Michael L. Myrick

631 Sumter Street
Department of Chemistry and Biochemistry
University of South Carolina
Columbia, SC 29208

Phone: 803-777-6018
Fax: 803-777-9521
e-mail: myrick@sc.edu

PROFESSIONAL PREPARATION

1. Post-Doctoral Associate, LLNL, Livermore, CA 1989-90. Optical Sensors.
2. New Mexico State University, Ph.D. in Physical Chemistry, 1988. Dissertation: "Energetics and Dynamics of Excited State in Ruthenium(II) Diimine Complexes
3. North Carolina State University, B.S. in Chemistry, 1985.

APPOINTMENTS

1. Professor of Chemistry, University of South Carolina, Columbia, SC 2003-present.
2. President, Coblentz Society, 2011-2013
3. Chief Scientist, Ometric Corporation, Columbia, SC 2004-2011
4. Associate Professor of Chemistry, University of South Carolina, Columbia, SC 1997-2003.
5. Assistant Professor of Chemistry, University of South Carolina, Columbia, SC 1991-1997.
6. Participating Guest, Lawrence Livermore National Laboratory, Livermore, CA, 1995-2006.
7. Visiting Scientist, University of California at Santa Barbara, CA, 1996-1997.
8. Chief Scientist, Laser Raman Systems, Houston TX, 1991-1995.

AWARDS

1. Gerald S. Birth Award for Research in Diffuse Reflectance, 2012
2. Army Research Office Young Investigator Award, 1992
3. NSF Graduate Fellowship, 1986
4. Microelectronic Center of North Carolina Fellowship, 1985

PUBLICATIONS

Fluorescence Excitation Spectroscopy for Phytoplankton Species Classification using an All-Pairs Method: Characterization of a System with Unexpectedly Low Rank

Cameron Rekully, Stefan Faulkner, Eric Lachenmyer, Brady Cunningham, Timothy Shaw, Tammi Richardson and Michael L. Myrick
Applied Spectroscopy https://doi.org/10.1177/0003702817741278

A quantitative method for determining a representative detection limit of the forensic luminol test for latent bloodstains

Brianna M. Cassidy, Zhenyu Lu, Jennifer P. Martin, Shawna K. Tazik, Katie W. Kellogg, Stephanie A. DeJong, Elle O. Belliveau, Katherine E. Kilgore, Samantha M. Ervin, Mackenzie Meece-Rayle, Alyssa M. Abraham, M.L. Myrick and S.L. Morgan
Forensic Science International 278 (2017), 396-403.

A Small-Volume P-V-T-X System for Broadband Spectroscopic Calibration of Downhole Optical Sensors

Christopher Michael Jones, Michael T. Pelletier, Robert Atkinson, Jing Shen, Jeff Moore, Jimmy Anders, David L. Perkins and M.L. Myrick
Review of Scientific Instruments 88 (2017), article number 073101.

Detection Limits for Blood on Fabrics Using Attenuated Total Reflection Fourier Transform Infrared (ATR FT-IR) Spectroscopy and Derivative Processing

Zhenyu Lu, Stephanie A. DeJong, Brianna M. Cassidy, Raymond G. Belliveau, M.L. Myrick and S.L. Morgan
Applied Spectroscopy 71 (2017), 839-46.

Attenuated Total Reflection (ATR) Sampling in Infrared Spectrosocpy of Heterogenous Materials Requires Reproducible Pressure Control

Zhenyu Lu, Brianna M. Cassidy, Stephanie A. DeJong, Raymond G. Belliveau, M.L. Myrick and S.L. Morgan
Applied Spectroscopy 71 (2017), 97-104.

Reversible Gap Derivatives and Their Integration

Stephanie A. DeJong, Zhenyu Lu, Brianna M. Cassidy, S.L. Morgan, M.L. Myrick
Applied Spectroscopy 70 (2016), 1044-54.

Ridge Patterns of blood-transferred simulated fingerprints observed on fabrics via steam thermography

Raymond G. Belliveau, Stephanie A. DeJong, Brianna M. Cassidy, Zhenyu Lu, Stephen L. Morgan and Michael L. Myrick
Forensic Chemistry 1 (2016), 74-7.

Effect of Azimuthal Angle on Infrared Diffuse Reflection Spectra of Fabrics

Stephanie A. DeJong, Briana M. Cassidy, Zhenyu Lu, Megan R. Pearl, Jessica N. McCutcheon, Wayne O'Brien, Nicholas D. Boltin, Raymond G. Belliveau, Stephen L. Morgan and M.L. Myrick
Spectroscopy 30 (2015), 23-25.

Minimally Invasive Identification of Degraded Polyester-Urethane Magnetic Tape Using Attenuated Total Reflection Fourier Transform Infrared Spectroscopy and Multivariate Statistics

B.M. Cassidy, ZY Lu, N.C. Fuenffinger, S.M. Skelton, E.J. Bringley, L. Nguyen, M.L. Myrick, E.M. Breitung and S.L. Morgan
Anal. Chem. 87 (2015), 9265-72.

An Improved Efficiency Compact lamp for the Thermal Infrared

W. O'Brien, N. Boltin, S. Dejong, B. Cassidy, Z. Lu, S. Hoy, S.L. Morgan and M.L. Myrick
Applied Spectroscopy 69 (2015), 1511-3.

Detection Limits for Blood on Four Fabric Types Using Infrared Diffuse Reflection Spectroscopy in Mid- and Near-Infrared Spectral Windows

S.A. DeJong, Z. Lu, B.M. Cassidy, W.L. O'Brien, S.L. Morgan and M.L. Myrick
Anal. Chem. 87 (2015) 8740-8747.

Optimization of Gap Derivatives for Measuring Blood Concentration of Fabric from Vibrational Spectroscopy

S.A. DeJong, W.L. O'Brien, Z. Lu, B. M. Cassidy, S.L. Morgan and M.L. Myrick
Appl. Spectrosc. 69 (2015), 733-748.

Chemical contrast observed in thermal images of blood-stained fabrics exposed to steam

Wayne L. Obrien, Nicholas D. Boltin, Zhenyu Lu, Brianna M. Cassidy, Raymond G. Belliveau, Emory J. Straub, Stephanie A. DeJong, Stephen L. Morgan and Michael L. Myrick
Analyst 140 (2015), 6222-6225.

Focus-independent Particle Size Measurement from Streak Images: A Comparison of Multivariate Methods

Shawna K. Tazik, Megan P. Baranowski, Cameron Rekully, Nicholas Viole, Timothy J. Shaw, Tammi L. Richardson and M.L. Myrick
Analyst 140 (2015), 1578-1589.

Taxonomic Classification of Phytoplankton with Multivariate Optical Computing, Part I: Design and Theoretical Performance of Multivariate Optical Elements

Joseph A. Swanstrom, Laura S. Bruckman, Megan R. Pearl, Michael N. Simcock, Kathleen A. Donaldson, Tammi L. Richardson, Timothy J. Shaw and M.L. Myrick
Applied Spectroscopy 67 (2013), 220-9.

Taxonomic Classification of Phytoplankton with Multivariate Optical Computing, Part II: Design and Experimental Protocol of a Shipboard Fluorescence Imaging Photometer

Joseph A. Swanstrom, Laura S. Bruckman, Megan R. Pearl, Elizabeth Abernathy, Tammi L. Richardson, Timothy J. Shaw, and M. L. Myrick
Applied Spectroscopy 67 (2013), 230-9.

Taxonomic Classification of Phytoplankton with Multivariate Optical Computing, Part III: Demonstration

Megan R. Pearl, Joseph A. Swanstrom, Laura S. Bruckman, Tammi L. Richardson, Timothy J. Shaw, Heidi M. Sosik and M.L. Myrick
Applied Spectroscopy 67 (2013), 240-7.

Infrared Specular Reflection Calculated for Polymer Films on Polymer Substrates: Models for the Spectra of Coated Plastics

M.L. Myrick and Stephen L. Morgan
Spectroscopy 8 supplement (2012), 8-25.

Comparison of the determination of a low concentration active ingredient in pharmaceutical tablets by backscatter and transmission Raman spectrometry

Nichola Townshend, Alison Nordon, David Littlejohn, Michael Myrick, John Andrews and Paul Dallin

Anal. Chem. 84 (2012), 4671-4676.

Linear Discriminant Analysis of Single-Cell Fluorescence Excitation Spectra of Five Phytoplankton Species

Laura S. Hill, Tammi L. Richardson, Joseph A. Swanstrom, Kathleen A. Donaldson, Michael Allora, Jr., Timothy J. Shaw and Michael L. Myrick

Appl. Spectrosc. 66 (2012), 60-65.

The Kubelka-Munk Formula Revisited

M.L. Myrick*, Megan Baranowski, Heather Brooke, Stephen L. Morgan, Jessica McCutcheon

Applied Spectroscopy Reviews 46 (2011), 140-165.

Coating Effects on Mid-Infrared Reflection Spectra of Fabrics

Megan Baranowski, Heather Brooke, Jessica McCutcheon, Stephen L. Morgan, M. L. Myrick

Applied Spectroscopy 65 (2011), 876-84.

Multimode Imaging in the Thermal Infrared for Chemical Contrast Enhancement. Part 1: Methodology

Heather Brooke, Megan R. Baranowski, Jessica N. McCutcheon, Stephen L. Morgan, and Michael L. Myrick

Anal. Chem. 82 (2010), 8412-20.

Multimode Imaging in the Thermal Infrared for Chemical Contrast Enhancement. Part 2: Simulation Driven Design

Heather Brooke, Megan R. Baranowski, Jessica N. McCutcheon, Stephen L. Morgan, and Michael L. Myrick

Anal. Chem. 82 (2010), 8421-26.

Multimode Imaging in the Thermal Infrared for Chemical Contrast Enhancement. Part 3: Visualizing Blood on Fabrics

Heather Brooke, Megan R. Baranowski, Jessica N. McCutcheon, Stephen L. Morgan, and Michael L. Myrick

Anal. Chem. 82 (2010), 8427-31.

Construction, Figures of Merit and Testing of a Single-Cell Fluorescence Excitation Spectroscopy System

Laura S. Hill, Tammi L. Richardson, Luisa T.M. Profeta, Timothy J. Shaw, Christopher J. Hintz, Benjamin S. Twining, Evelyn Lawrenz, Michael L. Myrick
Rev. Sci. Instrum. 81 (2010), article 013103 (13 pgs).

An Experiment in Physical Chemistry: Polymorphism and Phase Stability in Acetaminophen (Paracetamol)
M.L. Myrick*, Luisa T.M. Profeta and Megan Baranowski
J. Chem. Ed. 87 (2010), 842-4.

A Study of Electric Field Standing Waves on Reflection Micro-spectroscopy of Polystyrene Particles
Heather Brooke, B.V. Bronk, J. McCutcheon, S. Morgan, M.L. Myrick
Appl. Spectrosc. 63 (2009), 1293-302.

Birge-Sponer Estimation of the C-H bond dissociation energy in Chloroform using Infrared, Near-Infrared, and Visible Absorption Spectroscopy – An experiment in Physical Chemistry
M.L. Myrick, A.E. Greer, A.A. Nieuwland, R.J. Priore, J. Scaffidi, D. Andreatta, and P. Colavita
J. Chem. Educ. 85 (2008), 1276-78

Sampling and Quantitative Analysis of Clean B. subtilis Spores at Sub-Monolayer Coverage by Reflectance Fourier Transform Infrared Microscopy Using Gold-Coated Filter Substrates
H. Brooke, D.L. Perkins, B. Setlow, P. Setlow, B.V. Bronk, and M.L. Myrick
Appl. Spectrosc. 62 (2008), 881-8.

Spectral resolution in multivariate optical computing
L.T.M. Profeta and M.L. Myrick
Spectrochim. Acta A Mol. Biomol. Spectrosc. 67 (2007), 483-502.

Precision in imaging multivariate optical computing
M.N. Simcock and M.L. Myrick
Applied Optics 46 (2007), 1066-1080.

Reinforcing mechanisms of single-walled carbon nanotube-reinforced polymer composites
X. Li, H. Gao, W.A. Scrivens, D. Fei, X. Xu, M. A. Sutton, A.P. Reynolds and M.L. Myrick
J. Nanosci. Nanotechnol. 7 (2007), 2309-2317.

Development of Patterns for Digital Image Correlation Measurements at Reduced Length Scales
W.A. Scrivens, Y. Luo, M.A. Sutton, S.A. Collette, M.L. Myrick, P. Miney, P.E. Colavita, A.P. Reynold, X. Li
Experimental Mechanics 47 (2007), 63–77.

Tuning D* with modified thermal detectors
M.N. Simcock, M.L. Myrick

Appl. Spectrosc. 60 (2006), 1469-1476.

Fine-structure measurements of oxygen A band absorbance for estimating the thermodynamic average temperature of the earth's atmosphere - An experiment in physical and environmental chemistry
M.L. Myrick, A.E. Greer, A. Nieuwland, R.J. Priore, J. Scaffidi, D. Andreatta, P. Colavita
J. Chem. Educ. 83 (2006), 263-264.

Fabricating optical fiber imaging sensors using inkjet printing technology: A pH sensor proof-of-concept
J.C. Carter, R.M. Alvis, S.B. Brown, K.C. Langry, T.S. Wilson, M.T. McBride, M.L. Myrick, W.R. Cox, M.E. Grove, B.W. Colston
Biosensors and Bioelectronics 21 (2006), 1359-1364.

Effects of metal coating on self-assembled monolayers on gold. 2. Copper on an oligo(phenylene-ethynylene) monolayer
P.E. Colavita, P.G. Miney, L. Taylor, R. Priore, D.L. Pearson, J. Ratliff, S.G. Ma, O. Ozturk, D.A. Chen, and M.L. Myrick
Langmuir 21 (2005), 12268-12277.

Copper coated self-assembled monolayers: alkanethiols and prospective molecular wires
Paula E. Colavita, Paul Miney, Lindsay Taylor, Michael Doescher, Annabelle Molliet, John Reddic, Jing Zhou, Darren Pearson, Donna Chen, Michael L. Myrick
In Topics in Fluorescence Spectroscopy Volume 8, J. Lakowicz and C. Geddes, eds., Plenum Press (NY, 2005), pp 275-303.

Structural and mechanical characterization of nanoclay-reinforced agarose nanocomposites
X. Li, H. Gao, W. Scrivens, D. Fei, V. Thakur, M. Sutton, A. Reynolds and M. Myrick
Nanotechnology 16 (2005), 2020-2029.

Classification of Endospores of Bacillus and Clostridium Species by FT-IR Reflectance Microspectroscopy and Autoclaving
D.L. Perkins, C.R. Lovell, B.V. Bronk, B. Setlow, P. Setlow, M.L. Myrick
Proc. 2005 IEEE Intern. Workshop on Measurement Systems for Homeland Security, Contraband Detection and Personal Safety; Orlando, FL (29-30 March 2005), pp 81-7.

Improved Dispersion of Bacterial Endospores for Quantitative Infrared Sampling on Gold Coated Porous Alumina Membranes
M.V. Schiza, D.L. Perkins, R.J. Priore, B. Setlow, P. Setlow, B.V. Bronk, and M.L. Myrick
Appl. Spectrosc. 59 (2005), 1068-1074.

Fourier Transform Infrared Reflectance Microspectroscopy Study of Bacillus subtilis Engineered without Dipicolinic Acid: The Contribution of Calcium Dipicolinate to the Mid-Infrared Absorbance of Bacillus subtilis Endospores"

D. L. Perkins, C. R. Lovell, B. V. Bronk, B. Setlow , P. Setlow, M. L. Myrick
Appl. Spectrosc. 59 (2005), 893-896.

Development of Patterns for Nanoscale Strain Measurements: I. Fabrication of Imprinted Au Webs for Polymeric Materials.

S.A. Collette, M.A. Sutton, P. Miney, A.P. Reynolds, X. Li, P.E. Colavita, W.A. Scrivens, Y. Luo, T. Sudarshan, P. Muzykov and M.L. Myrick
Nanotechnology 15 (2004), 1812-1817.

Clustering effects on discontinuous gold film NanoCells

J.M. Seminario, Y.F. Ma, L.A. Agapito, L.M. Yan, R.A. Araujo, S. Bingi, N.S. Vadlamani, K. Chagarlamudi, T.S. Sudarshan, M.L. Myrick, P.E. Colavita, P.D. Franzon, D.P. Nackashi, L. Cheng, Y.X. Yao, J.M. Tour
J. Nanosci. Nanotechnol. 4 (2004), 907-917.

Nanomechanical Characterization of Single-Walled Carbon Nanotube Reinforced Epoxy Composites

X. Li, H. Gao, W.A. Scrivens, D. Fei, X. Xu, M.A. Sutton, A.P. Reynolds and M.L. Myrick
Nanotechnology 15 (2004), 1416-1423.

Miniature Stereo Spectral Imaging System for Multivariate Optical Computing

Ryan J. Priore, Frederick, G. Haibach, Maria V. Schiza, Ashley E. Greer, David L. Perkins and M.L. Myrick
Appl. Spectrosc. 58 (2004) 870-873.

Effects of Autoclaving on Bacterial Endospores Studied by Fourier Transform Infrared Microspectroscopy

D.L. Perkins, C.R. Lovell, B.V. Bronk, B. Setlow, P. Setlow and M.L. Myrick
Appl. Spectrosc. 58(2004) 749-753.

Precision in Multivariate Optical Computing

Frederick G. Haibach and M. L. Myrick
Applied Optics 43 (2004), 2130-2140.

A New Optically Reflective Thin Layer Electrode (ORTLE) Window: Gold on a Thin Porous Alumina Film used to observe the Onset of Water Reduction

Paul G. Miney, Maria V. Schiza, M. L. Myrick
Electroanal. 16 (2004), 113-119.

Use of molecular symmetry to describe Pauli principle effects on the vibration-rotation spectroscopy of CO_2(g)

M.L. Myrick, P.E. Colavita, A.E. Greer, B. Long, D. Andreatta
J. Chem. Educ. 81 (2004), 379-382.

The Growth and Characterization of a Porous Aluminum Oxide Film formed on an Electrically Insulating Substrate

Paul G. Miney, Paula E. Colavita, Maria V. Schiza, Ryan J. Priore, Frederick G. Haibach, and Michael L. Myrick
Electrochem. Solid State Lett 6 (2003), B42-B45.

Construction of a Nanowell Electrode Array by Electrochemical Gold Stripping and Ion Bombardment

M.S. Doescher, U. Evans, P.E. Colavita, P.G. Miney and M.L. Myrick
Electrochem. Solid State Lett. 6 (2003), C112-C115.

Decomposition of Dimethyl Methylphosphonate on TiO_2(110): Principal Component Analysis Applied to X-Ray Photoelectron Spectroscopy

J. Zhou, K. Varazo, J.E. Reddic, M.L. Myrick and D.A. Chen
Anal. Chim. Acta 496 (2003), 289-300.

Multi-Wavelength Raman Imaging Using a Small-Diameter Image Guide with a Dimension-Reduction Imaging Array

J. Chance Carter, Wally A. Scrivens, M.L. Myrick and S. Michael Angel,
Applied Spectroscopy 57 (2003), 761-767.

Online Reoptimization of Filter Designs for Multivariate Optical Elements

Frederick G. Haibach, Ashley E. Greer, Maria V. Schiza, Ryan J. Priore, Olusola O. Soyemi and Michael L. Myrick
Applied Optics 42 (2003), 1833-1838.

Nanostructuring of poly(aryleneethynylene)s: Formation of nanotowers, nanowires, and nanotubules by templated self-assembly

J.N. Wilson, C.G. Bangcuyo, B. Erdogan, M.L. Myrick and U.H.F. Bunz
Macromolecules 36 (2003), 1426-1428.

Quinoxaline-based poly(aryleneethynylene)s

C.G. Bangcuyo, J.M. Ellsworth, U. Evans, M.L. Myrick and U.H.F. Bunz
Macromolecules 36 (2003) 546-548.

Band Gap Engineering of Poly(p-phenyleneethynylene)s: Cross-Conjugated PPE-PPV Hybrids

James N. Wilson, Paul. M. Windscheif, Una Evans, Michael L. Myrick and Uwe H.F. Bunz
Macromolecules 35 (2002), 8681-8683.

Effects of Metal Coating on Self-Assembled Monolayers on Gold. 1. Copper on Dodecanethiol and Octadecanethiol

Paula E. Colavita, Michael S. Doescher, Annabelle Molliet, Una Evans, John Reddic, Jing Zhou, Donna Chen, Paul G. Miney, and M.L. Myrick
Langmuir 18 (2002), 8503-8509.

Construction and Characterization of a Nanowell Electrode Array
U. Evans, P.E. Colavita, M.S. Doescher, M.V. Schiza, and M.L. Myrick
NanoLetters 2 (2002), 641-645.

Design of Angle-Tolerant Multivariate Optical Elements for Chemical Imaging
O.O. Soyemi, P.J. Gemperline, M.L. Myrick
Appl. Optics. 41 (2002), 1936-1941.

A Single-Element All-Optical Approach to Chemometric Prediction
M.L. Myrick, O. Soyemi, J. Karunamuni, D. Eastwood, H.Li, L. Zhang, A.E. Greer and P. Gemperline
Vibrational Spectroscopy 28 (2002), 73-81.

Multivariate Optical Elements Simplify Spectroscopy
M.L Myrick
Laser Focus World 38 (2002), 91-94.

A Nonlinear Optimization Algorithm for Multivariate Optical Element Design
O.O. Soyemi, F.G. Haibach, P.J. Gemperline and M.L. Myrick
Appl. Spectrosc. 56 (2002), 477-487.

Application of Multivariate Optical Computing to Simple Near-Infrared Point Measurements
M.L. Myrick, O.O. Soyemi, M.V. Schiza, J.R. Farr, F.G. Haibach, A.E. Greer, H. Li and R.J. Priore
SPIE 4574 (2002), 208-215.

Application of Multivariate Optical Computing to Near-Infrared Imaging
M.L. Myrick, O.O. Soyemi, F.G. Haibach, L. Zhang, A.E. Greer, H.Li, R.J. Priore, M.V. Schiza and J.R. Farr
SPIE 4577 (2002), 148-157.

A Polarization-Based Fluorescent Method for Enhanced Analytical Determination of Mixed Fluorophores in Fluid
Y. Yan and M.L. Myrick
SPIE 4576 (2002), 19-26.

Preparation and Characterization of Nanoscale Silver Colloids by Two Novel Synthetic Routes
W.C. Bell and M.L. Myrick
J. Colloid Interfac. Sci. 242 (2001), 300-305.

Synthesis and Characterization of a 2,1,3-Benzothiadiazole-b-alkyne-b-1,4-bis(2-ethylhexyloxy)benzene Terpolymer, a Stable Low-Band-Gap Poly(heteroaryleneethynylene)

C.G. Bangcuyo, U. Evans, M.L. Myrick and U.H.F. Bunz

Macromol. 34 (2001), 7592-7594.

Identification of Water-Soluble Petrochemicals by UV-induced Fluorescence

A. Muroski, M. Groner, E.L. Raleigh and M.L. Myrick

Marine Pollution Bulletin 42 (2001), 935-941.

Identification of Nucleotides with Identical Fluorescent Labels Based on Fluorescence Polarization in Surfactant Solutions

Y. Yan and M.L. Myrick

Anal. Chem. 73 (2001), 4508-4513.

Blue Electroluminescence from Novel Poly(*para*-phenyleneethynlene) Copolymers

Neil G. Pschirer, Tzenka Miteva, Una Evans, Rhonda S. Roberts, Alan R. Marshall, Dieter Neher, Michael L. Myrick, and Uwe H.F. Bunz

Chem. Mater. 2001, 13, 2691-2696.

Portable Sniffer for 2,4-Dinitrotoluene Detection

K.J. Albert, M.L. Myrick, S.B. Brown, D.L. James, F.P. Milanovich and D.R. Walt

Environ. Sci. Technol. 35 (2001), 3193-3200.

Quantitative measurement and discrimination of isochromatic fluorophores based on micelle-enhanced steady-state fluorescence polarization in fluid solution

Yuan Yan and M.L. Myrick

Anal. Chim. Acta 441 (2001), 87-93.

Interference Filter Refinement for Array-Based Fluorescimetric Sensing

J. Karunamuni, K.E. Stitzer, D. Eastwood, K.J. Albert, D.R. Walt, S.B. Brown and M.L. Myrick

Optical Engineering 40 (2001), 888-95.

Thermodynamic Characterization of Separation Phenomena at the Polymer/Alkyl-Modified Silica Interface Within Glass-Reinforced Composites Using Thermogravimetric Analysis. Part II

H. Li and M.L. Myrick

J. Adhesion Sci. Technol. 15 (2001), 553-564.

A Simple Optical Computing Device for Chemical Analysis

O.O. Soyemi, P. J. Gemperline, L. Zhang, D. Eastwood, H. Li,, and M.L. Myrick

SPIE 4284 (2001), 17-28.

Novel Filter Design Algorithm for Multivariate Optical Computing

O.O. Soyemi, P.J. Gemperline, L. Zhang, D. Eastwood, H. Li, and M.L. Myrick

SPIE 4205 (2001), 288-299.

Spectroelectrochemical Study of the Oxidative Doping of Polydialkylphenyleneethynene using Iterative Target Transformation Factor Analysis

Una Evans, O. Soyemi, M. Doescher, U. Bunz, L. Kloppenberg, M.L. Myrick
Analyst 126 (2001), 508-512.

Design and Testing of a Multivariate Optical Element (MOE): The First Demonstration of Multivariate Optical Computing for Predictive Spectroscopy

O. Soyemi, D. Eastwood, L. Zhang, H. Li, J. Karunamuni, P. Gemperline, R.A. Synowicki, M.L. Myrick
Anal. Chem. 73 (2001), 1069-1079.

The Use of a 2D to 1D Dimension Reduction Fiber-Optic Array for Multi-Wavelength Imaging Sensors

M. V. Schiza, M. P. Nelson, M. L. Myrick, S. M. Angel
Appl. Spectrosc. 55 (2001), 217-26.

Field applications of stand-off sensing using visible/NIR multivariate optical computing

D. Eastwood, O. Soyemi, J. Karunamuni, L. Zhang, H. Li, and M.L. Myrick
SPIE 4199 (2001), 105.

Spectral Tolerance Determination for Multivariate Optical Element Design

M.L. Myrick, S. Soyemi, H. Li, L. Zhang and D. Eastwood
Fres. J. Anal. Chem. 369(2001), 351-5.

Stripping Voltammetry of Cu Overlayers Deposited on Self-Assembled Monolayers: Field Emission of Electrons Through A Phenylene Ethynylene Oligomer

M.S. Doescher, A. Rawlett, J.M. Tour and M.L. Myrick
J. Phys. Chem. B 105(2001), 105.

Molecular Scale Electronics. Critical Nanolithography Issues of Synthesis and Addressing.

S. Huang, E. T. Mickelson, A.M. Rawlett, C.L. Asplund, A.M. Cassell, M. Kozaki, T.P. Burgin, L. Jones II, J. M. Tour, M.L. Myrick, P.G. Van Patten, J. Chen, C.W. Zhou, C.J. Muller, M.R. Deshpande, M.A. Reed, L.A. Bumm, M.T. Cygan, T.D. Dunbar, P.S. Weiss and D.L. Allara
Materials Research Society Proceedings 584 (2000), 45-56.

Fluorescence Fingerprint of Waters: Excitation-Emission Matrix Spectroscopy as a Tracking Tool

Y. Yan, H. Li and M.L. Myrick
Appl. Spectrosc. 54 (2000), 1539-1542.

Simple Techniques for Chemical Imaging at Many Wavelengths Simultaneously, Using a Novel 2D to 1D Optical Fiber Array

S.M. Angel, M.V. Schiza, M.L. Myrick and M.P. Nelson
SPIE 4074 (2000), 99.

Kinetic and Spectroscopic Profiles of Pyridine Complexes at a Silver Electrode Using Surface-Enhanced Raman Scattering (SERS) and Evolving Factor Analysis
M.A. Nicholson, J.F. Aust, K.S. Booksh, W.C. Bell and M.L. Myrick
Vibrational Spectroscopy 24 (2000), 157-163.

The Lowest Electronic Excited States of poly(*para*-cyclobutadienylenecyclopentadienyl-cobalt)butadiynylene
B. Craig Harrison, J. Seminario, U. Bunz and M.L. Myrick
J. Phys. Chem. 104 (2000), 5937.

Hyperspectral Imaging Sensors Using a Novel 2D to 1D Fiber Array
M.V. Schiza, M.P. Nelson, M.L. Myrick, and S.M. Angel
SPIE 3860 (1999), 317-325.

Characterization of K+ Ion Exchange into Na-LSX Using Time-Resolved Synchrotron X-Ray Powder Diffraction and Rietveld Refinement
Y. Lee, C.L. Cahill, J.C. Hanson, J.B. Parise, S.W. Carr, M.L. Myrick, U.W. Preckwinkel, and J.C. Phillips
in Proc. 12th Intern. Zeolite Conf., M.M.J. Treacy, B.K. Marcus, M.E. Bisher and J.B. Higgins, eds., Materials Research Society (Warrendale, PA), 1999, pgs 2401-8.

Design of a Cone-Penetrometer-Compatible Probe and Housing: The LLNL Raman Probe
S. Brown, F.P. Milanovich, K. Kyle and M.L. Myrick
Rev. Sci. Instrum. 70 (1999), 3735.

New Developments in Two-Dimensional Fluorescence Spectroscopy for Rapid Detection of Organics in Seawater
M.L. Myrick and Y. Yan
SPIE 3854 (1999), 65.

New Approaches to Implementing Predictive Spectroscopy
M.L. Myrick
SPIE 3854 (1999), 98-102.

Assignment of the Optical Transitions in 1,3-Diethynylcyclobutadiene (cyclopentadienyl)cobalt Oligomers
H. Rengel, M. Altmann, D. Neher, B.C. Harrison, M.L. Myrick and U.H.F. Bunz
J. Phys. Chem. 103(1999),10335.

High-Speed Detection of Explosives.
K.J. Albert, M.L. Myrick, S.B. Brown, F.P. Milanovich and D.R. Walt

SPIE 3710 (1999), 308-314 .

Water surface reconstruction system for underwater target detection
J. Zhou, H. Storm, E. D. Sinzinger, M. L. Myrick
SPIE 3710 (1999), 504.

Analysis of Metal Salts by Combining Spectral Windows: Quantifying and Optimizing Cost-Effectiveness of Multispectral Analyses
J.L. Wu, W.J. Egan and M.L .Myrick
LLNL UCRL publication number JC-132851.
Appl. Spectrosc. 53(1999),439.

Placement of Conjugated Oligomers in an Alkanethiol Matrix by STM Lithography
J. Chen, M.A. Reed, C.L. Asplund, A.M. Cassell, A.M. Rawlett, P.G. Van Patten, M.L. Myrick and J.M. Tour
Appl. Phys. Lett. 75(1999), 624.

Single-Frame Chemical Imaging: Dimension Reduction Fiber-Optic Array Improvements and Application to Laser-Induced Breakdown Spectroscopy.
M.P. Nelson and M.L. Myrick
Appl. Spectrosc. 53(1999), 751.

Thermodynamic Characterization of Separation Phenomena at the Silica/Polymer Interface within Glass-Reinforced Composites using Adsorption Chromatography. Part I.
A.R. Muroski, M.P. Nelson and M.L. Myrick
J. Adhesion Sci. Technol. 13(1999), 437-451.

Fabrication and Evaluation of a Dimension-Reduction Fiber-Optic System for Chemical Imaging Applications
M.P. Nelson and M.L. Myrick
Rev. Sci. Instrum. 70(1999), 2836.

Simultaneous Enantiomeric Determination of Dansyl-D,L-Phenylalanine by Fluorescence Spectroscopy in the Presence of ✔Acid Glycoprotein
Yuan Yan and M.L. Myrick
Anal. Chem. 71(1999), 1958.

Time-dependent multivariate single-frame chemical imaging spectroscopy of laser plumes using a dimension reduction fiber optic array"
M. P. Nelson, M. L. Myrick
SPIE 3649(1999), 92-99.

Applications of Atomic Force Microscopy to Study of Artificially Coalified Peats

A.D. Cohen, A.M. Bailey, M.L. Myrick, M. Doescher, W.C. Riese, S. Thibodeaux and R. Enrico
Soc. Org. Petrology, 15(1998), 23-27.

Template Electropolymerization of Polypyrrole Nanostructures on Highly Ordered Pyrolytic Graphite Defects and and Pit Defects
M.A. Nicholson, J.D. Noll and M.L. Myrick
J. Electrochem. Soc. 145(1998), 3320-3328.

Pyrolysis gas chromatography/mass spectrometry investigation of a thermally cured polymer
R. C. Galipo, W. J. Egan, J. F. Aust, M. L. Myrick, and S. L. Morgan
J. Anal. Appl. Pyrolysis, 45(1998), 23-40.

Single-Shot and Multiwavelength Imaging of Laser Plumes
M.P. Nelson and M.L. Myrick
Proc. SPIE-Int. Soc. Opt. Eng. (1998), 3261(Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing V) 289-298.

Multivariate Optical Computation for Predictive Spectroscopy
M.P. Nelson, J.F. Aust, J.A. Dobrowolski, P.G. Verly, and M.L. Myrick
Proc. SPIE-Int. Soc. Opt. Eng. (1998), 3261(Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing V) 232-243.

Principal Component Mapping Applied to Raman Microspectroscopy of Fiber-Reinforced Polymer Composites
C.M. Stellman, K.S. Booksh and M.L. Myrick
J. Sci. Eng. Comp. Mater. 7(1998), 51-80.

Single-Shot Multiwavelength Imaging of Laser Plumes
M.P. Nelson, W.C. Bell, M.L. McLester, and M.L. Myrick
Appl. Spectrosc. 52(1998), 179.

Modeling of Growth Morphology of Underpotential Electropolymerization of Pyrrole
M.L. Myrick, J.D. Noll, M.A. Nicholson
J. Electrochem. Soc. 145(1998), 179-185.

Monitoring Anhydride and Acid Conversion in Supercritical/Hydrothermal Water by in Situ Fiber-Optic Raman Spectroscopy
W.C. Bell, K.S. Booksh, M.L. Myrick
Anal. Chem. 70(1998), 332.

Multivariate Optical Computation for Predictive Spectroscopy
M.P. Nelson, J.F. Aust, J.A. Dobrowolski, P.G. Verly, and M.L. Myrick
Anal. Chem. 70(1998), 73-82.

Design of Thin Film Filters for the Monitoring of Chemical Reactions
J.A. Dobrowolski, P.G. Verly, J.F. Aust, M.P. Nelson and M.L. Myrick
Proc. SPIE-Int. Soc. Opt. Eng. (1998), 3133 (Optical Thin Films V), 38-45.

Use of in situ Fiber-Optic Raman Spectroscopy to Replace Calorimetry in the Monitoring of Polymer and Composite Curing
Jeffrey F. Aust, Karl S. Booksh, Christopher M. Stellman, Richard S. Parnas, and Michael L. Myrick
Internet J. Vibrational Spectrosc. 1(1997) 117-129.

Precise Determination of Percent Cure of Epoxide Polymers and Composites via Fiber-Optic Raman Spectroscopy and Multivariate Analysis
Jeffrey F. Aust, K.S. Booksh, Christopher M. Stellman, Richard S. Parnas and Michael L. Myrick
Appl. Spectrosc. 51(1997), 247-252.

Spark-Gap Atomic Emission Microscopy 2. Improvements in Resolution
P.G. Van Patten, J.D. Noll and M.L . Myrick
J. Vac. Sci. Technol. B 15(1997), 282-286.

Comment on 'Formation of Holes in Alkanethiol Monolayers on Gold'
P.G. Van Patten, J.D. Noll, M.L. Myrick
J. Phys. Chem. B 101(1997), 7874-7875.

Scanning Tunneling Microscopy Under Polar Solvents with Uncoated Tips
P.G. Van Patten, J.D. Noll, M.L. McLester, Y.-G. Kim, and M.L. Myrick
Langmuir 13(1997), 365-368.

Observing Reactions via Flow-Injection Scanning Tunneling Microscopy
J.D. Noll, P.G. Van Patten and M.L. Myrick
in Proceedings of the 2nd Atomic Force Microscopy/Scanning Tunneling Microscopy Symposium, Plenum Press, S.H. Cohen and M. Lightbody eds., 1997, pg. 137-146.

Nanometer-Scale Qualitative Analysis of Surfaces with a Modified Scanning Tunneling Microscope/Field Emission Source
P.G. Van Patten, J.D.Noll and M.L. Myrick
in Proceedings of the 2nd Atomic Force Microscopy/Scanning Tunneling Microscopy Symposium, Plenum Press, S.H. Cohen and M. Lightbody eds., 1997, pg. 155-159.

Multivariate Raman Imaging of Simulated and "Real World" Glass-Reinforced Composites
C.M. Stellman, K.S. Booksh and M.L. Myrick
Appl. Spectrosc. 50(1996), 552-557.

Single-Measurement Excitation/Emission Matrix Spectrofluorometer for Determination of Hydrocarbons in Ocean Water 1. Instrumentation and Background Correction

A.R. Muroski, K.S. Booksh and M.L. Myrick

Anal. Chem. 68(1996), 3534-3538.

Single-Measurement Excitation/Emission Matrix Spectrofluorometer for Determination of Hydrocarbons in Ocean Water 2. Calibration and Quantitation of Naphthalene and Styrene

K.S. Booksh, A.R. Muroski and M.L. Myrick

Anal. Chem. 68(1996), 3539-3544.

Novel In-Situ Probe for Monitoring Polymer Curing

J.F. Aust, K.S. Booksh, and M.L. Myrick

Appl. Spectrosc. 50(1996), 382-387.

Mathematical Alignment of Wavelength-Shifted Optical Spectra for Qualitative and Quantitative Analysis

K.S. Booksh, C.M. Stellman, W.C. Bell and M.L. Myrick

Appl. Spectrosc. 50(1996), 139-147.

Design and Performance of a Highly Versatile, Low Cost Fiber-Optic Confocal Raman Microscope

C.M. Stellman, J.E. Reddic and M.L. Myrick

Rev. Sci. Instrum. 67(1996), 79-84.

Spark-Gap Atomic Emission Microscopy

P.G. Van Patten, J.D. Noll, M.L. Myrick, C.R. Li and T.S. Sudarshan

J. Phys. Chem. 1996, 100(9), 3646-3651.

Fiber-Optic Raman Measurements of Bonding Agents and Interfaces during the Curing Process

M.L.Myrick and S.L. Morgan Office of Naval Research, Report, 34 pp. (1995).

Multivariate Fluorescence Imaging of Nylon 66 Gel on Production Pack Screens

C.M. Stellman, K.S. Booksh and M.L. Myrick

Appl. Spectrosc. 49(1995),1545-49.

Flow Injection System for the Scanning Tunneling Microscope

J.D. Noll, P.G. Van Patten, K.S. Booksh, M.A. Nicholson and M.L. Myrick

Rev. Sci. Instrum. 66(1995),4150-4156.

In-Situ Spectroscopic Study of Microwave Polymerization

C.M. Stellman, J.F. Aust and M.L. Myrick

Appl. Spectrosc. 49(1995), 392-394.

Ultraviolet Absorbance Measurements Using a Fluorescent Transduction Mechanism
E.L. Raleigh, J.B. Cooper, P.T. Chou, J.D. Noll and M.L. Myrick
Spectrochim. Acta 50A(1994),577-582.

FT-Raman Studies of a Polyimide Curing Reaction
J.F. Aust, M. Hale, S.L. Morgan and M.L. Myrick
Anal. Chim. Acta 293(1994), 119-128.

Raman Spectroscopy With A Low-Cost Imaging CCD Array
J.B. Cooper, J.F. Aust, C.M. Stellman, K.E. Chike, M.L. Myrick, R. Schwartz and M. Longmire
Spectrochim. Acta 50A(1994),567-575.

In-Situ Fiber-Optic Raman Spectroscopy of Organic Chemistry in A Supercritical Water Reactor
M.L. Myrick, J. Kolis, E. Parsons, K.E. Chike, M.C. Lovelace, W. Scrivens, R. Holliday, and M. Williams J. Raman Spectrosc. 25(1994), 59-65.

Analysis of Highly Ordered Pyrolytic Graphite Step Defects Via Scanning Tunneling Microscopy
J.D. Noll, J.B. Cooper, and M.L. Myrick
J. Vac. Sci. Technol. A 11(1993), 2006-2011.

Fiber-optic Raman and micro-Raman measurements of bonding agents in interfaces during the curing process
M.L. Myrick and S.L. Morgan Report (1993), ARO-30450.1-MS-YIP; Order No. AD-A260560, 10 pp. Avail.: NTIS From: Gov. Rep. Announce. Index (U. S.) 1993, 93(12), Abstr. No. 334,576.

Raman and Near-Infrared Studies of an Epoxy Resin
K.E. Chike, M.L. Myrick, R.E. Lyon, S.M. Angel
Appl. Spectrosc. 47(1993), 1631.

Remote Cure Monitoring of Polymeric Resins by Laser Raman Spectroscopy
K.C. Hong, T.M. Vess, R.E. Lyon, K.E. Chike, J.F.Aust, and M.L. Myrick
Int. SAMPE Symp. Exhib. (1993), 38(Advanced Materials: Performance through Tec), 427-35. (PDF of UCRL-JC-112824)

Microstructure Profiles of Laser Induced Chlorophyll Fluorescence Spectra: Evaluation of Backscatter and Forward Scatter Fiber Optic Sensors
R.A. Desiderio, T.J. Cowles, James N. Moum, Michael Myrick
J.Atmos.Oceanic Tech. 10(1993), 209-224.

Energy Capture by a Tetranuclear Metal Cluster Complex. The Synthesis and Characterization of $PtOs_3(CO)_{10}(\mu-\eta^2$-dppm)[Si(OMe)$_3$]($\mu$-H) and its Metastable Photoisomer

R.D. Adams, J.E. Cortopassi, J.F. Aust, and M.L. Myrick
J.Am.Chem.Soc. 115(1993), 8877-8878.

Development of Raman Scattering Techniques Using Near-Infrared Lasers and Fiber Optics

S.M. Angel and M.L. Myrick, in Advances in Near-Infrared Measurements, Volume 1, pp. 25-54, Copyright 1993 by JAI Press, Inc., Edited by Gabor Patonay.

Fiber-optic Raman spectroscopy for cure monitoring of advanced polymer composites

M.L. Myrick, S.M. Angel, R.E. Lyon and T.M. Vess
Society of Plastics Engineers, ANTEC'92 (May 3-7, 1992; Detroit, MI), 50 (1992) 2052-5.
(PDF of UCRL-JC-109213)

Near-Infrared Surface-Enhanced Raman Spectroscopy: New Developments and Applications

S.M. Angel, and M.L. Myrick, in Handbook of Near-IR Analysis, Marcel Dekker, D.A. Burns, and E. Ciurczak, eds., p.225 (1992), LLNL UCRL publication 102448.

Scanning Tunneling Microscopy of [Ru(1,10-phenanthroline)$_3$]Cl$_2$ on metals and GaAs: Electronic Factors in Imaging

K.C. Yung, T.M. Vess, and M.L. Myrick
in Proceedings of the International Symposium on the Physics and Chemistry of Finite Systems: From Clusters to Crystals, P. Jena, S.Ms. Khanna, and BK. Rao eds. (Kluwer Academic Publishers)
NATO ASI Ser., Ser. C **374**(1992), 1171.

Epoxy Cure monitoring using fiber-optic Raman spectroscopy

M.L. Myrick, S.M. Angel, R.E. Lyon, and T.M. Vess
SAMPE J., 28(1992), 37.

Fiber-Optic Sensors Using Raman and Surface-enhanced Raman Spectroscopy

S.M. Angel, M.L. Myrick, and F.P. Milanovich
in Frontiers in Bioprocessing II, P. Todd, S. Sikdar and M. Bier eds.
American Chemical Society, Washington, DC (1992), pp. 72-89.

Simultaneous Multi-point Fiber-optic Raman Sampling for Chemical Process Control Using Diode Lasers and a CCD Detector

S.M. Angel, T.M. Vess, and M.L. Myrick
SPIE **1587** (1992), 219-231.

Tunneling Spectroscopy on Graphite: Implications for Biological Scanning Tunneling Microscopy

M.L. Myrick, N.V. Hud, S.M. Angel, and D.G. Garvis
Chem.Phys.Lett. **180** (1991), 156.

Remote Raman Spectroscopy Using Diode Lasers and Fiber-Optic Probes

S.M. Angel, M.L. Myrick, and T.M. Vess
SPIE, **1435**(1991), 72-81.

Development and Applications of Fiber Optic Sensors
S.M. Angel, T.J. Kulp, and M.L. Myrick
in Chemical Sensor Technology Vol 2.
N. Yamazoe, Ed. (Kodansha Ltd. and Elsevier Science Publishers B.V. Amsterdam), 1991, LLNL UCRL publication 103174.

Fluorescence Microstructure using a laser/fiber optic profiler
T.J. Cowles, R.A. Desiderio, J.N. Moum, M.L. Myrick, D.G. Garvis, S.M. Angel
Ocean Optics 10 R.W. Spinrad, Ed., SPIE Vol. 1302, p. 336-345 (1990).

FT-Raman of Urethane Polymers for the Determination of Physical Properties
C.M. Miller, D.A. Archibald, M.L. Myrick and S.M. Angel
Appl. Spectrosc. **44**(1990),1297.

Wavelength Selection for Fiber-Optic Raman Spectroscopy, Part 1
S.M. Angel and M.L. Myrick
Appl. Opt. **29**(1990),1350-1352. (also UCRL-101983)

Elimination of Background in Fiber-Optic Raman Measurements
M.L. Myrick and S.M. Angel
Appl. Spectrosc. 44(1990), 565-570.

Comparison of Some Fiber-Optic Configurations for Measurement of Luminescence and Raman Scattering
M.L. Myrick, S.M. Angel and R.A. Desiderio
Appl. Opt. 29(1990),1333.

Photoselection Studies of Mono-Diimine Complexes: d-π^* and $\pi-\pi^*$ Emitters
M.K. De Armond, M.L. Myrick, R. Pittman. and R.E. Des Enfants
Coord. Chem. Rev. 97(1990), 261.

Surface-enhanced Raman Spectroscopy Using Commercially Available Au Colloids
S.M. Angel, M.L. Myrick and F.P. Milanovich
Appl. Spectrosc. 44(1990),335.

Chromophoric Fine-Tuning and the Interchromophoric Coupling Model in Ruthenium(II) Polypyridyl Complexes
R.L. Blakley, M.L. Myrick and M.K. De Armond
J. Phys. Chem. 94(1990), 4804-4809.

Development of a Drug Assay Using Surface-Enhanced Raman Spectroscopy
S.M. Angel, J.N. Roe, B.D. Andresen, M.L. Myrick, and F.P. Milanovich
in Optical Fibers in Medicine V, SPIE Vol. 1201, p. 469-473 (1990).

Photoselection Studies of Mixed-Ligand Ru(II) Complexes; [RuL2L']2+ -- Multiple State Emission
M.L. Myrick, M.K. De Armond and R.L. Blakley
Inorg. Chem. 28(1989),4077-4084.

High-Energy Metal to Ligand Charge-Transfer States in Ruthenium-Diimine Complexes
M.L. Myrick, and M.K. De Armond
J. Phys. Chem. 93(1989), 7099-7107.

Time-Dependent Photoselection Results for Ruthenium(II) Diimine Complexes
M.K. De Armond and M.L. Myrick
Inorg. Chem. 28(1989), 981-982.

Photoselection Studies of Cis/Trans Isomers of [Ru(bpy)2(L)2]2+: Evidence for Exciton Interactions in Singlet Metal-Ligand Charge-Transfer States
M.L. Myrick, R.L. Blakley, and M.K. De Armond
J. Phys. Chem. 93(1989), 3936-3940.

Near-Infrared Surface-Enhanced Raman Spectroscopy Using a Diode Laser
S.M. Angel, and M.L. Myrick
Anal. Chem. 61(1989), 1648-1652.

The Number and Spacing of Levels in the Emitting Manifold of [Ru(bpy)3]2+: Low Temperature Measurements
M.L. Myrick, R.L. Blakley, and M.K. De Armond
Chem. Phys. Lett. 157(1989), 73-77.

The Life and Times of [Ru(bpy)3]2+: Localized Orbitals and Other Strange Occurrences
M.K. De Armond, and M.L. Myrick
Acc. Chem. Res. 22(1989), 364-370.

Normal and surface-enhanced Raman scattering using optical fibers
S.M. Angel, and M.L. Myrick
in Fibers '89 Symposium, SPIE 1172 (1989), 38-48.

New Developments and Applications of Fiber-Optic Sensors
S.M. Angel, M.N. Ridley, K. Langry, T.J. Kulp, and M.L. Myrick in
Chemical Sensors and Microinstrumentation, R. Murray, R. Dessy,
W. Heineman, J. Janata, and W. Seitz, eds.,
American Chemical Society Symposium Series 403(1989), pp. 345-363.

ISBN: 0-8412-1661-4

Evidence for Static Localization in the Lowest Optically Excited States of Ruthenium(II) Diimine Complexes: A Solvent- and Time-Dependent Photoselection Study at 77 K
M.L. Myrick, R.L. Blakley, M.K. De Armond, and M.L. Arthur
J.Am. Chem. Soc. 110 (1988),1325-1336.

Emission Wavelength Independence of the Excitation Photoselection of [Ru(bpy)3]2+
R.L. Blakley, M.L. Myrick and M.K. De Armond
Inorg. Chem. 27(1988), 589-590.

Time-Resolved Photoselection of [Ru(bpy)3]2+ -- Exciton Hopping in the Excited State
M.L. Myrick, R.L. Blakley, and M.K. De Armond
J. Am. Chem. Soc. 109(1987), 2841-2.

Interligand and Charge-Transfer Emission from [Ru(bpy)(HDPA)2]2+: A Dual Emitting Ru(II) Complex"
R.L. Blakley, M.L. Myrick, and M.K. De Armond
J. Am. Chem. Soc. 108(1986),7843-7844.

PATENTS

9,523,637 “Thermal selectivity multivariate optical computing” December 2016

9,377,424 “Methods of detecting latent stains on a surface” June 2016

9,182,282 “Multi-analyte optical computing system” November 2015

9,170,154 “Data validation and classification in optical analysis systems” October 2015

8,902,423 “Classification using multivariate optical computing” December 2014

8,862,445 “Selecting spectral elements and components for optical analysis systems” October 2014

8,823,802 “Multi-mode imaging in the thermal infrared for chemical contrast enhancement” Sept 2014

8,400,637 “Signal Processing for Optical Computing System” March 2013

8,358,418 “Optical Analysis System” January 2013

8,352,205 “Multivariate Optical Elements for Nonlinear Calibration” January 2013

8,345,251 “Thin Layer Porous Optical Sensors for Gases and Other Fluids” January 2013

8,345,234 “Self Calibration Methods for Optical Analysis System” January 2013

8,283,633 “Tuning D* with modified thermal detectors” October 2012

8,240,189 “Thermal Selectivity Multivariate Optical Computing” August 2012

8,237,929 “Signal Processing for Optical Computing System” August 2012

8,213,012 “Stability for optical computing system” July 2012

8,213,006 “Multi-Analyte optical computing system” July 2012

8,212,213 “Chemically-selective detector and methods relating thereto” July 2012

8,208,147 “Method of high speed monitoring based on multivariate optical elements” June 2012

8,184,371 “Thin film interference filter and bootstrap method for process control” May 2012

8,184,295 “Tablet analysis and measurement system” May 2012

8,049,881 “Optical analysis system and methods/normal incidence orientation” November 2011

7,990,538 “Signal Processing for optical computing system” August 2011

7,920,258 “Optical analysis system and elements to isolate spectral region” April 2011

7,911,605 “Multivariate optical elements for optical analysis system” March 2011

7,889,346 “Thin-layer porous optical sensors for gases and other fluids” February 2011

7,834,999 “Optical Analysis System and optical train” November 2010

7,138,156 “Filter Design Algorithm” November 2006

7,123,844 “Optical Computational System” October 2006

6,529,276 “Optical Computational System” March 2003

6,198,531 “Optical Computation System” March, 2001

5,194,913 “Fiber-optic apparatus and method” March 1993