soldi, R. ; Kirov, A. ; Small, D. ; Kathir, K.M. ; Rajalingam, D. ; Kumar, T.K. "Secretion without Golgi", *Journal of Cellular Biochemistry* **103**, 1327 (2008)
3. Prudovsky, I. ; Kumar, T.K. ; Sterling, S. ; Neivandt, D. "Protein-Phospholipid Interactions in Nonclassical Protein Secretion and Methods of their Study" *International Journal of Molecular Sciences* **14**, 1374 (2013)

Articles

1. Prudovsky, I. ; Kacer, D. ; Davis, J. ; Shah, V. ; Jayanthi, S. ; Huber, I. ; Dakshinamurthy, R. ; Ganter, O. ; Soldi, R. ; Neivandt, D. ; Guvench, O. ; Kumar, T. "FGF1 Folding is Critical for its Nonclassical Release" *Biochemistry* **55**, 1159 (2016)
2. Li, L. ; Neivandt, D.J. "Interference Effects in Femtosecond Sum Frequency Spectra of Model Cellulose Films" *Journal of Physical Chemistry C* **120**, 17296 (2016)
3. Kim, C.H. ; Neivandt, D.J. ; Kaye, L.W. ; Crittenden, J.A. " Technology and Aging: An Emerging Research and Development Sector in Maine" *Maine Policy Review* **24**, 29 (2015)
4. Vassiliev, T. ; Neivandt, D.J. "Let Them Eat Cake...OE Cake!" *Science Scope* **38**, 60 (2015)
5. Allgeyer, E.S. ; Sterling, S.M. ; Gunewardene, M.S. ; Hess, S. ; Neivandt, D.J. ; Mason, M.D. "Combining Total Internal Reflection Sum Frequency Spectroscopy Spectral Imaging and Confocal Fluorescence Microscopy" *Langmuir* **31**, 987 (2015)
6. Sterling, S.M. ; Dawes, R. ; Allgeyer, E. ; Ashworth, S.L. ; Neivandt, D.J. "Comparison of Inner Leaflet Diffusion Coefficients of Actin Supported and Glass Supported Phospholipid Bilayers Determined by Z-scan Fluorescence Correlation Spectroscopy" *Biophysics Journal* **108**, 1946 (2015)
7. Kandpal, S.K. ; Otterson, S. ; Bousfield, D.W. ; Neivandt, D.J. ; Mason, M.D. "Investigation of Laser Induced Structure Formation and Resultant Fluorescence" *Optical Materials* **42**, 257 (2015)
8. Kandpal, S.K. ; Co, A. ; Allcroft, K. Neivandt, D.J. ; Bousfield, D.W. ; Mason, M.D. "Laser Induced Fluorescent Micro-Structures in Silver Nanoparticle Based Films" *Optical Materials* **36**, 873 (2014)
9. Sterling, S.M. ; Allgeyer, E.S. ; Fick, J. ; Prudovsky, I. ; Mason, M.D. ; Neivandt, D.J. "Phospholipid Diffusion Coefficients of Cushioned Model membranes determined via Z-Scan Fluorescence Correlation Spectroscopy", *Langmuir* **29**, 7966 (2013)

10. Vassiliev, T. ; Bernhardt, P. ; Neivandt, D.J. "Innovative Composite Research Modeled in the Middle School Classroom" *Science Scope*, **37**, 42 (2013).
11. Duy, W.D. ; Hackett, B.E. ; Nadeau, S. ; Alcott, S. ; Mlsna, T.E. ; Neivandt, D.J. ; Vetelino, J.F. "A Lateral-Field-Excited Acoustic Wave Peroxide Based Explosive Sensor", *IEEE Sensors Journal* **13**,4780 (2013).
12. Kandpal, S.K. ; Allcroft, K. ; Mason, D. ; Bousfield D.W. ; Neivandt D.J. "Laser-Drawn Features on Nanoparticle Films", *Proc. 16th International Coating Science and Technology Symposium*, **203** (2012).
13. Spender, J. ; Demers, A. ; Xie, X. ; Cline, A.E. ; Earle, M.A. ; Ellis, L.D. ; Neivandt, D.J. "Method for Production of Polymer and Carbon Nanofibers from Water Soluble Polymers", *Nano Letters* **12**, 3857 (2012)
14. Gagnon, G. ; Sanders, N. ; Neivandt, D.J. ; Bousfield, D.W. "The Influence of Dispersant Type and Ion Addition on the Colloidal Chemistry and Rheology of Calcium Carbonate Suspensions", *Proc. 8th International Paper and Coating Chemistry Symposium*, 202 (2012)
15. Allgeyer, E.S. ; Sterling, S.M. ; Neivandt, D.J. ; Mason, M.D. "Low Axial Drift Stage and Temperature Controlled Liquid Cell for Z-Scan Fluorescence Correlation Spectroscopy In an Inverted Confocal Geometry", *Review of Scientific Instruments* **82**, 053708 (2011)
16. Oporto, G. S. ; Gardner, D. J. ; Kiziltas, A. ; Neivandt, D. J. "Understanding the Affinity Between Components of Wood-Plastic Composites from a Surface Energy Perspective", *Journal of Adhesion Science and Technology* **25**, 1785 (2011)
17. Duy, W.B. ; Hackett, B. ; Mlsna, T. ; Vetelino, J.F. ; Neivandt D.J. "Detection of Peroxide Based Explosives Utilizing a Lateral Field Excited Acoustic Wave Sensor", *Sensor Letters* **9**, 910 (2011)
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21. Graziani, I. ; Doyle, A. ; Sterling, S ; Kirov, A. ; Tarantini, F. ; Ladnriscina, M. ; Kumar, T.K.S. ; Neivandt, D. ; Prudovsky, I. "Protein Folding Does Not Prevent the Nonclassical Export of FGF1 and S100A13", *Biochemical and Biophysical Research Communications* **381**, 350 (2009)
22. Andrusyk, L. ; Oporto, G.S. ; Gardner, D.J. ; Neivandt, D.J. "Wood-Plastic Composites Manufactured from Hot Water Extracted Wood. Part I: Mechanical Evaluation", *Proc. of the 51st International Convention of Society of Wood Science and Technology*, 1 (2008)
23. McCann, D.F. ; Wark, M. ; Millard, P. ; Neivandt, D.J. ; Vetelino, J.F. "The Detection of Chemical and Biological Analytes using a Monolithic Spiral Coil Acoustic Transduction Sensor", *IEEE Ultrasonics Syposium 2008*,1187 (2008)

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29. McGall, S.J. ; Davies, P.B. ; Neivandt, D.J. "Development of a Biologically Relevant Calcium Phosphate Substrate for Sum Frequency Generation (SFG) Vibrational Spectroscopy", *Journal of Physical Chemistry A* **109**, 8745 (2005)
30. -Holman, J. ; Davies, P. B. ; Nishida, T. ; Ye, S. ; Neivandt, D. J. "Sum Frequency Generation from Langmuir Blodgett Multilayer Films on Metal and Dielectric Substrates", *Journal of Physical Chemistry B* **109**, 18723 (2005) **Feature and Cover Article**
31. Poirier, J. S. ; Tripp, C. P. ; Neivandt, D. J. "Templated Surfactant Re-Adsorption on Polyelectrolyte Induced Depleted Surfactant Surfaces", *Langmuir* **21**, 2876 (2005)
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34. McGall, S.J. ; Davies, P.B. ; Neivandt, D.J. "Interference Effects in Sum Frequency Generation Vibrational Spectra of Thin Polymer Films: an Experimental and Theoretical Investigation ", *Journal of Physical Chemistry B* **108**, 16030 (2004)
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37. Casford, M.T.L. ; Davies, P.B. ; Neivandt, D.J. "A Study of the Co-Adsorption of an Anionic Surfactant and an Uncharged Polymer at the Aqueous Solution/Hydrophobic Interface by Sum Frequency Spectroscopy", *Langmuir* **19**, 7396 (2003)

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