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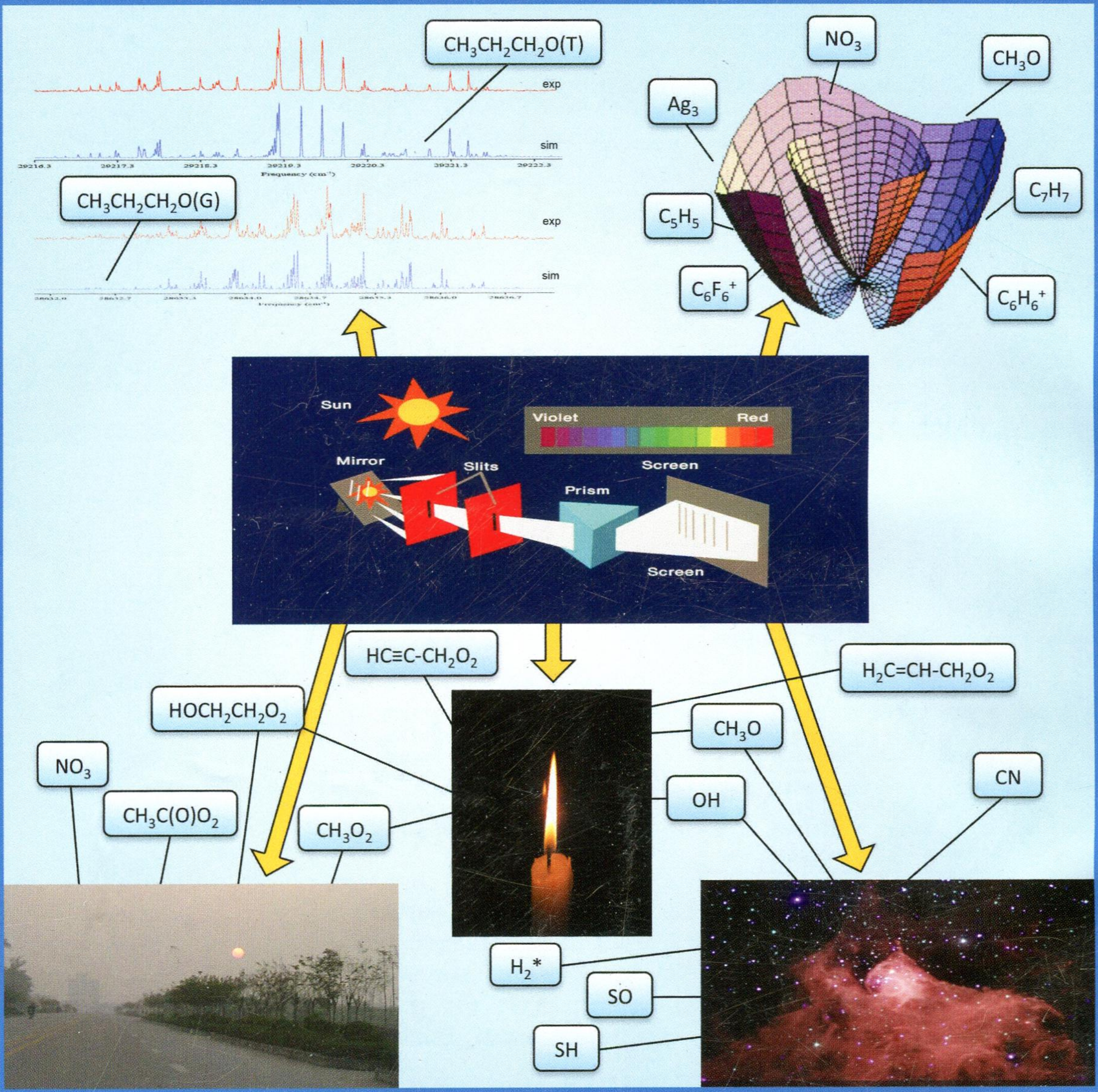

Central Role of Spectroscopy for the Detection and Characterization of Reactive Chemical Intermediates (see page 5A)

TERRY A. MILLER FESTSCHRIFT

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ON THE COVER: Schematic diagram (center) indicating the central role of spectroscopy, as depicted by the Franhofer experiment showing dark atomic absorption lines from the solarsphere. Rotationally resolved 0_0^0 band (upper left) of the $\tilde{B}-\tilde{X}$ electronic transition of two jet-cooled conformers of the *n*-propoxy radical and simulations thereof based upon the spectral analysis. The potential energy surface (upper right) of a Jahn−Teller active molecule indicating the fundamental knowledge that spectra can provide about the electronic and geometric structure. Panels on the bottom represent chemical processes for which spectroscopy can provide diagnostics of reactive chemical intermediates: tropospheric chemistry represented by a photo of smog in China (left); combustion represented by a burning candle (center); and interstellar chemistry represented by a composite image of the Cepheus B region showing a molecular cloud (Image credit: NASA/CXC/JPLCaltech/PSU/CfA). The chemical formulas associated with each image identify reactive molecules involved in the process whose spectra have been observed and/or analyzed in the lab of Terry A. Miller. This special issue was organized by Guest Editors Andrew M. Ellis, Michael C. Heaven, and Anne B. McCoy.

SPECIAL ISSUE: TERRY A. MILLER FESTSCHRIFT

Guest Editors: Andrew M. Ellis, Michael C. Heaven, and Anne B. McCoy

Special Issue Preface

13207 dx.doi.org/10.1021/jp408694x
Preface to the Terry A. Miller Festschrift
Andrew M. Ellis, Michael C. Heaven, and Anne B. McCoy

13209 dx.doi.org/10.1021/jp409303s
Autobiography of Terry A. Miller
Terry A. Miller

13216 dx.doi.org/10.1021/jp4093767
Colleagues of Terry A. Miller

13218 dx.doi.org/10.1021/jp4093755
Publications of Terry A. Miller

Articles

13229 (S) dx.doi.org/10.1021/jp4016239
Laser-Induced Fluorescence of Isobutoxy in Competition with Ground State Decomposition
Gaiting Liang, Chengxuan Liu, Haiyan Hao, Lily Zu,* and Weihai Fang

13236 dx.doi.org/10.1021/jp401979v
New Analysis of the ν_3 and ν_4 Bands of HNO_3 in the 7.6 μm Region
Agnès Perrin*

13249 S dx.doi.org/10.1021/jp402552t
Chirped-Pulse and Cavity-Based Fourier Transform Microwave Spectroscopy of a Chiral Epoxy Ester: Methyl Glycidate
Javix Thomas, Jensen Yiu, Johannes Rebling, Wolfgang Jäger, and Yunjie Xu*

13255 S dx.doi.org/10.1021/jp403386d
Sub-Doppler Spectroscopy of the *trans*-HOCO Radical in the OH Stretching Mode
Chih-Hsuan Chang, Grant T. Buckingham, and David J. Nesbitt*

13265 S dx.doi.org/10.1021/jp404244y
Vibrational Spectra and Fragmentation Pathways of Size-Selected, D_2-Tagged Ammonium/Methylammonium Bisulfate Clusters
Christopher J. Johnson and Mark A. Johnson*

13275 S dx.doi.org/10.1021/jp404581z
Rotational Spectrum of Paracetamol
Marcelino Varela, Carlos Cabezas, Juan C. López, and José Luis Alonso*

13279 S dx.doi.org/10.1021/jp404604z
Electronic Transitions of Ruthenium Monoxide
Na Wang, Y. W. Ng, and A. S.-C. Cheung*

13284 S dx.doi.org/10.1021/jp404710s
Electronic Spectroscopy of Diatomic VC
Olha Krechkivska and Michael D. Morse*

13292 S dx.doi.org/10.1021/jp404950p
Hyperfine Interactions and Electric Dipole Moments in the [16.0]1.5(v = 6), [16.0]3.5(v = 7), and $X^2\Delta_{5/2}$ States of Iridium Monosilicide, IrSi
Anh Le, Timothy C. Steimle,* Michael D. Morse, Maria A. Garcia, Lan Cheng, and John F. Stanton

13303 dx.doi.org/10.1021/jp404944s
Surface Self-Diffusion of Organic Glasses
Caleb W. Brian and Lian Yu*

13310 S dx.doi.org/10.1021/jp4051758
Dynamics of Small, Ultraviolet-Excited ICN^- Cluster Anions
Amanda S. Case, Anne B. McCoy,* and W. Carl Lineberger*

13319 dx.doi.org/10.1021/jp405747q
Photoisomerization Action Spectroscopy of the Carbocyanine Dye DTC^+ in the Gas Phase
Brian D. Adamson, Neville J. A. Coughlan, Gabriel da Silva, and Evan J. Bieske*

13326 dx.doi.org/10.1021/jp406313a
Size-Dependent Velocity Map Photoelectron Imaging of Nanosized Ammonia Aerosol Particles
Adam H. C. West, Bruce L. Yoder, and Ruth Signorell*

13336 S dx.doi.org/10.1021/jp4064998
High-Resolution Electron Spectroscopy and Rotational Conformers of Group 6 Metal (Cr, Mo, and W) Bis(mesitylene) Sandwich Complexes
Sudesh Kumari and Dong-Sheng Yang*

13345 S dx.doi.org/10.1021/jp406624p
Role of Fluorophore–Metal Interaction in Photoinduced Electron Transfer (PET) Sensors: Time-Dependent Density Functional Theory (TDDFT) Study
Hyunjung Lee, Robert D. Hancock, and Hee-Seung Lee*

13356 S dx.doi.org/10.1021/jp406668w
Torsion–Inversion Tunneling Patterns in the CH-Stretch Vibrationally Excited States of the G_{12} Family of Molecules Including Methylamine
Mahesh B. Dawadi, Ram S. Bhatta, and David S. Perry*

13368 dx.doi.org/10.1021/jp4066554
Jahn–Teller Effect in VCl_4
K. Zhao, H.-L. Hsu, L. Laux, and R. M. Pitzer*

13373 S dx.doi.org/10.1021/jp406680r
Accurate Analytic Potential and Born–Oppenheimer Breakdown Functions for MgH and MgD from a Direct-Potential-Fit Data Analysis
Robert D. E. Henderson,* Alireza Shayesteh, Jason Tao, Carl C. Haugen, Peter F. Bernath, and Robert J. Le Roy*

13388 S dx.doi.org/10.1021/jp406687x
Photoisomerization and Photoinduced Reactions in Liquid CCl_4 and $CHCl_3$
Fawzi Abou-Chahine, Thomas J. Preston, Greg T. Dunning, Andrew J. Orr-Ewing,* Gregory M. Greetham, Ian P. Clark, Mike Towrie, and Scott A. Reid

13399 dx.doi.org/10.1021/jp406691e
Sensitivity Limits of Continuous Wave Cavity Ring-Down Spectroscopy
Haifeng Huang and Kevin K. Lehmann*

13412 dx.doi.org/10.1021/jp406690p
Influence of Salt Purity on Na^+ and Palmitic Acid Interactions
Zishuai Huang, Wei Hua, Dominique Verreault, and Heather C. Allen*

13419 dx.doi.org/10.1021/jp406732g
Microwave Spectrum and Molecular Structure of Vinyl Chloride–Acetylene, A Side Binding Complex
Helen O. Leung,* Mark D. Marshall,* and Fan Feng

13429 dx.doi.org/10.1021/jp406821g
Rotational Spectra and Structures of the van der Waals Dimers of Argon with 2-Fluoropyridine and 3-Fluoropyridine
Ming Sun, Mahdi Kamaee, and Jennifer van Wijngaarden*

13435 dx.doi.org/10.1021/jp4068697
Infrared Photodissociation Spectroscopy of Vanadium Oxide–Carbonyl Cations
A. D. Brathwaite, A. M. Ricks, and M. A. Duncan*

13443 dx.doi.org/10.1021/jp4069174
Absorptions between 3000 and 5500 cm^{-1} of Cyclic O_4^+ and O_4^- Trapped in Solid Neon
Marilyn E. Jacox* and Warren E. Thompson

13450 dx.doi.org/10.1021/jp406940w
The Renner Effect in the $\tilde{X}\ ^2A''$ and $\tilde{A}\ ^2A'$ Electronic States of HSO/HOS
Roman I. Ovsyannikov, Tsuneo Hirano, and Per Jensen*

13465 dx.doi.org/10.1021/jp406945u
Jet-Cooled Spectroscopy of the α-Methylbenzyl Radical: Probing the State-Dependent Effects of Methyl Rocking Against a Radical Site
Nathanael M. Kidwell, Neil J. Reilly, Ben Nebgen, Deepali N. Mehta-Hurt, Ross D. Hoehn, Damian L. Kokkin, Michael C. McCarthy, Lyudmila V. Slipchenko, and Timothy S. Zwier*

13481 dx.doi.org/10.1021/jp407035p
Electronic Quenching of OH A $^2\Sigma^+$ Induced by Collisions with Kr Atoms
Julia H. Lehman, Marsha I. Lester,* Jacek Kłos, Millard H. Alexander, Paul J. Dagdigian, Diego Herráez-Aguilar, F. Javier Aoiz, Mark Brouard, Helen Chadwick, Tom Perkins, and Scott A. Seamons

13491 dx.doi.org/10.1021/jp407102y
Rotationally-Resolved Spectroscopy of the Donor Bending Mode of $(D_2O)_2$
Jacob T. Stewart* and Benjamin J. McCall*

13500 dx.doi.org/10.1021/jp407175r
Rotational Study of *cis*- and *trans*-Acrylic Acid–Trifluoroacetic Acid
Qian Gou, Gang Feng, Luca Evangelisti, and Walther Caminati*

13504 dx.doi.org/10.1021/jp407267u
High-Resolution Rovibrational Spectroscopy of Carbon Monoxide Isotopologues Isolated in Solid Parahydrogen
Mario E. Fajardo*

13513 dx.doi.org/10.1021/jp407270j
Spectroscopic Investigation of Photoinduced Charge-Transfer Processes in FTO/TiO_2/N719 Photoanodes with and without Covalent Attachment through Silane-Based Linkers
Bill Pandit, Tulashi Luitel, Dustin R. Cummins, Arjun K. Thapa, Thad Druffel, Frank Zamborini, and Jinjun Liu*

13524 dx.doi.org/10.1021/jp407327h
S_1 and S_2 States of Linear and Zigzag Cata-Condensed Hydrocarbons
Masaaki Baba,* Toshiharu Katori, Megumi Kawabata, Sachi Kunishige, and Takaya Yamanaka

13531 dx.doi.org/10.1021/jp407408f
Ubbelohde Effect within Weak C–H···π Hydrogen Bonds: The Rotational Spectrum of Benzene–DCF_3
Qian Gou, Gang Feng, Luca Evangelisti, Donatella Loru, José L. Alonso, Juan C. López, and Walther Caminati*

13535 dx.doi.org/10.1021/jp407412t
Spectroscopic Study of $N_2(b^1\Pi_u, v = 8)$ by Atmospheric-Pressure Resonant-Enhanced Multiphoton Ionization and Fluorescence Detection
Steven F. Adams and James M. Williamson*

13543 dx.doi.org/10.1021/jp407438j
Structure and Hydrogen-Bonding Ability of Estrogens Studied in the Gas Phase
Fumiya Morishima, Yoshiya Inokuchi, and Takayuki Ebata*

13556 dx.doi.org/10.1021/jp407544c
π-Stacking, C–H/π, and Halogen Bonding Interactions in Bromobenzene and Mixed Bromobenzene–Benzene Clusters
Scott A. Reid,* Silver Nyambo, Lloyd Muzangwa, and Brandon Uhler

13564 dx.doi.org/10.1021/jp407556k
Vacuum Ultraviolet Photodissociation Dynamics of Isocyanic Acid: The Hydrogen Elimination Channel
Shengrui Yu, Shu Su, Dongxu Dai, Kaijun Yuan,* and Xueming Yang*

13572 dx.doi.org/10.1021/jp407599x
Spectroscopic Study of the I_2 Formation from the Photolysis of Iodomethanes (CHI_3, CH_2I_2, CH_3I, and CH_2ICl) at Different Wavelengths
Cian-Ping Tu, Hsin-I Cheng, and Bor-Chen Chang*

13578 dx.doi.org/10.1021/jp4075652
Theoretical Study of M^+–RG_2 (M^+ = Li, Na, Be, Mg; RG = He–Rn)
Anna Andrejeva, Adrian M. Gardner, Jack B. Graneek, Richard J. Plowright, W. H. Breckenridge, and Timothy G. Wright*

13591 dx.doi.org/10.1021/jp407577m
Electronic Spectroscopy of Toluene in Helium Nanodroplets: Evidence for a Long-Lived Excited State
Benjamin Shepperson, Jon Tandy, Adrian Boatwright, Cheng Feng, Daniel Spence, Andrew Shirley, Shengfu Yang,* and Andrew M. Ellis*

13596 S dx.doi.org/10.1021/jp407592r
Infrared, Raman, and Ultraviolet Absorption Spectra and Theoretical Calculations and Structure of 2,6-Difluoropyridine in Its Ground and Excited Electronic States
Hong-Li Sheu, Sunghwan Kim, and Jaan Laane*

13605 S dx.doi.org/10.1021/jp407566h
Electronic Transitions of $C_6H_4^+$ Isomers: Neon Matrix and Theoretical Studies
Jan Fulara,* Adam Nagy, Karol Filipkowski, Venkatesan S. Thimmakondu, John F. Stanton,* and John P. Maier*

13616 S dx.doi.org/10.1021/jp407619s
Matrix Isolation and Computational Study of the [H, C, N, Se] Isomers
Tamás Vörös, Gábor Bazsó, and György Tarczay*

13626 S dx.doi.org/10.1021/jp407652f
Propargyl + O_2 Reaction in Helium Droplets: Entrance Channel Barrier or Not?
Christopher P. Moradi, Alexander M. Morrison, Stephen J. Klippenstein, C. Franklin Goldsmith, and Gary E. Douberly*

13636 S dx.doi.org/10.1021/jp407603y
Coupled Large Amplitude Motions: A Case Study of the Dimethylbenzaldehyde Isomers
M. Tudorie, I. Kleiner,* M. Jahn, J.-U. Grabow, M. Goubet, and O. Pirali

13648 dx.doi.org/10.1021/jp4076542
Infrared Spectra in the 3 μm Region of Ethane and Ethane Clusters in Helium Droplets
Luis F. Gomez, Russell Sliter, Dmitry Skvortsov, Hiromichi Hoshina, Gary E. Douberly,* and Andrey F. Vilesov*

13654 dx.doi.org/10.1021/jp407655h
Experimental and Theoretical Characterization of the $2^2A'-1^2A'$ Transition of BeOH/D
Kyle J. Mascaritolo, Jeremy M. Merritt, Michael C. Heaven,* and Per Jensen

13664 dx.doi.org/10.1021/jp407627x
Visible Photodissociation Spectra of the 1- and 2-Methylnaphthalene Cations: Laser Spectroscopy and Theoretical Simulations
Hela Friha, Géraldine Féraud, Tyler Troy, Cyril Falvo, Pascal Parneix, Philippe Bréchignac, Zoubeida Dhaouadi, Timothy W. Schmidt, and Thomas Pino*

13673 dx.doi.org/10.1021/jp407671m
Rotational Spectra of Bicyclic Decanes: The Trans Conformation of (−)-Lupinine
Michaela K. Jahn, David Dewald, Montserrat Vallejo-López, Emilio J. Cocinero, Alberto Lesarri,* and Jens-Uwe Grabow*

13680 dx.doi.org/10.1021/jp407668z
Infrared Spectra of the 1-Pyridinium ($C_5H_5NH^+$) Cation and Pyridinyl (C_5H_5NH and 4-C_5H_6N) Radicals Isolated in Solid *para*-Hydrogen
Barbara Golec, Prasanta Das, Mohammed Bahou, and Yuan-Pern Lee*

13691 dx.doi.org/10.1021/jp4077036
Rotational Spectrum and Structure of Cyclohexene Oxide and the Argon−Cyclohexene Oxide van der Waals Complex
Daniel J. Frohman, Stewart E. Novick, and Wallace C. Pringle*

13696 dx.doi.org/10.1021/jp407755m
Laser-Induced Fluorescence Study of the S_1 State of Doubly-Substituted ^{13}C Acetylene and Harmonic Force Field Determination
Jun Jiang, Joshua H. Baraban, G. Barratt Park, Michelle L. Clark, and Robert W. Field*

13704 dx.doi.org/10.1021/jp407751d
Influence of Crystallite Size on Cation Conductivity in Faujasitic Zeolites
Michael Severance, Yangong Zheng, Elizabeth Heck, and Prabir K. Dutta*

13712 dx.doi.org/10.1021/jp4078097
Keto−Enol Tautomerism and Conformational Landscape of 1,3-Cyclohexanedione from Its Free Jet Millimeter-Wave Absorption Spectrum
Camilla Calabrese, Assimo Maris, Luca Evangelisti, Laura B. Favero, Sonia Melandri,* and Walther Caminati

13719 dx.doi.org/10.1021/jp407818k
Spectroscopy of Cold LiCa Molecules Formed on Helium Nanodroplets
Günter Krois, Johann V. Pototschnig, Florian Lackner,* and Wolfgang E. Ernst*

13732 (S) dx.doi.org/10.1021/jp407822g
FTIR Spectroscopy of NO_3: Perturbation Analysis of the $\nu_3+\nu_4$ State
Kentarou Kawaguchi,* Ryuji. Fujimori, Jian Tang, and Takashi Ishiwata

13743 (S) dx.doi.org/10.1021/jp407810x
Plasma-Assisted Nanoscale Protein Patterning on Si Substrates via Colloidal Lithography
A. Malainou, K. Tsougeni, K. Ellinas, P. S. Petrou, V. Constantoudis, E. Sarantopoulou, K. Awsiuk, A. Bernasik, A. Budkowski, A. Markou, I. Panagiotopoulos, S. E. Kakabakos, E. Gogolides, and A. Tserepi*

13752 (S) dx.doi.org/10.1021/jp407896d
A New Look at the Infrared Spectrum of the Weakly Bound CO–N_2 Complex
Mojtaba Rezaei, K. H. Michaelian, N. Moazzen-Ahmadi, and A. R. W. McKellar*

13759 dx.doi.org/10.1021/jp407980f
Sub-Doppler Resolution in the THz Frequency Domain: 1 kHz Accuracy at 1 THz by Exploiting the Lamb-Dip Technique
*Gabriele Cazzoli and Cristina Puzzarini**

13767 (S) dx.doi.org/10.1021/jp408013n
Ab Initio Intermolecular Potential of Ar–C_2H_2 Refined Using High-Resolution Spectroscopic Data
Clément Lauzin, Laurent H. Coudert,* Michel Herman, and Jacques Liévin

13775 dx.doi.org/10.1021/jp408076q
Stark Effect in the Benzene Dimer
Melanie Schnell,* P. R. Bunker, Gert von Helden, Jens-Uwe Grabow, Gerard Meijer, and Ad van der Avoird

13779 (S) dx.doi.org/10.1021/jp408116j
Accurate Spectroscopic Models for Methane Polyads Derived from a Potential Energy Surface Using High-Order Contact Transformations
Vladimir Tyuterev,* Sergei Tashkun, Michael Rey, Roman Kochanov, Andrei Nikitin, and Thibault Delahaye

13806 (S) dx.doi.org/10.1021/jp4081806
Rovibrational States of N_3^- and CO_2 Up to High J: A Theoretical Study Beyond fc-CCSD(T)
Peter Sebald, Christopher Stein, Rainer Oswald, and Peter Botschwina*

13815 dx.doi.org/10.1021/jp408255m
Far-Infrared Spectrum of $S(CN)_2$ Measured with Synchrotron Radiation: Global Analysis of the Available High-Resolution Spectroscopic Data
Zbigniew Kisiel,* Manfred Winnewisser, Brenda P. Winnewisser, Frank C. De Lucia, Dennis W. Tokaryk, and Brant E. Billinghurst

13825 dx.doi.org/10.1021/jp408303p
Thermal Effects Associated with the Raman Spectroscopy of WO_3 Gas-Sensor Materials
Raul F. Garcia-Sanchez, Tariq Ahmido, Daniel Casimir, Shankar Baliga, and Prabhakar Misra*

13832 dx.doi.org/10.1021/jp408336n
Fourier Transform Infrared Studies of Ammonia Photochemistry in Solid Parahydrogen
Mahmut Ruzi and David T. Anderson*

13843 dx.doi.org/10.1021/jp408391f
Rotational Spectroscopy of Isotopologues of Silicon Monoxide, SiO, and Spectroscopic Parameters from a Combined Fit of Rotational and Rovibrational Data
Holger S. P. Müller,* Silvia Spezzano, Luca Bizzocchi, Carl A. Gottlieb, Claudio Degli Esposti, and Michael C. McCarthy

13855 dx.doi.org/10.1021/jp408349r
Fourier Transform Microwave Spectrum of the Nitrogen Molecule–Ethylene Oxide Complex: Intracomplex Motions
Yoshiyuki Kawashima* and Eizi Hirota

13868 dx.doi.org/10.1021/jp4083807
Calculated Dipole Moments for Silicon and Phosphorus Compounds of Astrophysical Interest
Holger S. P. Müller* and David E. Woon*

13878 dx.doi.org/10.1021/jp408490d
Fluorescence Lifetimes of the $\tilde{A}^1\Pi_u$ State of C_3
Yi-Jen Wang, Chiao-Wei Chen, Liuzhu Zhou, Anthony J. Merer, and Yen-Chu Hsu*

13885 dx.doi.org/10.1021/jp4085684
Selective Photoinduced Ligand Exchange in a New Tris–Heteroleptic Ru(II) Complex
Bryan A. Albani, Christopher B. Durr, and Claudia Turro*

13893 dx.doi.org/10.1021/jp408667m
Concerning the Ground State and S_1 and T_1 Photoexcited States of the Homoleptic Quadruply Bonded Complexes $Mo_2(O_2CC_6H_4\text{-}p\text{-}X)_4$, where X = C≡C–H or C≡N
Samantha E. Brown-Xu, Malcolm H. Chisholm,* Christopher B. Durr, and Thomas F. Spilker

13899 Ⓢ dx.doi.org/10.1021/jp4088833

Excitation Spectra of Large Jet-Cooled Polycyclic Aromatic Hydrocarbon Radicals: 9-Anthracenylmethyl ($C_{15}H_{11}$) and 1-Pyrenylmethyl ($C_{17}H_{11}$)
Gerard D. O'Connor, George B. Bacskay, Gabrielle V. G. Woodhouse, Tyler P. Troy, Klaas Nauta, and Timothy W. Schmidt*

13908 dx.doi.org/10.1021/jp408960e

Temperature-Dependent, Nitrogen-Perturbed Line Shape Measurements in the $\nu_1 + \nu_3$ Band of Acetylene Using a Diode Laser Referenced to a Frequency Comb
Matthew J. Cich, Damien Forthomme, Christopher P. McRaven, Gary V. Lopez, Gregory E. Hall, Trevor J. Sears,* and Arlan. W. Mantz

13919 Ⓢ dx.doi.org/10.1021/jp4097666

Simple Relationship between Oxidation State and Electron Affinity in Gas-Phase Metal–Oxo Complexes
Sarah E. Waller, Manisha Ray, Bruce L. Yoder, and Caroline Chick Jarrold*

13926 Ⓢ dx.doi.org/10.1021/jp410051w

Direct Probing of Solvent Accessibility and Mobility at the Binding Interface of Polymerase (Dpo4)-DNA Complex
Yangzhong Qin, Yi Yang, Luyuan Zhang, Jason D. Fowler, Weihong Qiu, Lijuan Wang, Zucai Suo, and Dongping Zhong*

Ⓢ Supporting Information available via online article