

**Life Sciences Division
Open Literature Publications**

CY 2001

- Algramam, K. N., C. L. Murcia, H. Y. Kwon, K. S. Pawlowski, C. G. Wright, and R. P. Woychik, "The mouse Ames waltzer hearing-loss mutant is caused by mutation of *Pcdh15*, a novel protocadherin gene," *Nature Genetics* **27**(1):99–102 (January 2001).
- Allain, L. R., M. Askari, D. L. Stokes, and T. Vo-Dinh, "Microarray Sampling-Platform Fabrication Using Bubble-jet Technology for a Biochip System," *Fres. J. Anal. Chem.* **371**(2):146–150 (Sept. 2001).
- Aponte, J. L., G. A. Segal, L. J. Hauser, M. S. Dhar, C. M. Withrow, D. A. Carpenter, E. M. Rinchik, C. T. Culiati, and D. K. Johnson, "Point Mutations in the Murine Fumarylacetoacetate Hydrolase Gene: Animal Models for the Human Genetic Disorder Hereditary Tyrosinemia Type 1," *Proc. Natl. Acad. Sci. USA* **98**:641–645 (2001).
- Arakawa, E. T., P. S. Tuminello, B. N. Khare, and M. E. Milham, "Optical Properties of Ovalbumin in 0.130–2.50 μ m Spectral Region," *Biopolymers* **62**(2):122–128 (2001).
- Askari, M., G. H. Miller, and T. Vo-Dinh, "Synchronous luminescence: A simple technique for the analysis of hydrolysis activity of the fragile histidine triad protein," *Biotech. Ltrs.* **23**(20):1697–1702 (Oct. 2001).
- Askari, M., J. P. Alarie, M. Moreno-Bondi, and T. Vo-Dinh, "Application of an antibody biochip for *p53* detection and cancer diagnosis," *Biotech. Prog.* **17**(3):543–552 (May-June 2001).
- Blishchenko, E. Y., O. A. Kalinina, O. V. Sazonova, S. V. Khaidukov, N. S. Egorova, A. Y. Surovoy, M. M. Philippova, A. A. Vass, A. A. Karelin, and V. T. Ivanov, "Endogenous fragment of hemoglobin, neokytorphin, as cell growth factor," *Peptides* **22**(12):1999–2008 (December 2001).
- Brown, K., B. E. Hingerty, E. A. Guenher, V. V. Krishnan, S. Broyde, K. Turtelaub, and M. Cosman, "Solution Structure of the 2-amino-1-methyl-6-phenylimidazo," *Proc. Natl. Acad. Sci. USA* **98**:8507–8512 (July 2001).
- Chen, C. H., L. J. Sammartano, N. R. Isola, and S. L. Allman, "Laser Desorption Mass Spectrometry for Biomolecule Detection and Its Applications," in *Proceedings of Resonance Ionization Spectroscopy 2000 Laser Ionization and Applications Incorporating RIS 10th International Symposium, Knoxville, Tennessee*, pp. 96–105, edited by J. E. Parks and J. P. Young, AIP Conference Proceedings #584 (2001).
- Chen, F. D., B. T. Hsieh, H. E. Want, Y. H. Ou, W. K. Yang, J. Whang-Peng, R. S. Liu, F. F. Knapp, G. Ting, and S. H. Yen, "Efficacy of Re-188-labelled sulphur colloid on prolongation of survival time in melanoma-bearing animals," *Nucl. Med. & Biol.* **28**(7):835–844 (October 2001).
- Chi, Z., B. M. Cullum, D. L. Stokes, J. Mobley, G. H. Miller, M. R. Hajaligol, and T. Vo-Dinh, "Laser-Induced Fluorescence Studies of Polycyclic Aromatic Hydrocarbons (PAH) Vapors at High Temperatures," *Spectrochimica Acta, Part A*, **57**:1377–1384 (2001).

- Chi, Z. H., B. M. Cullum, D. L. Stokes, J. Mobley, G. H. Miller, M. R. Hajaligol, and T. Vo-Dinh, "High-temperature vapor detection of polycyclic aromatic hydrocarbon fluorescence," *Fuel* **80**(12):1819–1824 (Oct. 2001).
- Coleman, R. L., "A Method for Concurrent and Continuous Measurement of Rn-222 and Rn-220 Using Scintillation Cells," ORNL/TM-2002/37 (2001)
- Cullum, B. M. and T. Vo-Dinh, "Nanosensors for Biochemical Analysis of Single Cells," *Chemica Oggi, Chemistry Today* **January**:58 (2001).
- Davison, B. H. J. D. McMillan, and M. Finkelstein (Eds.), *Proceedings of the Twenty-second Symposium on Biotechnology for Fuels and Chemicals, Gatlinburg, Tennessee, May 2000, Appl. Biochem. Biotechnol.* **91-93** (2001).
- Dehal, P., P. Predki, A. S. Olsen, A. Kobayashi, P. Folta, S. Lucas, M. Land, A. Terry, C.L.E. Zhou, S. Rash, Q. Zhang, L. Gordon, J. Kim, C. Elkin, M. J. Pollad, P. Richardson, D. Rokhsar, E. Uberbacher, T. Hawkins, E. Branscomb, and L. Stubbs, "Human chromosome 19 and related regions in mouse: Conservative and lineage-specific evolution," *Science* **293**(5527):104–111 (July 2001).
- Dasigi, V. R. C. Mann, and V. A. Protopopescu, "Information Fusion for Text Classification – An Experimental Comparison," *Patt. Recogn.* **34**(12):2413–2425 (December 2001).
- Deng, L., M. G. Payne, and W. R. Garrett, "Electromagnetically-induced-transparency-enhanced Kerr nonlinearity: Beyond steady-state treatment," *Phys. Rev. A* **6402**(2):3807 (Aug. 2001).
- Easterly, M. E., C. J. Foltz, and M. J. Paulus, "Body Condition Scoring: Comparing newly training scorers and micro-computed tomography imaging," *Lab Animal* **30**(3):46–49 (March 2001).
- Esposito, R. D., M. Durante, G. Gialanella, G. Grossi, M. Pugliese, P. Scampoli, and T. D. Jones, "A Model of Radiation-Induced Myelopoiesis in Space," *Physica Medica* **17**:181–182 (2001).
- Fell, T. P., J. D. Harrison, R. W. Leggett, "A model for the transfer of alkaline earth elements to the fetus," *Rad. Protect. Dos.* **95**:309-321 (2001).
- Ferrell, T. L., C. L. Britton, W. L. Bryan, L. G. Clonts, M. S. Emery, N. Ericson, F. Meriaudeau, W. Morrison, A. Passian, S. F. Smith, T. D. Threatt, G. W. Turner, and A. L. Wintenberg, "Telesensor Integrated Circuits," *World Journal of Surgery* **25**(11):1412–1418 (November 2001).
- Finot, E. E. Lesniewska, J. P. Goudonnet, and T. G. Thundat, "Measuring Magnetic Susceptibilities of Nanogram Quantities of Materials Using Microcantilevers," *Ultra Microscopy* **86**:175–180 (2001).
- Fredrickson, H. L., E. J. Perkins, T. S. Bridges, R. J. Tonucci, J. K. Fleming, A. Nagel, K. Diedrich, A. Mendez-Tenorio, M. J. Doktycz, and K. L. Beattie, "Towards environmental toxicogenomics – development of a flow-through, high-density DNA hybridization array and its application to ecotoxicity assessment," *Sci. of the Total Environ.* **274**(1-3):137–149 (July 2001).
- Fry, R.J.M., "Deterministic Effects," *Health Phys.* **80**(4):338–343 (April 2001).

- Golovlev, V. V., S. H. Lee, S. L. Allman, N. I. Taranenko, and C. H. Chen, "Non-resonance MALDI of Oligonucleotides: Mechanism of Ion Desorption," *Anal. Chem.* **73**:809–812 (2001).
- Grant, W. F. and E. T. Owens, "Chromosome Aberration Assays in *Pisum* for the study of environmental mutagens," *Mut. Res.–Rev. Mut. Res.* **488**(2):93–118 (May 2001).
- Griest, W. H., M. B. Wise, K. J. Hart, S. A. Lammert, C. V. Thompson, and A. A. Vass, "Biological agent detection and identification by the block II chemical biological mass spectrometer," *Field Anal. Chem. & Tech.* **5**(4):177–184 (2001).
- Hansen, K. M., H. F. Ji, G. Wu, R. Datar, R. Cote, A. Majumdar, and T. G. Thundat, "Cantilever-Based Optical Deflection Assay for Discrimination of DNA Single-Nucleotide Mismatches," *Anal. Chem.* **73**:1567–1571 (2001).
- Hanson, B. L., J. M. Harp, K. Kirschbaum, D. A. Parrish, D. E. Timm, A. Howard, A. A. Pinkerton, and G. J. Bunick, "Macromolecular Data Collection with Cryogenic Helium," *J. Cryst. Growth* **232**:536–544 (2001).
- Harrison, J. D., R. W. Leggett, D. Nosske, F. Paquet, . W. Phipps, D. M. Taylor, and H. Metivier, "Reliability of the ICRP's dose coefficients for members of the public: Uncertainties in the absorption of ingested radionuclides and the effect on dose estimates," *Rad Protect. Dos.* **95**:295-308 (2001).
- Harrison, J. D., R. W. Leggett, D. Nosske, F. Paquet, W. Phipps, D. M. Taylor, and H. Metivier, "Reliability of the ICRP's dose coefficients for members of the public: Uncertainties in the absorption of ingested radionuclides and the effect on dose estimates," *Rad. Protect. Dos.* **95**:295-308 (2001).
- Hatmaker, T. L. and S. Das, "Economic Viability of Nondestructive Testing Methods for Testing of Joints," *Matls. Eval.* **59**(1):1208–1213 (October 2001).
- Hess, W. R., G. Rocap, C. S. Ting, F. Larimer, S. Stilwagen, J. Lamerdin, S. W. Chisholm, "The photosynthetic apparatus of *Prochlorococcus*: Insights through comparative genomics," *Photosynthesis Research* **70**(1): 53-71 (2001).
- Hicks, J. S., B. W. Harker, K. L. Beattie, and M. J. Doktycz, "Modification of an automated liquid-handling system for reagent-jet, nanoliter-level dispensing," *Biotechniques* **30**(4):878 (April 2001).
- Hoyt, P. R., M. J. Doktycz, R. J. Warmack, and D. P. Allison, "Spin-column isolation of DNA-protein interactions from complex protein mixtures for AFM imaging," *Ultramicroscopy* **86**(1-2):139–143 (Jan. 2001).
- Hu, Z, T. G. Thundat, and R. J. Warmack, "Investigations of Adsorption and Absorption-Induced Stresses Using Microcantilever Sensors," *J. Appl. Phys.* **90**:427–431 (2001).
- International Human Genome Sequencing Consortium (E. C. Uberbacher), "Initial Sequencing and Analysis of the Human Genome," *Nature* **409**:860–921 (2001).
- Isola, N. R., N. I. Taranenko, S. L. Allman, V. V. Gololev, and C. H. Chen, "MALDI-TOF Mass Spectrometric Method for Detection of Hybridized DNA Oligomer," *Anal. Chem.* **73**:2126–2131 (2001).

- Ji, H.-F., K. M. Hansen, Z. Hu, and T. Thundat, "Detection of pH variation Using Modified Microcantilever Sensors," *Sensors & Actuators* **72**(3):233–238 (2001).
- Ji, H.-F., T. Thundat, R. Dabestani, G. M. Brown, P. F. Britt, and P. V. Bonnesen, "Ultrasensitive Detection of CrO₄²⁻ Using Microcantilever Sensor," *Anal. Chem.* **73**:1572–1576 (2001).
- Jung, C. H., F. C. Hartman, T.-Y.S. Lu, and F. W. Larimer, "D-ribose-5-phosphate isomerase from spinach: Heterologous overexpression, purification, characterization, and site-directed mutagenesis of the recombinant enzyme," *Arch. of Biochem. & Biophys.* **373**(3):409–417 (January 2000).
- Kim, Y., G. B. Hurst, M. J. Doktycz, and M. V. Buchanan, "Improving spot homogeneity by using polymer substrates in matrix-assisted laser desorption/ionization mass spectrometry of oligonucleotides," *Anal. Chem.* **73**(11):2617–2624 (June 2001).
- Klasson, K. T., "Mercury Separations," in *Handbook of Mixed Waste Management Technology*, ed. C. H. Ho, CRC Press, Boca Raton, Florida, p. 3.2-1 (2001).
- Klasson, K. T., and B. H. Davison, "Effect of Temperature on Biofiltration of Nitric Oxide," *Appl. Biochem. Biotechnol.* **91-93**:205–211 (2001).
- Knapp, F. F., R. H. Spencer, and J. Kropp, "Invited commentary – Intravascular radiation therapy with radioactive liquid-filled balloons for inhibition of restenosis after angioplasty: A new opportunity for nuclear medicine?," *J. Nucl. Med.* **42**(9):1384–1387 (Sept. 2001).
- Kocher, D. C., "Drinking water standards for radionuclides: The dilemma and a possible resolution," *Health Phys.* **80**(5):486–490 (May 2001).
- Leggett, R. W., "Consistent biokinetic models for the actinide elements," *Rad Protect and Envir J* **24** (Oct-Dec 2001).
- Leggett, R. W., "Reliability of the ICRP's Dose Coefficient for Members of the Public: Sources of Uncertainty in the Biokinetic Models," *Rad. Protect. Dos.* **95**(3):199–213 (2001).
- Leggett, R. W. and K. F. Eckerman, "A Systemic Biokinetic Model for Polonium," *Science of the Total Environment* **275**:109–125 (July 2001).
- Leggett, R. W., N. B. Munro, and K. F. Eckerman, "Proposed Revision for ICRP's Model for Inhaled Mercury Vapor," *Health Phys.* **81**:450–455 (October 2001).
- Lin, C. H., X. W. Huang, A. Kolbanovskii, B. E. Hingerty, S. Amin, S. Broyde, N. E. Geacintov, and D. J. Patel, "Molecular topology of polycyclic aromatic carcinogens determines DNA adduct conformation: A link to tumorigenic activity," *J. Mol. Biol.* **306**(5):1059–1080 (March 2001).
- Mackenzie, C., M. Choudhary, F. W. Larimer, P. F. Predki, S. Stilwagen, J. P. Armitage, R. D. Barber, T. J. Donohue, J. P. Hosler, J. E. Newman, J. P. Shapleigh, R. E. Sockett, J. Zeilstra-Ryalls, and S. Kaplan, "The home stretch, a first analysis of the nearly completed genome of *Rhodobacter sphaeroides* 2.4.1," *Photosynthesis Research* **70**(1): 19-41 (2001).
- Mahurin, S., M. McGinnis, J. S. Bogard, L. D. Hulett, R. M. Pagni, and R. N. Compton, "Effect of beta radiation on the crystallization of sodium chlorate from water: A new type of asymmetric synthesis," *Chirality* **13**:636-640 (Nov. 2001).

- Marchetti, F., j. B. Bishop, X. Lowe, W. M. Generoso, J. Hozier, and A. J. Wyrobek, "Etoposide induces heritable chromosomal aberrations and aneuploidy during male meiosis in the mouse," *Proc. Natl. Acad. Sci. USA* **98**(7):3952–3957 (March 2001).
- McPherson, D. W., W. K. Breeden, A. L. Beets, H. M. Luo, V. Sood, and F. F. Knapp, "Stereoselective synthesis, *in vitro*, and initial *in vivo* evaluation of 1-methylpiperidin-4-yl alpha-hydroxy-alpha-(1-iodo-1-propen-3-yl)-alpha-phenylacetate (IPIP): A novel radioiodinated molecular probe with high affinity for the muscarinic receptor," *Nuc. Med. Biol.* **28**(8):959–973 (Nov. 2001).
- Meeks, J. C., J. Elhai, T. Thiel, M. Potts, F. Larimer, J. Lamerdin, P. Predki, R. Atlas, "An overview of the genome of *Nostoc punctiforme*, a multicellular, symbiotic cyanobacterium," *Photosynthesis Research* **70**(1): 85-106 (2001).
- Mehta, A., S. Cherian, D. Hedden, and T. G. Thundat, "Manipulation and Controlled Amplification of Brownian Motion of Microcantilever Sensors," *Appl. Phys. Letts.* **78**:1637–1639 (2001).
- Meriaudeau, F. T. L. Ferrell, E. T. Arakawa, A. Wig, A. Passian, T. Thundat, W. J. Shen, S. Patel, and F. B. Kraemer, "Study of different hormone-sensitive lipase concentrations using a surface plasmon resonance sensor," *Sensors and Actuators B-Chemical* **73**(2-3):192–198 (March 2001).
- Meriaudeau, F., A. Wig, A. Passian, J. P. Lauret, and T. L. Ferrell, "Multiple gold island layers on a fiber core: a promising sensing device," *Opt. Eng.* **10**(5):658–660 (May 2001).
- Moiseenko, V. V., R. N. Hamm, A. J. Walker, and W. V. Prestwich, "Calculation of radiation-induced DNA damage from photons and tritium beta-particles – Part I: Model formulation and basic results," *Rad. Env. Biophys.* **40**(1):23–31 (March 2001).
- Moussa, H. M., K. F. Eckerman, L. W. Townsend, and R. Pevey, "Estimation of Electron Absorbed Fractions in the Extrathoracic Airways," *Health Phys.* **80**:12–15 (2001).
- Muralidharan, G., A. Mehta, S. Cherian, and T. Thundat, "Analysis of Amplifications of Thermal Vibrations of a Microcantilever," *J. Appl. Phys.* **89**:4587–4591 (2001).
- Nagel, A. C., J. T. Fleming, G. S. Sayler, and K. L. Beattie, "Screening for ribosomal-based false positives following prokaryotic mRNA differential display," *Biotechniques* **30**(5):988 (May 2001).
- Nandagopal, K., D. M. Popp, and S. K. Niyogi, "Utilization of a receptor reserve for effective amplification of mitogenic signaling by an epidermal growth factor mutant deficient in receptor activation," *J. Cell. Biochem.* **83**(2):326–341 (2001).
- Nobuhara, K., L. Farde, C. Halldin, P. Karlsson, C. G. Swahn, H. Olsson, K. A. Bergstrom, S. A. Larsson, P. O. Schnell, D. W. McPherson, A. Savonen, J. Hiltunen, and G. Sedvall, "SPET imaging of central muscarinic acetylcholine receptors with Iodine-123 labelled E-IQNP and Z-IQNP," *Eur. J. Nucl. Med.* **28**(1):13–24 (January 2001).
- Opresko, D. M., "New species of antipatharians (Cnidaria:Anthozoa) from Madeira, with the establishment of a new genus," *Proc. Biol. Soc. of Washington* **114**(2):349–358 (May 2001).

- Opresko, D. M. and R. C. Baron-Szabo, "Reevaluation of *Tropidopathes saliciformis* Silberfeld: A Hydroid Originally Identified as an Antipatharan Coral," *Proc. Biol. Soc. of Washington* **114**(3):788–793 (Oct. 2001).
- Opresko, D. M., R. A. Young, A. P. Watson, R. A. Faust, S. S. Talmage, R. H. Ross, K. A. Davidson, J. King, and V. Hauschild, "Chemical Warfare Agents: Current Status of Oral Reference Doses," *Rev. Environ. Contm. Toxicol.* **172**:65–85 (2001).
- Passian, A., A. Wig, F. Meriaudeau, M. Buncick, T. G. Thundat, and T. L. Ferrell, "Electrostatic Force Density for a Scanned Probe Above a Charged Surface," *J. Appl. Phys.* **90**:1010–1016 (2001).
- Paulus, M. J., S. S. Gleason, M. E. Easterly, and C. J. Foltz, "A review of high resolution X-ray computed tomography and other imaging modalities for small animal research," *Lab Animal* **30**(3):36–45 (March 2001).
- Rinchik, E. M., D. A. Carpenter, L. Branstetter, P. R. Hunsicker, Y. You, E. J. Michaud, D. R. Miller, and D. K. Johnson, "Short- and Long-Term Design Parameters for Chemical Mutagenesis Screens in Mice: Examples from Regional Mutagenesis Programs Ongoing at the Oak Ridge National Laboraotry, *Genetica* (in press July 2001)
- Rodriguez, M., Jr., K. T. Klasson, and B. H. Davison, "Enhancement of the Conversion of toluene by *Pseudomonas putida* F1 using Organic Cosolvents," *Appl. Biochem. Biotechnol.* **91-93**:195–204 (2001).
- Roix, J. J., A. Hage-Greenberg, D. M. Bissonnette, S. Rodick, L. B. Russell, and T. P. O'Brien, "Molecular and functional mapping of the piebald deletion complex on mouse chromosome 14," *Genetics* **157**(2):803_815 (February 2001).
- Sadana, A. and T. Vo-Dinh, "A kinetic analysis using fractals of cellular analyte-receptor binding and dissociation," *Biotech. Appl. Biochem.* **33**:17–28 (February 2001).
- Sadana, A. and T. Vo-Dinh, "Biomedical Implications of Protein Folding and Misfolding," *Biotechnol. Appl. Biochem.* **33**:7–16 (2001).
- Sanders, C. A., M. Rodriguez, Jr., and E. Greenbaum, "Stand-off Tissue-Based Biosensors for the Detection of Chemical Warfare Agents Using Photosynthetic Fluorescence Induction," *Biosensors & Bioelectronics* **16**(7-8):439–446 (2001).
- Schurter, B. T., S. S. Koh, D. Chen, G. J. Bunick, J. M. Harp, B. L. Hanson, A. Henschen, M. R. Stallcup, and D. W. Aswad, "Methylation of Histone H3 by Coactivator-Associated Arginine Methyltransferase," *Biochemistry* **40**(19): 5747–5756 (2001).
- Sommardahl, C., M. Cotrell, J. E. Wilkinson, R. P. Woychik, and D. K. Johnson, "Phenotypic Variations of *orpk* Mutation and Chromosomal Localization of Modifiers Influencing Kidney Phenotype," *Physiol. Genomics* **7**(2):127–134 (December 2001).
- Stevens, A., "5'-exoribonuclease 1:Xrn 1," *Ribonucleases, Pt B: Meth. in Enzym.* **342**:251–259 (2001).
- Stevenson, K. A., G. Muralidharan, J. C. Wells, J. Barhen, and T. Thundat, "Site Specific Attachment of Gold Nanoparticles on DNA Templates," in *Mat. Res. Symp.*, Vol. 635 (2001).

- Stokes, D. L., G. D. Griffin, and T. Vo-Dinh, "Detection of E.coli using a Microfluidics-based Antibody Biochip Detection System," *Fresenius J. Anal. Chem.* **369**:295–301 (2001).
- Thomas, R. and R. A. Young, "Arsine," *Inhal. Tox.* **13**:43–77 (2001).
- Thomas, R. and R. A. Young, "Monomethylhydrazine," *Inhal. Tox.* **13**:79–110 (2001).
- Thomas R. and R. A. Young, "Dimethylhydrazine," *Inhal. Tox.* **13**:111–144 (2001).
- Vo-Dinh, T., B. M. Cullum, and D. L. Stokes, "Nanosensors and biochips: Frontiers in biomolecular diagnostics," *Sensors and Actuators B-Chemical* **74**(1-3):2–11 (April 2001).
- Vo-Dinh, T. and R. L. Spellicy, Eds. *Water, Ground and Air Pollution Monitoring and Remediation*, SPIE Publishers, Vol. 4199, Bellingham, Washington (2000).
- Vo-Dinh, T., W. S. Grundfest, and D. A. Benaron, Eds. *Biomedical Diagnostic, Guidance and Surgical Assist Systems II*, Vol. 4254, SPIE Publishers, Bellingham, Washington (2001).
- Walker, A. B., C. Tsouris, D. W. DePaoli, and K. T. Klasson, "Ozonation of Soluble Organics in Aqueous Solutions Using Microbubbles," *Ozone Science & Engineering* **23**:77 (2001).
- Wang, P. D. Sheng, S. D. Waezsada, A. Y. Tsao, and B. H. Davison, "Enzyme Activation and Stabilization by Covalent Binding in Mesoporous Sol-gel Glass for Nonaqueous Biocatalysis," *Biotechnol. Bioeng.* **74**:24–255 (2001).
- Wang, S. J., W. Y. Lin, M. N. Chen, J. T. Chen, W. L. Ho, B. T. Hsieh, H. Huang, L. H. Shen, G. Ting, and F. F. Knapp, "Histologic study of effects of radiation synovectomy with Rhenium-188 microsphere," *Nucl. Med. & Biol.* **28**(6):727–732 (Aug. 2001).
- Wu, G. R. H. Datar, K. M. Hansen, T. G. Thundat, R. J. Cote, and A. Majumdar, "Bioassay of Prostate Specific Antigen (PSA) Using Microcantilevers," *Nature Biotech.* XXXX (2001).
- Wu, G., H. F. Ji, K. Hansen, T. Thundat, R. Datar, R. Cote, M. F. Hagan, A. Chakraborty, and A. Majumdar, "Origin of Nanomechanical Cantilever Motion Generated from Biomolecular Interactions," *Proc. Natl. Acad. Sci. USA* **98**:1560–1564 (2001).
- Xu, D., K. Baburaj, C. B. Peterson, and Y. Xu, "Model for the three-dimensional structure of vitronectin: Predictions for the multi-domain protein from threading and docking," *Proteins-Structure Function and Genetics* **44**(3):312–320 (Aug. 2001).
- Xu, Dong, Oakley H. Crawford, Philip F. LoCascio, and Ying Xu, "Application of PROSPECT in CASP4: Characterizing Protein Structures with New Folds," *Proteins Structure, Function, and Genetics (CASP4 Special Issue)* **46**:140-148 (2001).
- Xu, Dong, Oakley H. Crawford, Philip F. LoCascio, and Ying Xu, "Application of PROSPECT in CASP4: Characterizing Protein Structures with New Folds," *Proteins Structure, Function, and Genetics (CASP4 Special Issue)* **46**:140-148 (2001).
- Xu, Ying, Victor Olman, and Dong Xu, "Minimum Spanning Trees for Gene Expression Data Clustering," in Proceedings of the 12th International Conference on Genome Informatics (GIW), edited by S. Miyano, R. Shamir and T. Takagi. Universal Academy Press, Tokyo, pp. 24-33 (December 2001).
- Xu, Ying, Victor Olman, and Dong Xu, "Minimum Spanning Trees for Gene Expression Data Clustering," in Proceedings of the 12th International Conference on Genome Informatics

(GIW), edited by S. Miyano, R. Shamir and T. Takagi. Universal Academy Press, Tokyo, pp. 24-33 (December 2001).

(98 open literature articles)

Informational products by Human Genome Management Information System Group:

Human Chromosomes Landmarks poster, January 2001

Human Genome Project Fact Sheet, May 2001

“Genomes to Life: Neutralizing the Biological Threat” (brochure)

“Genomes to Life: Report on the Computational Biology Workshop for the Genomes to Life Program; U.S. Department of Energy, Germantown, Maryland, August 7-8, 2001”

“Genomics and Its Impact on Medicine and Society: A 2001 Primer”

“U.S. Department of Energy Genome Programs” (freestanding exhibit)

Genomes to Life, 20-page brochure, February 2001

Genomes to Life, 2-page flyer, May 2001

Genomes to Life, 70-page booklet, April 2001