

## Curriculum vitae – Assistant Professor Lane A. Baker (Indiana University, USA)

**Born:** 16 May 1971, Missouri      **Nationality:** US      **email:** lanbaker@indiana.edu  
**Telephone:** 812-856-1873    **Fax:** 812-855-8300    **Group Website:** www.indiana.edu/~bakergp  
**Address:** Department of Chemistry, Indiana University, 800 E Kirkwood Ave, Bloomington IN 47405

### Academic Career

Aug. 2006 - Assistant Professor, Indiana University, Department of Chemistry, Bloomington, Indiana, USA  
2004-2006 Postdoctoral Associate, University of Florida, Gainesville, Florida, USA  
Supervisor: Charles R. Martin  
2001-2004 National Research Council Postdoctoral Associate, Naval Research Laboratory, Washington, D.C., USA Supervisor: Lloyd J. Whitman  
2001 Ph.D. Texas A&M University, College Station, TX, USA  
Supervisor: Richard M. Crooks  
1996 B.S. Missouri State University, Springfield, MO, USA

### Honors and Awards

2012 Young Investigator Award, Society for Electroanalytical Chemistry  
2009 Cottrell Scholar Award, Research Corporation for Science Advancement  
2009 CAREER Award, National Science Foundation  
2008 Starter Grant Awardee, Society of Analytical Chemists of Pittsburgh  
2001 National Research Council Postdoctoral Associate, Naval Research Laboratory  
2001 Celanese Outstanding Graduate Student, Texas A&M University  
1996 Hyperchem Hypercube Scholar, Missouri State University  
1996 Outstanding Undergraduate in Inorganic Chemistry, Missouri State University

Lane Baker was educated at Missouri State University, Springfield, MO (BS Chem 1996) and Texas A&M University (Ph.D. 2001) working with Richard M. Crooks. He joined the group of Lloyd J. Whitman (2001) in the Surface Nanoscience and Sensor Technology Section of the Naval Research Laboratory as a National Research Council Postdoctoral Associate, conducting research on atomically resolved scanned probe microscopies. He then joined the group of Charles R. Martin (2004) at the University of Florida as a Postdoctoral Associate investigating polymeric nanopores for sensing and separations. He started as an Assistant Professor at Indiana University in the Analytical Chemistry Division (2006) performing research in three areas. (i) Transient and spatial measurement of ion concentrations with scanned probe microscopies. (ii) Electromagnetically-gated micro and nanopore membranes. (iii) Studies of transport through the nuclear pore complex and synthetic mimics of the nuclear pore complex.

### Collaborations

Hideo Tokuhisa (AIST, Tsukuba, Japan), Jim Marrs (Indiana University-Purdue University Indiana), Nickolay Lavrik (Center for Nanophase Materials Science, Oak Ridge National Laboratory)

## **Financial Support**

**current:** NSF-CAREER (PI, CHE-0847642); NSF-DMR (PI, DMR-0906843); NSF-MRI (co-PI, CHE-0923064) NIH-NIDDK (PI, 1R21DK082990); American Heart Association (PI); Research Corporation Cottrell Scholars (PI). **completed:** Society of Analytical Chemists of Pittsburgh Starter Grant (PI); New Energy and Industrial Technology Development Organization, Japan (Co-PI); Indiana University Start-up Funds.

## **Current and Past Group Members**

**Visiting Faculty:** Prof. Wookyoung Lee (Inje, Korea)

**Postdoctoral:** Dr. Srinivas Beeram, Dr. Jeremy Wilburn (2010-2011), Dr. Yaqin Fu (2006-2009), Dr. Vish Bhakthavatsalam (2007-2008)

**Graduate:** Sean Bird, Maksymillian Derylo, Joseph Basore, Rahul Thakar, Chiao-Chen Chen, Celeste Morris, Niya Sa, Rashid Zakeri, Alicia Friedman, Yi Zhou, Kirstin Morton

**Undergraduate:** Kayla Matthews, Andrew Rusch, Doug Miller (2010), Kyuwon Kim (2008), Ryan Kapp(2008), Carrie VanLue (2007)

**Editorial** *Analytical Chemistry* Features Advisory Panel, 2011-2014

## **Professional Reviewer**

**Journals:** *Nature Chemistry, Nature Nanotechnology, Nature Protocols, Proceedings of the National Academy of Science, Journal of the American Chemical Society, Analytical Chemistry, Macromolecules, Journal of Physical Chemistry B, Langmuir, NanoLetters, Thin Solid Films, Nanotechnology, Chemistry of Materials, Electroanalysis, Journal of Electroanalytical Chemistry, Nanomedicine, Trends in Analytical Chemistry, Sensors and Actuators B, The Analyst, Journal of Materials Science, ACS Nano*

**Funding Agencies:** NSF DMR (Panel reviews 2010, 2009); NIH EBIT (Ad hoc, 2 meetings); ASEE Fellowship Program; AHA Biomedical Engineering Study Section (2009-2011); Department of Energy; Research Corporation; Defense Threat Reduction Agency

## **Invited Seminar Presentations**

41. Gordon Research Conference on Biosensors (Summer **2012**).
40. Reilly Award Symposium, Pittcon 2012, Orlando, FL (March **2012**).
39. Southwest Regional American Chemical Society Meeting, Austin, TX (November **2011**).
38. University of Notre Dame, Notre Dame, IN (October **2011**).
37. Beijing Conference & Exhibition on Instrumental Analysis, Beijing, China (October **2011**).
36. Texas Tech, Lubbock, TX (September **2011**).
35. Potter's Lodge Meeting, Blue Mountain Lake, NY (September **2011**).
34. Cottrell Scholar's Conference, Tucson, AZ (July **2011**).
33. University of Washington, Seattle, WA (May **2011**).
32. Kansas State University, Manhattan, KS (May **2011**).
31. University of Kansas, Lawrence, KS (May **2011**).
30. University of North Carolina, Chapel Hill, NC (April **2011**).
29. Scanning Ion Conductance Microscopy Workshop, London, UK (March **2011**).
28. Pittcon 2011, Atlanta, GA (March **2011**).
27. University of Illinois, Urbana, IL (February **2011**).

26. Pacifichem 2010, Honolulu, HI (December **2010**).
25. Purdue University, West Lafayette, IN (November **2010**).
24. University of Texas, Austin, TX (November **2010**).
23. Texas A&M University, College Station, TX (November **2010**).
22. St. Louis University, St. Louis, MO (September **2010**).
21. Georgia State University, Atlanta, GA (April **2010**).
20. University of Florida, Gainesville, FL (April **2010**).
19. Michigan State University, East Lansing, MI (March **2010**).
18. Optical Society of America 93<sup>rd</sup> Annual Meeting, San Jose, CA (October **2009**).
17. Potter's Lodge Meeting, Blue Mountain Lake, NY (September **2009**).
16. University of Louisville, Louisville, KY (April **2009**).
15. Northern Kentucky University, Highland Heights, KY (April **2009**).
14. Pittcon 2009, Chicago, IL (March **2009**).
13. IUPUI, Indianapolis, IN (February **2009**).
12. Lab Automation 2009, Palm Springs, CA (January **2009**).
11. Southern Illinois University, Carbondale, IL (November **2008**).
10. Rose-Hulman Institute of Technology, Terre Haute, IN (October **2008**).
9. Valparaiso University, Valparaiso, IN (September **2008**).
8. 20<sup>th</sup> International Conference on Accelerators, Fort Worth, TX (August 2008).
7. HPLC2008, Baltimore, MD (May **2008**).
6. Wright State University, Dayton, OH (February **2008**).
5. National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan (December **2007**).
4. Eastern Kentucky University, Richmond, KY (December **2007**).
3. Western Kentucky University, Bowling Green, KY (November **2007**).
2. Benedictine College, Atchison, KS (November **2007**).
1. Indiana State University, Terre Haute, IN (April **2007**).

#### **Arranged and Contributed Seminars**

29. Center for Analytical Instrumentation Development Annual Meeting, West Lafayette, IN (May **2011**)
28. 218<sup>th</sup> Electrochemical Society Meeting, Las Vegas, NV (October **2010**).
27. Midwest Universities Analytical Chemistry Conference, Purdue University, West Lafayette, IN (October **2010**).
26. Midwest Universities Analytical Chemistry Conference, Michigan State University, East Lansing, MI (December **2009**).
25. Pittcon 2008, New Orleans, LA (March **2008**).
24. Midwest Universities Analytical Chemistry Conference, University of Illinois, Urbana, IL (November **2007**).
23. University of Kansas, Lawrence, KS (February **2006**).
22. The Ohio State University, Columbus, OH (February **2006**).
21. Virginia Polytechnic Institute, Blacksburg, VA (January **2006**).
20. Indiana University, Bloomington, IN (January **2006**).
19. Florida State University, Tallahassee, FL (January **2006**).
18. University of California, Riverside, CA (December **2005**).
17. University of Massachusetts, Amherst, MA (December **2005**).

16. University of Delaware, Newark, DE (December **2005**).
15. University of Florida, Gainesville, FL (December **2005**).
14. University of Texas, Austin, TX (November **2005**).
13. Renesselear Polytechnic Institute, Troy, NY(November **2005**).
12. Auburn University, Auburn, AL (November **2005**).
11. Wayne State University, Detroit, MI (November **2005**).
10. University of Kentucky, Lexington, KY (October **2005**).
9. 230<sup>th</sup> National American Chemical Society Meeting in the Analytical Chemistry Division; Washington, DC (August **2005**).
8. 229<sup>th</sup> National American Chemical Society Meeting in the Colloid and Surface Chemistry Division, San Diego, CA (March **2005**).
7. Pittcon 2005, Orlando, FL (March **2005**).
6. AVS 50<sup>th</sup> International Symposium, Baltimore, MD (November **2003**).
5. 226<sup>th</sup> National American Chemical Society Meeting in the Colloid and Surface Chemistry Division, New York, NY (September **2003**).
4. 2003 Physical Electronics Conference, Ithaca, NY (June **2003**).
3. 221<sup>st</sup> National American Chemical Society Meeting in the Polymer Materials Science and Engineering Division, San Diego, CA (April **2001**).
2. Missouri State University, Springfield, MO (October **1999**).
1. 218<sup>th</sup> National American Chemical Society Meeting in the Organic Chemistry Division, New Orleans, LA (August **1999**).

### **Poster Presentations**

Gordon Research Conference on Electrochemistry, Ventura, CA (January **2010**); Gordon Research Conference on Cell Contact and Adhesion, Waterville, NH (June **2009**); Pittcon 2006, Orlando, FL (March **2006**); 230<sup>th</sup> National American Chemical Society Meeting, Washington, DC (August **2005**); 215<sup>th</sup> National American Chemical Society Meeting in the Colloid and Surface Chemistry Division; Dallas, TX (March, **1998**); Midwest Regional ACS Meeting in the Physical Chemistry Division; Joplin, MO (March, **1996**).

### **Outreach and Synergistic Activities**

- 2011 Invited to *Analytical Chemistry* Features Advisory Panel, **2011-2014**.
- 2010 Presided over session at Pacifichem, December **2010**.
- 2010 Electrochemical Society, Symposium Organizer (with Takashi Ito, Kansas State University), October **2010**.
- 2010 Hosted Boy Scout Merit Badge Event at Indiana University, November **2010**.
- 2010 Lab Tours and Chemistry Magic Show for Rogers Elementary School First Grade, September **2010**.
- 2010 AGEP Alliance for Graduate Education and the Professoriate Panelist, Indiana University, September **2010**.
- 2010 Faculty Sponsor of National Organization of Black Chemists and Chemical Engineers (NOBCChe).
- 2009 Lab Automation, Symposium Organizer, January **2009**.
- 2009 Activity Publication in *Journal of Chemical Education*.
- 2009 Lab Tours and Chemistry Magic Show for Bloomington Developmental Learning Center, March **2009**.

- 2008 Lectures (4) to High School Science Classes in Robstown, TX on Nanoscience, April **2008**.
- 2008 Midwest Analytical Universities Chemistry Conference, Indiana University, Bloomington Indiana Meeting Organizer (with Stephen Jacobson), November **2008**.
- 2008 Pittcon, New Orleans, LA: Organized Symposium and Organized Contributed Session *Fluidics at the Nanoscale: Pores, Pipettes, and Channels* (with Stephen Jacobson), March **2008**.

### Teaching

2154 Students Total (Course, Semester/Enrollment) A800:Analytical Chemistry Research Seminar, S2011/20; A315:Chemical Measurements Laboratory, F2010/12; A800:Analytical Chemistry Research Seminar, F2010/20; C611:Electroanalytical Chemistry, S2010/20; C117:Principles of Chemistry and Biochemistry, F2009/572; C117:Principles of Chemistry and Biochemistry Laboratory, S2009/473; C117:Principles of Chemistry and Biochemistry, F2008/572; C117:Principles of Chemistry and Biochemistry Laboratory, S2008/473; C611:Electroanalytical Chemistry, S2010/20; A315:Chemical Measurements Laboratory, F2010/12.

### List of publications in print or in press

(\* indicates independent publication from Indiana University)

#### 2011

- 44.\* Bird, S.P; Baker, L.A. An abiotic analogue of the nuclear pore complex hydrogel, *submitted June 2011*.
- 43.\* Sa, N.; Baker, L.A. Rectification of nanopores at surfaces, *J. Am. Chem. Soc.*, **2011**, *133*, 10398-10401. (<http://dx.doi.org/10.1021/ja203883q>)
- 42.\* Morton, K. C.; Morris, C. A.; Derylo, M. A.; Thakar, R.; Baker, L. A. Carbon electrode fabrication from pyrolyzed parylene c, *Anal. Chem.*, **2011**, *83*, 5447-5452. (<http://dx.doi.org/10.1021/ac200885w>)
- 41.\* Thakar, R.; Wilburn, J.; Baker, L. A. Studies of edge effects with shroud-modified electrodes, *Electroanalysis*, **2011**, *23*, 1543-1547. (<http://dx.doi.org/10.1002/elan.201100170>)
- 40.\* Bird, S. P.; Baker, L. A. Biologically modified hydrogels for chemical and biochemical analysis. *Analyst*, **2011**, accepted. (<http://dx.doi.org/10.1039/C0AN00871K>)
- 39.\* Powell, M.; Sa, N.; Davenport, M.; Healy, K.; Vlassioux, I.; Letant, S.; Baker, L. A.; Siwy, Z. Noise Properties of Rectifying Nanopores, *J. Phys. Chem. C.*, **2011**, *115*, 8775-8783. (<http://dx.doi.org/10.1021/jp2016038>)
- 38.\* Baker, L. A.; Chen, C. Waves in Microscopy. *Nature Chem.*, **2011**, *3*, 191-192. (invited commentary) (<http://dx.doi.org/10.1038/nchem.983>)
- 37.\* Chen, C., Baker, L.A. Effects of pipette modulation and imaging distances on ion currents measured with Scanning Ion Conductance Microscopy (SICM). *Analyst*, **2011**, *1*, 90-97. (<http://dx.doi.org/10.1039/C0AN00604A>)

#### 2010

- 36.\* Niya, S.; Fu, Y.; Baker, L. A. Reversible cobalt ion binding to imidazole-modified nanopipettes. *Anal. Chem.*, **2010**, *82*, 9963-9966. (<http://dx.doi.org/10.1021/ac102619j>)
- 35.\* Basore, J. R.; Lavrik, N. V.; Baker, L. A. Electromagnetic Micropores: Fabrication and Operation. *Langmuir*, **2010**, *26*, 19239-1244. (<http://dx.doi.org/10.1021/la103977e>)
- 34.\* Morris, C.; Friedman, A. K.; Baker, L. A. Applications of Nanopipettes in the Analytical Sciences. *Analyst*, **2010**, *135*, 2190-2202. (<http://dx.doi.org/10.1039/c0an00156b>)
- 33.\* Thakar, R.; Baker, L. A. Lithography-free Production of Stamps for Microcontact Printing. *Anal. Meth.*, **2010**, *2*, 1180-1183. (<http://dx.doi.org/10.1039/c0ay00233j>)
- 32.\* Basore, J. R.; Lavrik, N. V.; Baker, L. A.; Single-Pore membranes Gated by Microelectromagnetic Traps. *Adv. Mat.*, **2010**, 2759-2763. (<http://dx.doi.org/10.1002/adma.201000566>)

## 2009

31. Petrovykh, D.; Sullivan, J.; Clark, T.; Baker, L. A.; Whitman, L. J. Self-Assembled Monolayers of Alkanethiols on InAs. *Langmuir*, **2009**, *25*, 12185-12194. (<http://dx.doi.org/10.1021/la804314j>)
- 30.\* Fu, Y.; Tokuhisa, H.; Baker, L. A. Nanopore DNA sensors based on dendrimer-modified nanopipettes. *Chem Comm.*, **2009**, *32*, 4877-4879. (<http://dx.doi.org/10.1039/b910511e>)
- 29.\* Chen, C.; Derylo, M.; Baker, L. A. Measurement of Ion Currents through Porous Membranes with Scanning Ion Conductance Microscopy. *Anal. Chem.*, **2009**, *81*, 4742-4751. (<http://dx.doi.org/10.1021/ac900065p>)
- 28.\* Burgan, D. A.; Baker, L. A. Investigating Self-Assembly with Macaroni. *J. Chem. Ed.* **2009**, *86*, 704A. (<http://dx.doi.org/10.1021/ed086p704A>)
- 27.\* Tokuhisa, H.; Liu, J.; Omori, K.; Kanetsato, M.; Baker, L. A. Efficient Biosensor Interfaces Based on Space-Controlled Self-Assembled Monolayers. *Langmuir*, **2009**, *25*, 1633-1637. (<http://dx.doi.org/10.1021/la8033148>)

## 2008

26. Laracuate, A. R.; Baker, L. A.; Whitman, L. J. UHV Characterization of Ambient-Dosed Hydrogen-Terminated Si(001). *Surf. Sci.*, **2008**, *602*, 3-8. (<http://dx.doi.org/10.1016/j.susc.2007.09.032>)
- 25.\* Baker, L. A.; Bird, S. P. A Makeover for Membranes. *Nat. Nanotechnol.*, **2008**, *3*, 73-74 (invited commentary). (<http://dx.doi.org/10.1038/nnano.2008.13>)

## 2007

24. Sexton, L. T.; Horne, L. P. Sherrill, S. S.; Bishop, G. W.; Baker, L. A.; Martin, C. R. Resistive-Pulse Studies of Proteins and Protein/Antibody Complexes Using a Conical Nanotube Sensor. *J. Am. Chem. Soc.*, **2007**, *129*, 13144-13152. (<http://dx.doi.org/10.1021/ja0739943>)

## 2006

23. Harrell, C. C.; Choi, Y.; Baker, L. A.; Siwy, Z.; Martin, C. R. Resistive-Pulse DNA Detection with a Conical Nanopore Sensor. *Langmuir*, **2006**, *22*, 10837-10843. (<http://dx.doi.org/10.1021/la061234k>)
22. Choi, Y.; Baker, L. A.; Hillebrenner, H.; Martin, C. R. Biosensing with conically shaped nanopores and nanotubes. *Phys. Chem. Chem. Phys.*, **2006**, *8*, 4976-4988. (<http://dx.doi.org/10.1039/b607360c>)

21. Ervin, E. N.; White, H. S.; Baker, L. A.; Martin, C. R. Alternating Current Impedance Imaging of High-Resistance Membrane Pores Using a Scanning Electrochemical Microscope. Application of Membrane Electrical Shunts to Increase Measurement Sensitivity and Image Contrast. *Anal. Chem.*, **2006**, *78*, 6535-6541. (<http://dx.doi.org/10.1021/ac060577k>)
20. Scopece, P.; Baker, L. A.; Ugo, P.; Martin, C. R. Conical Nanopores: Solvent Shaping of Nanopores. *Nanotechnology*, **2006**, 3951-3956. (<http://dx.doi.org/10.1088/0957-4484/17/15/057>)
19. Baker, L. A.; Choi, Y.; Martin, C. R. Nanotube Membranes for Biomaterials Synthesis, Bioseparations, and Biosensors. *Current Nanoscience*, **2006**, *2*, 243-255.

## 2005

18. Martin, C. R.; Baker, L. A. Expanding the Molecular Electronics Toolbox. *Science* **2005**, *309*, 67-68 (invited commentary). (<http://dx.doi.org/10.1126/science.1114663>)
17. Heins, E. S.; Baker, L. A.; Siwy, Z. S.; Mota, M. O.; Martin, C. R. Effect of Crown Ether on Ion Currents through Synthetic Membranes Containing a Single Conically Shaped Nanopore. *J. Phys. Chem. B*, **2005**, *109*, 18400-18407. (<http://dx.doi.org/10.1021/jp052341a>)
16. Odom, D. J.; Baker, L. A.; Martin, C. R. Solvent-Extraction and Langmuir-Adsorption-Based Transport in Chemically Functionalized Nanopore Membranes. *J. Phys. Chem. B*, **2005**, *109*, 20877-20894. (<http://dx.doi.org/10.1021/jp0524983>)
15. Heins, E. S.; Siwy, Z. S.; Baker, L. A.; Martin, C. R. Detecting Single Porphyrin Molecules in a Conically Shaped Synthetic Nanopore. *Nano Lett.*, **2005**, *5*, 1824-1829. (<http://dx.doi.org/10.1021/nl050925i>)
14. Ervin, E. N.; White, H. S.; Baker, L. A. Alternating Current Impedance Imaging of Membranes Pores Using Scanning Electrochemical Microscopy. *Anal. Chem.*, **2005**, *77*, 5564-5569. (<http://dx.doi.org/10.1021/ac050453s>)
13. Baker, L. A.; Jin, P.; Martin, C. R. Biomaterials and Biotechnologies Based on Nanotube Membranes. *Crit. Rev. Solid State Mater. Sci.*, **2005**, *30*, 1-22 (invited review). (<http://dx.doi.org/10.1080/10408430500198169>)
12. Baker, L. A.; Laracuate, A. R.; Whitman, L. J. Hydrogen Termination Following Cu Depositin on Si(001). *Phys. Rev. B*, **2005**, *71*, 153302. (<http://dx.doi.org/10.1103/PhysRevB.71.153302>)
11. Siwy, Z.; Trofin, L.; Kohli, P.; Baker, L. A.; Trautmann, C.; Martin, C. R. Protein Biosensors Based on Biofunctionalized Conical Gold Nanotubes. *J. Am. Chem. Soc.*, **2005**, *127*, 5000-5001. (<http://dx.doi.org//10.1021/ja043910f>)

## 2004

10. Kooi, S. E.; Baker, L. A.; Sheehan, P. E.; Whitman, L. J. Dip-Pen Nanolithography of Chemical Templates on Silicon Oxide. *Adv. Mater.*, **2004**, *16*, 1013-1016. (<http://dx.doi.org//10.1002/adma.200306468>)

## 2002

9. Oh, S. -K.; Baker, L. A.; Crooks, R. M. Electrochemical Rectification Using Mixed Monolayers of Redox-Active Ferrocenyl Dendrimers and *n*-Alkanethiols. *Langmuir*, **2002**, *18*, 6981-6987. (<http://dx.doi.org/10.1021/la020382h>)
8. Baker, L. A.; Sun, L.; Crooks, R. M. Synthesis and Catalytic Properties of Imidazole-Functionalized Poly(propylene imine) Dendrimers. *Bull. Kor. Chem. Soc.*, **2002**, *23*, 647-654 (invited feature article).

#### 2000

7. Baker, L. A.; Crooks, R. M. Photophysical Properties of Pyrene-Functionalized Poly (Propylene Imine) Dendrimers. *Macromolecules*, **2000**, *33*, 9034-9039. (<http://dx.doi.org/10.1021/ma001379c>)

#### 1999

6. Baker, L. A.; Zamborini, F. P.; Sun, L.; Crooks, R. M. Dendrimer-Mediated Adhesion between Vapor-Deposited Gold and Glass or Si Wafers. *Anal. Chem.*, **1999**, *71*, 4403-4406. (<http://dx.doi.org/10.1021/ac990495e>)
5. Smith, D. D.; Yoon, Y.; Boyd, R. W.; Campbell, J. K.; Baker, L. A.; Crooks, R. M.; George, M. z-Scan Measurement of the Nonlinear Absorption of a Thin Gold Film. *J. Appl. Phys.*, **1999**, *86*, 6200-6205. (<http://dx.doi.org/10.1063/1.371675>)
4. Garcia, M. E.; Baker, L. A.; Crooks, R. M. Preparation and Characterization of Dendrimer-Gold Colloid Nanocomposites. *Anal. Chem.*, **1999**, *71*, 256-258. (<http://dx.doi.org/10.1021/ac980588g>)

#### 1998

3. Hierlemann, A.; Campbell, J. K.; Baker, L. A.; Crooks, R. M.; Ricco, A. J. Structural Distortion of Dendrimers on Gold Surfaces: A Tapping Mode AFM Investigation. *J. Am. Chem. Soc.*, **1998**, *120*, 5323-5324. (<http://dx.doi.org/10.1021/ja974283f>)
2. Tokuhisa, H.; Zhao, M. Q.; Baker, L. A.; Phan, V. T.; Dermody, D. L.; Garcia, M. E.; Peez, R. F.; Crooks, R. M.; Mayer, T. M. Preparation and Characterization of Dendrimer Monolayers and Dendrimer-Alkanethiol Mixed Monolayers Adsorbed to Gold. *J. Am. Chem. Soc.*, **1998**, *120*, 4492-4501. (<http://dx.doi.org/10.1021/ja9742904>)
1. Baker, L. A.; Su, S. J. An *ab initio* Molecular Orbital Study of the Reaction  $\text{NH}_2 + \text{NO} \rightarrow \text{H}_2 + \text{N}_2\text{O}$ . *Chem. Phys.*, **1998**, *228*, 9-16. ([http://dx.doi.org/10.1016/S0301-0104\(97\)00319-4](http://dx.doi.org/10.1016/S0301-0104(97)00319-4))