

GABRIEL A. MONTAÑO

Staff Scientist

Los Alamos National Laboratory

Center for Integrated Nanotechnologies

Albuquerque, NM 87123-1315

Phone: 505-284-8236

Fax: 505-284-7778

Email: gbmon@lanl.gov

Education

Ph.D. Dept. of Chemistry & Biochemistry, and Molecular and Cellular Biology Program, Arizona State University, Tempe, AZ Graduated 8/02 Advisor: Dr. Robert E. Blankenship

Dissertation Title: An Investigation of the Green Bacterial Light-Harvesting Complexes

B.S. Dept. of Biology, New Mexico State University, Las Cruces, NM- 5/97

Advisor: Dr. Peter Houde

Project: Isolation and Sequencing of 12s rDNA of *Gruiformes* (AVES)

Appointments

Technical Staff Member- Oct 2005 – present. Center for Integrated Nanotechnologies, Materials Science and Technology Division.

Intelligence Community Postdoctoral Fellow- Oct 2003- Oct. 2005. Continuation of postdoctoral associate work.

Post-Doctoral Research Associate- Oct. 2002-Sept. 2003. Los Alamos National Laboratory, Biosciences Division. Performing research in molecularly engineered biomimetic nano-assemblies. Project entails aspects of materials chemistry, scanning probe microscopy, spectroscopy, biochemistry and molecular biology, specifically phage-display technology.

Post-Doctoral Research Fellow- Aug-Oct 2002. Department of Chemistry & Biochemistry at Arizona State University. Performed research in biochemistry and biophysics as well as training of graduate students in biochemical techniques and maintenance of departmental lab equipment.

Scanning Probe Microscopy (SPM) Lab Technician- May-Aug 1997. Maintained laboratory equipment and trained users in both Atomic Force and Scanning Tunneling Microscopy (STM). Also served as primary instructor for REU Summer Research Training Program in SPM.

Publications

1. G.A. Montaño, M. Brown, A. Zurek, Y. Gao, H-L. Wang, A.M. Dattelbaum, and A.P. Shreve. *Environmental control of Polymer Heterogeneity and Photoluminescence: effects on the polyelectrolyte assembly 2,5 methoxy-propyloxysulfonate phenylene vinylene (MPS-PPV)*. (In prep).
2. G.A. Montaño, J.R. McCoury, M. Goertz, A.P. Shreve. *Aggregate dependent γ -cyclodextrin encapsulated C60 fullerene interaction with lipid bilayer assemblies and UV induced damage*. (In prep)
3. G. Gupta, S.B. Rathod, K.W. Staggs, L.K. Ista, K. Abbou-Cucherif, P.B. Atanassov, M.S. Tartis, G.A. Montaño, G.P. Lopez. (2009) *CVD for Facile Synthesis of Hybrid Nano-Biomaterials Integrating Functional Supramolecular Assemblies*. *Science. Langmuir* 25 (23), pp 13322–13327.
4. R. Polsky, C.M. Washburn, G.A. Montaño, H. Liu, T.L. Edwards, D.M. Lopez, J.C. Harper, S.M. Brozik, and D.R. Wheeler. (2009) *Reactive ion etching of gold nanoparticle-modified pyrolyzed photoresist films*. *Small* 5(2) 2510-2513.
5. J. Werner, G.A. Montaño, A Zurek, A. Garcia, E. Akhadov, G.L Lopez, A.P. Shreve. (2009) *Formation and characterization of a supported phospholipid membrane on a periodic nanotextured substrate*. 25(5):2986-2993.

6. A.S. Anderson, A.M. Dattelbaum, G.A. Montaña, D.N. Price, J.G. Schmidt, J.S. Martinez, W.K. Grace, K.M. Grace and B.I. Swanson. (2008) *Functional PEG-modified thin-films for biological detection*. *Langmuir* 24:2240-2247.
7. R. Martin, H.-L. Wang, S. Iyer, G.A. Montaña, J.S. Martinez, A.P. Shreve, Y. Bao, C.-C. Wang, Z. Chang, Y. Gao, J. Gao, R. Iyer. (2009) *Impact of physicochemical properties of engineered fullerenes on key biological responses*. *Toxicology and Appl. Pharmacology* 234:58-67.
8. A.S. Anderson, A.M. Dattelbaum, G.A. Montaña, J.G. Schmidt, J.S. Martinez, W.K. Grace, K.M. Grace and B.I. Swanson. (2006) *Functionalized Waveguides for biological assays*. *Materials Research Society Symposium Proceedings*. 950:162-167.
9. Y. Xin, S. Lin, G.A. Montano, and R.E. Blankenship. (2005) *Purification and characterization of the B808-866 light-harvesting complexes from green non-sulfur bacterium Chloroflexus aurantiacus*. *Photosynthesis Research* 86:155-163.
10. G.A. Montaña, A. Dattelbaum, H-L Wang and A.P. Shreve. (2004) *Increase in photoluminescence of water-soluble poly(phenylene vinylene) due to polycationic interactions in solution*. *Chemical Communications*, 21:2490 – 2491.

Synergistic Activities

Honors

SACNAS Presidential Award-2006

Intelligence Community Postdoctoral Fellowship-2002-2005

Postdoctoral Associate Appointment- Los Alamos National Laboratories, Oct. 2002

Achievement Rewards for College Scientists (ARCS) Foundation Fellow- 2001-2002

Ph.D. Fellowship in Biomolecular Devices at Arizona State University: Aug, 1997- May, 2002

Arizona State University Minority Graduate Tuition Scholarship: 1998-02

Biophysical Society Conference Travel Stipend: March, 1997

MARC Fellowship recipient- New Mexico State University: July, 1995- May, 1997

MBRS Fellowship recipient- New Mexico State University: May, 1995- July, 1995

New Mexico State University Crimson Scholar: 1992-1997

New Mexico State University Regents Scholarship: 1992-1996