

**Life Sciences Division
Open Literature Publications**

CY 2000

- Alarie, J. P., S. C. Jacobson, C. T. Culbertson, and J. M. Ramsey, "Effects of the Electric Field Distribution on Microchip Valving Performance," *Electrophoresis* **21**, 100–106 (2000).
- Barnes, M. D., A. Mehta, T. Thundat, R. N. Bhargava, V. Chhabra, and B. Bulkarni., "On-Off Blinking and Multiple Bright States of Single Europium Ions in Eu³⁺:Y₂O₃ Nanocrystals," *J. Phys. Chem.* **104**(26), 6099-6102 (2000).
- Biggar, R., M. Frisch, H. T. Borges, J. Goedert, and the NACMR Group, "The Risk of Cancer in Children with Aids," *JAMA* **2001** **284**(2), 205209 (2000).
- Blower, P. J., A. G. Kettle, M. J. O'Doherty, A. J. Coakley, and F. F. Knapp, Tc-99m(V)DMSA Quantitatively Predicts Re-188(V)DMSA Distribution in Patients with Prostate Cancer Metastatic to Bone," *Eur. J. Nucl. Med.* **27**(9), 1405–1409 (2000).
- Bollinger, M. E., K. Picel, and C. W. McGinn, "Communicating Risks from the Environmental Management Program of the United States Department of Energy," *Environmental Science and Pollution Research*, Special Issue (2) (2000).
- Breeden, W. F. III, D. M. Hamby, J. E. Carey, Jr., K. F. Eckerman, D. W. McPherson, and F. F. Knapp, Jr., "In Vivo biodistribution of 125IPIP and internal dosimetry of 123IPIP radioiodinated agents selective to the muscarinic acetylcholinergic receptor complex," *Med. Phys.* **27**(4), 778–786 (2000).
- Breeden, W. K. and D. W. McPherson, "Response to 'Comment on "In Vivo Biodistribution of (IPIP)-I-125 and Internal Dosimetry of (IPIP)-I-123 Radioiodinated Agents Selective to the Muscarinic Acetylcholinergic Receptor Complex,"" *Med. Phys.* **27**(9), 2191 (2000).
- Britton, C. L., Jr., R. L. Jones, P. I. Oden, Z. Hu, R. J. Warmack, S. F. Smith, W. L. Bryan, and J. M. Rochelle, "Multiple-Input Microcantilever Sensors," *Ultramicroscopy* **82**, 17–21 (2000).
- Chen, C. H., "Mass Spectrometry for Forensic Analysis, in *Encyclopedia of Analytical Chemistry: Instrumentation and Applications*, edited by R. Y. Meyers, John Wiley and Sons Ltd., Chichester, West Sussex, England, pp. 4469–4484 (2000).
- Coburn, C. T., F. F. Knapp, M. Febbraio, A. L. Beets, R. L. Silverstein, and N. A. Abumrad, "Defective Uptake and Utilization of Long Chain Fatty Acids in Muscle and Adipose Tissues of CD36 Knockout Mice," *J. Biol. Chem.* **275**(42), 32523–32529 (2000).
- Colella, T. A. Bullock, T.N.J., L. B. Russell, D. W. Mullins, W. W. Overwijk, C. J. Luckey, R. A. Pierce, N. P. Restifo, and V. H. Engelhard, "Self-Tolerance to the Murine Homologue of a Tyrosinase-Derived Melanoma Antigen: Implications for Tumor Immunotherapy," *J. Exp. Med.* **191**(7), 1221-1231 (2000).
- Colitz, C.M.H., D. E. Malarkey, R. P. Woychik, and J. E. Wilkinson, "Persistent Hyperplastic Tunica Vasculosa Lentis and Persistent Hyperplastic Primary Vitreous in Transgenic Line TgN3261Rpw," *Vet. Path.* **37**(5), 422–427 (2000).

- Cullum, B. M., and T. Vo-Dinh, "Nanocapteurs Optiques et Mesures Biologiques," *Biofutur* **205**:A1–A6 (November 2000).
- Cullum, B. M., G. D. Griffin, G. D. Miller, and T. Vo-Dinh, "Intracellular Measurements in Mammary Carcinoma Cells Using Fiber-Optic Nanosensors," *Anal. Biochem.* **277**(1), 25–32 (2000).
- Cullum, B. M., J. Mobley, Z. H. Chi, D. L. Stokes, G. H. Miller, and T. Vo-Dinh, "Development of a Compact, Handheld Raman Instrument with No Moving Parts for Use in Field Analysis," *Rev. Sci. Instrum.* **71**(4), 1602-1607 (2000).
- Cullum, B.M. and T. Vo-Dinh 2000. "Sample Collection and Preparation of Liquids and Solids," Wiley-VCH, New York, NY USA, 2000.
- Cullum, B.M. and T. Vo-Dinh, "Development of Optical Nanosensors for Biological Measurements," *Trends in Biotechnology* **18**, 388-394 (2000).
- Cullum, B.M., Z. Chi, and T. Vo-Dinh, "High-Temperature Fluorescence Measurements and Instrumentation for Polyaromatic Hydrocarbons (PAH): A Review," *Journal of Polycyclic Aromatic Compounds* **18**, 25-47 (2000).
- Cullum, B. M., J. Mobley, J. S. Bogard, M. Moscovitch, G. W. Phillips, and T. Vo-Dinh, "Three-Dimensional Optical Random Access Memory Materials for Use as Radiation Dosimeters," *Anal. Chem.* **72**(22), 5612–5617 (2000).
- Curlee, T. R. and K. L. Yuracko, "The Use of Life Cycle Analysis within the U. S. Department of Energy," *Env. Prog.* **19**(2), 117–123 (2000).
- Davison, B. H., J. W. Barton, K. T. Klasson, and A. Francisco, "Influence of high Biomass on Alkane Solubilities," *Biotechnol. Bioeng.* **68**:279–284 (2000).
- Dhar, M., L. S. Webb, L. Smith, L. Hauser, D. Johnson, and D. B. West, "A Novel ATPase on Mouse Chromosome 7 is a Candidate Gene for Increased Body Fat," *Phys. Gen.* **4**(1), 93-100 (2000).
- Doktycz, M. J., "Discontinuous Electrophoresis," in *Encyclopedia of Separation Science*, edited by I. D. Wilson, T. R. Adlard, C. F. Poole, and M. Cook, Academic Press, pp. 1245–1250 (2000).
- Dunn, W.C., S. C. Jacobson, L. C. Waters, N. Kroutchinina, J. Khandurina, R. S. Foote, M. J. Justice, L. J. Stubbs, and J. M. Ramsey, "PCR Amplification and Analysis of Simple Sequence Length Polymorphisms in Mouse DNA Using a Single Microchip Device," *Anal. Biochem.* **277**, 157-160 (2000).
- Eckerman, K. F. and M. G. Stabin, "Electron Absorbed Fractions and Dose Conversion Factors for Marrow and Bone by Skeletal Regions," *Health Phys.* **78**(2), 199-214 (2000).
- Etnier, E. L., J. F. King, and A. P. Watson, "Chemical Warfare Materiel: Unique Regulatory Issues," *Env. Mgmt.* **25**(4), 347-356 (2000).
- Ferrell, T. L., F. Meriaudeau, A. Passian, J.-P. Goudonnet, and A. Wig, "Imaging with the Photon Scanning-Tunneling Microscope," *Microscopy Today* **14-6** (2000).

- Ferrell, T. L., F. Meriaudeau, A. Passian, J.-P. Goudonet, and A. Wig, "Spectroscopy with the Photon Scanning-Tunneling Microscope," *Microscopy Today* **April 00-03**, 22–24 (2000).
- Frisch, M., R. J. Biggar, J. J. Goedert, and H. T. Borges, "Human papillomavirus-associated cancers in patients with human immunodeficiency virus infection and acquired immunodeficiency syndrome," *J. Natl. Cancer Inst.* **92**(18), 1500–1510 (2000).
- Fry, R.J.M., "Biological Effects of Space Radiation," *Rad. Prot Dos.* **92**(1-3), 199-200 (2000).
- Geck, M. K. and F. C. Hartman, "Kinetic and Mutational Analyses of the Regulation of Phosphoribulokinase by Thioredoxins," *J. Biol. Chem.* **275**(24), 18034-18039 (2000).
- Golovlev, V. V., M. J. Gresalfi, J. C. Miller, G. Romer, and P. Messier, "Laser Characterization and Cleaning of Nineteenth Century Daguerreotypes," *J. Cultural Heritage* **1**, 139 (2000).
- Griffin, G. D., W. Khalf, K. E. Hayden, E. J. Miller, V. R. Dowray, A. L. Creekmore, C. W. Carruthers, M. W. Williams, and P. C. Gailey, "Power Frequency Magnetic Field Exposure and Gap Junctional Communication in Clone 9 Cells," *Bioelectrochemistry* **51**:117–123 (2000).
- Griffin, G. D., M. W. Williams, and P. C. Gailey, "Cellular Communication in Clone 9 Cells Exposed to Magnetic Fields," *Radiat. Res.* **153**(5), 690-698 (2000).
- Guhlke, S., A. L. Beets, K. Oetjen, S. Mirzadeh, H. J. Biersack, and F. F. Knapp, "Simple New Method for Effective Concentration of Re-188 Solutions from Alumina-Based W-188-Re-188 Generator," *J. Nucl. Med.* **41**(7), 1271-1278 (2000).
- Hansen, K. M., H.-F. Ji, G. Wu, R. Datar, R. Cote, A. Majumdar, and T. Thundat, "Nanomechanical Detection of Molecular Interactions," in *ECS Proceedings*, Vol. 2000-19, pp. 200–205, Phoenix, Arizona (2000).
- Harp, J. M., B. L. Hanson, D. E. Timm, and G. J. Bunick, "Asymmetries in the Nucleosome Core Particle at 2.5 Gnstrom Resolution," *Acta Crys. Sec. D - Biol. Crys.* **56**, 1513-1534 (2000).
- Hopke, P. K., T. B. Borak, J. Doull, J. E. Cleaver, K. F. Eckerman, L.C.S. Gunderson, N. H. Harley, C. T. Hess, N. E. Kinner, K. J. Kopecky, . E. McKone, R. G. Sextro, and S. L. Simon, "Health Risks Due to Radon in Drinking Water," *Env. Sci. Tech.* **34**(6), 921-926 (2000).
- Hosono, M. N., M. Hosono, A. K. Mishra, A. Faivre-Chauvet, E. Gautherot, J. Barbet, F. F. Knapp, and J. F. Chatal, "Rhenium-188-labeled Anti-Neural Cell Adhesion Molecule Antibodies with 2-iminothiolane Modification for Targeting Small-Cell Lung Cancer," *Annals Nucl. Med.* **14**(3), 173–179 (2000).
- Hoyt, P. R., M. J. Doktycz, P. Modrich, R. J. Warmack, and D. P. Allison, "Identifying Sequence Similarities Between DNA Molecules," *Ultramicroscopy* **82**, 237–44 (2000).
- Hu, Z., T. Thundat, and R. J. Warmack, "Metal Coated Microcantilever Hydrogen and Mercury Sensors," in *Chemical Sensors IV*, ECS Proceedings 99-23, editors M. Butler, N. Yamazoe, P. Vanysek, and M. Aizawa, pp. 347–354 (2000).
- Ji, H-F., and T. G. Thundat "A Novel Self-Assembled Monolayer (SAM) Coated Microcantilever for Low Level Cesium Detection," *Chemical Comm.* **6**, 457-458 (2000).

- 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. Biochem. Biophys.* **373**(2), 409-417 (2000).
- Justice, M. J., D. A. Carpenter, J. Favor, A. Neuhauser-Klaus, M. H. de Angelis, D. Soewarto, A. Moser, S. Cordes, D. Miller, V. Chapman, J. S. Weber, E. M. Rinchik, P. R. Hunsicker, W. L. Russell, V. C. Bode, "Effects of ENU Dosage on Mouse Strains," *Mamm. Gen.* **11**(7), 484-488 (2000).
- Kennel, S. J., L. J. Foote, A. A. Vass, and W. H. Griest, "Mutation Analyses of a Series of TNT Related Compounds Using the CHO-*hprt* Assay," *J. App. Toxicol.* **20**, 441-448 (2000).
- Kennel, S. J., I. A. Davis, J. Branning, H. J. Pan, G. W. Kabalka, and M. J. Paulus, "High Resolution Computed Tomography and MRI for Monitoring Lung Tumor Growth in Mice Undergoing Radioimmunotherapy: Correlation with Histology," *J. Med. Phys.* **27**(5), 1101-1107 (2000).
- Kennel, S. J., L. L. Chappell, K. Dadachova, M. W. Brechbiel, P. K. Lankford, I. A. Davis, M. Stabin, and S. Mirzadeh, "Evaluation of Ac-225 for Vascular Targeted Radioimmunotherapy of Lung Tumors," *Cancer Biotherapy and Radiopharmaceuticals* **15**(3), 235-244 (2000).
- Kennel, S. J., S. Mirzadeh, G. B. Hurst, L. J. Foote, P. K. Lankford, K. A. Glowienka, L. L. Chappell, J. R. Kelso, S. M. Davern, A. Safavy, and M. W. Brechbiel, "Labeling and distribution of linear peptides identified using *in vivo* phage display selection for tumors," *Nuc. Med. Biol.* **27**(8):815-825 (Nov. 2000).
- Kocher, D. C. and J. R. Trabalka, "On the Application of a Radiation Weighting Factor for Alpha Particles in Protection of Non-Human Biota," *Health Phys.* **79**(4), 407-411 (2000).
- Larimer, F. W., "HOBACGEN: Homologous Bacterial Genes Database," Software review, *Briefings in Bioinformatics* **1**(4):415-416 (2000).
- Leggett, R. W., J. C. Barton, and K. F. Eckerman, "Mathematical Models of Metal Metabolism in Hemochromatosis," in *Hemochromatosis*, eds., J. C. Barton and C. Q. Edwards, Cambridge University Press, New York, NY, pp. 170-176 (2000).
- Leggett, R. W. and R. A. Guilmette, "Sources of ^{210}Pb in bone of former U miners: Reference values and uncertainties," *Technology* **7**, 317-332 (2000).
- Liepe, K., R. Hliscs, J. Kropp, T. Gruning, R. Runge, R. Koch, F. F. Knapp, and W. G. Franke, "Rhenium-188-HEDP in the Palliative Treatment of Bone Metastases," *Can. Biother. & Radiopharma.* **15**(3), 261-265 (2000).
- Lin, W. Y., J. F. Hsieh, S. C. Tsai, T. C. Yen, S. J. Want, and F. F. Knapp, "A Comprehensive Study on the Blockage of Thyroid and Gastric Uptakes of Re-188-perrhenate in Endovascular Irradiation Using Liquid-Filled Balloon to Prevent Restenosis," *Nucl. Med. and Biol.* **27**(1), 83-87 (2000).
- Lowndes, D. H., C. M. Rouleau, T. Thundat, G. Duscher, E. A. Kenik, and S. J. Pennycook, "Silicon and Zinc Telluride Nanoparticles Synthesized by Low Energy Density Pulsed Laser Ablation in Ambient Gases," *J. Matls. Res.* **14**, 359-370 (2000).

- Maya, L., G. Muralidharan, T. G. Thundat, and E. A. Kenik, "Polymer-Mediated Assembly of Gold Nanoclusters," *Langmuir* **16**(24), 9151-9154 (2000).
- Mazur, P., I. I. Katkov, N. Katkova, and J. K. Critser, "The Enhancement of the Ability of Mouse Sperm to Survive Freezing and Thawing by the Use of High Concentrations of Glycerol and the Presence of an Escherichia Coli Membrane Preparation (Oxyrase) to Lower the Oxygen Concentration," *Cryobiology* **40**(3), 187-209 (2000).
- McPherson, D. W., M. Greenbaum, H. Luo, A. L. Beets, and F. F. Knapp, "Evaluation of Z-(R,R)-IQNP for the Potential Imaging of m2 mAChR Rich Regions of the Brain and Heart," *Life Sci.* **66**(10), 885-896 (2000).
- McPherson, D.W. 2000. "Targeting Cerebral Muscarinic Acetylcholine Receptors with Radioligands for Diagnostic Nuclear Medicine Studies in Ion Channel Localization Methods and Protocols," The Humana Press, Totowa, New Jersey, Totowa, NJ USA, 2000.
- Meriaudeau, F., A. Wig, A. Passian, T. Downey, M. Buncick, and T. L. Ferrell, "Gold Island Fiber Optic Sensor for Refractive Index Sensing," *Sensors and Actuators B - Chemical* **69**(1), 51-57 (2000).
- Mirzadeh, S., M. T. Du, A. Beets, and F. F. Knapp, "Thermoseparation of Neutron-Irradiated Tungsten from Re and Os," *Ind. & Eng. Chem. Res.* **39**(9), 3169-3172 (2000).
- Moreno-Bondi, M. C., J. Mobley, J. P. Alarie, and T. Vo-Dinh, "Antibody-Based Biosensor for Breast Cancer with Ultrasonic Regeneration," *J. Biomed. Optics* **5**(3), 350-354 (2000).
- Nobuhara, K., C. Halldin, H. Hall, P. Karlsson, L. Farde, J. Hiltunen, D. W. McPherson, A. Savonoe, K. A. Bergstrom, S. Pauli, C. G. Swahn, S. A. Larsson, P. O. Schnell, G. Sedvall, "Z-IQNP: A Potential Radioligand for SPECT Imaging of Muscarinic Acetylcholine Receptors in Alzheimer's Disease," *Psychopharmacology* **149**(1), 45-55 (2000).
- Orfanides, P. T. F. Buckner, M. Buncick, F. Meriaudeau, and T. L. Ferrell, "Demonstration of surface plasmons in metal island films and the effect of the surrounding medium — An undergraduate experiment," *American Journal of Physics* **68**(10), 936-942 (2000).
- Palmedo, H., S. Guhlke, H. Bender, J. Sartor, G. Schoeneich, J. Risse, F. Grunwald, F. F. Knapp, and H. J. Biersack, "Dose Escalation Study with Rhenium-188 Hydroxyethylidene Diphosphonate in Prostate Cancer Patients with Osseous Metastases," *Eur. J. Nucl. Med.* **27**(2), 123-130 (2000).
- Paulus, M. J., S. S. Gleason, S. J. Kennel, P. R. Hunsicker, and D. K. Johnson, "High Resolution X-Ray Computed Tomography: An Emerging Tool for Small Animal Cancer Research," *Neoplasia* **2**(1-2), 62-70 (2000).
- Paulus, M. J., S. S. Gleason, H. Sari-Sarraf, D. K. Johnson, C. J. Foltz, D. W. Austin, M. E. Easterly, E. J. Michaud, M. S. Dhar, P. R. Hunsicker, J. W. Wall, and M. Schell, *SPIE Proceedings* **3921**, 270-279 (2000).
- Planchart, A., Y. You, and J. Schimenti, "Physical Mapping of Male Fertility and Meiotic Drive QTLs in the Mouse *t* Complex Using Chromosome Deficiencies," *Genetics* **155**, 803-812 (2000).

- Pui, D.Y.H., J. R. Brock, D.-R. Chen, H. Fissan, C. D. Frisbie, C. E. Lyman, J. C. Miller, G. W. Mulholland, R. Pecora, O. Preining, and T. Vo-Dinh, "Instrumentation and Measurement Issues for Nanometer Particles," *J. Nanoparticle Res.* **2**:103–112 (2000).
- Rinchik, E. M., "Developing Genetic Reagents to Facilitate Recovery, Analysis, and Maintenance of Mouse Mutations," *Mamm. Gen.* **11**(7), 489-499 (2000).
- Rusch, G. M., R. Garrett, P. Tobin, E. Falke, and P. Y. Lu, "The Development of Acute Exposure Guideline Levels for Hazardous Substances," *Proc. Safety Prog.* **19**(2), 98–102 (2000).
- Russell, L. B., P. R. Hunsicker, A. M. Hack, and T. Ashley, "Effect of the topoisomerase-II Inhibitor Etoposide on Meiotic Recombination in Male Mice," *Mut. Res.-Gen. Tox. and Env. Mut.* **464**(2), 201-212 (2000).
- Russell, L. B., P. R. Hunsicker, M. K. Kerley, D. K. Johnson, and M. D. Shelby, "Bleomycin, Unlike Other Male-Mouse Mutagens, is Most Effective in Spermatogonia, Inducing Primarily Deletions," *Mut. Res.-Gen. Tox. and Env. Mutag.* **469**(1), 95-105 (2000).
- Selby, P. B., "Stillbirths Among Offspring of Male Radiation Workers," *Lancet* **355**(9202), 492-493 (2000).
- Shimotakahara, S., A. Gorin, A. Kolbanovskiy, A. Kettani, B. E. Hingerty, S. Amin, S. Brojde, N. Geacintov, and D. J. Patel, "Accommodation of S-cis-tamoxifen-N-2-guanine Adduct within a Bent and Widened DNA Minor Groove," *J. Mol. Biol.* **302**(2), 377-393 (2000).
- Simpson, E. H., R. Suffolk, J. A. Bell, S. A. Jordan, D. K. Johnson, P. R. Hunsicker, J. S. Weber, M. J. Justice, and I. J. Jackson, "A Comparative Transcript Map and Candidates for Mutant Phenotypes in the Tyrp1 (brown) Deletion Complex Homologous to Human 9p21-23," *Mamm. Gen.* **11**(1), 58-63 (2000).
- Stabin, M. G., M. Konijnenberg, F. F. Knapp, and R. H. Spencer, "Monte Carlo Modeling of Radiation Dose Distributions in Intravascular Radiation Therapy," *Med. Phys.* **27**(5), 1086–1092 (2000).
- Stokes, D. L. and T. Vo-Dinh, "Development of an Integrated Single-Fiber SERS Sensor," *Sensors and Actuators B - Chemical* **69**(1-2), 28-36 (2000).
- Tav, C. and L. A. Pinnaduwege, "Dissociative Electron Attachment to Laser-Excited Benzene," *J. Phys. D. (App. Phys)* **33**, 2391–2397 (2000).
- Thundat, T., E. Finot, Z. Hu, R. H. Ritchie, G. Wu, and A. Majumdar, "Chemical Sensing in Fourier Space," *App. Phys. Lett.* **77**(24), 4061-4063 (2000).
- Thundat, T., E. Finot, H.-F. Ji, R. Dabestani, P. F. Britt, P. V. Bonnesen, G. M. Brown, and R. J. Warmack, "Highly Selective Microcantilever Sensor for Cs Ion Detection," in *Chemical Sensors IV*, ECS Proceedings 99-23, editors M. Butler, N. Yamazoe, P. Vanysek, and M. Aizawa, pp. 314–319 (2000).
- Viallet, P., T. Vo-Dinh, A. C. Ribou, J. Vigo, and J.-M. Salmon, "Native Fluorescence and Mag-Indo-1-Protein Interaction as Tools for Probing Unfolding and Refolding of Proteins: Study of Serum Albumin Sub-Domain in the Presence of Guanidine Hydrochloride," *J. Prot. Chem.* **19**:431–439 (2000).

- Vo-Dinh, T. and B. Cullum, "Biosensors and Biochips: Advances in Biological and Medical Diagnostics," *Fres. J. Anal. Chem.* **366**(6-7), 540–551 (2000).
- Vo-Dinh, T., G. D. Griffin, J. P. Alarie, B. Cullum, B. Sumpter, and D. Noid, "Development of Nanosensors and Bioprobes," *J. Nanoparticle Res.* **2**:17–27 (2000).
- Vo-Dinh, T., J. P. Alarie, B. M. Cullum, and G. D. Griffin, "Antibody-Based Nanoprobe for Measurement of a Fluorescent Analyte in a Single Cell," *Nat. Biotech.* **18**(7), 764-767 (2000).
- Volkan, M. D. L. Stokes, and T. Vo-Dinh, "Surface-enhanced Raman of dopamine and neurotransmitters using sol-gel substrates and polymer-coated fiber-optic probes," *Appl. Spectrosc.* **54**(12):1842–1848 (December 2000).
- Ward, R. C., M. W. Yambert, R. J. Toedte, N. B. Munro, C. E. Easterly, E. P. Difilippo, and D. C. Stallings, "Creating a Human Phantom for the Virtual Human Program," *Proc of Medicine Meets Virtual Reality 2000*, IOS Press, Amsterdam (2000).
- Whitaker, T. J., K. B. Jacobson, and M. J. Doktycz, "Preparation and Application of DNA Arrays," in *Encyclopedia of Analytical Chemistry: Instrumentation and Applications*, edited by R. A. Meyers, John A. Wiley & Sons, Ltd., pp. 1219–1238 (2000).
- Wig, A., F. Meriaudeau, A. Passian, J.-P. Goudonnet, and T. L. Ferrell, "Spectroscopy with the Photon Scanning-Tunneling Microscope," *Microscopy Today* **00-03**, 22-24 (2000).
- Wilson, S. M., R. Yip, D. A. Swing, T. N. O'Sullivan, Y. Zhang, E. K. Novak, R. T. Swank, L. B. Russell, N. G. Copeland, and N. A. Jenkins, "A mutation in *Rab27a* causes the vesicle transport defects observed in *ashen* mice," *Proc. Natl. Acad. Sci. USA* **97**(14), 7933–7938 (2000).
- Wu, M., E. M. Rinchik, and D. K. Johnson, "An Integrated Deletion and Physical Map Encompassing 171R1, a Chromosome 7 Locus Required for Peri-Implantation Survival in the Mouse," *Genomics* **67**(2), 228-231 (2000).
- Wunderlich, G., J. Pinkert, M. Andreeff, M. Stintz, F. F. Knapp, J. Kropp, and W. G. Franke, "Preparation and Biodistribution of Rhenium-188 Labeled Albumin Microspheres B 20: A Promising New Agent for Radiotherapy," *App. Rad. & Isotop.* **52**(1), 63–68 (2000).
- Xu, D., M. A. Unseren, Y. Xu, and E. C. Uberbacher, "Sequence-Structure Specificity of a Knowledge Based Energy Function at the Secondary Structure Level," *Bioinformatics* **16**(3), 257-268 (2000).
- Xu, Y. and D. Xu, "Chapter 18: Protein Structure Prediction by Protein Threading and Partial Experimental Data," MIT Press, Cambridge, MA USA, 2000.
- Xu, Y. and D. Xu, "Protein Structure Prediction by Protein Threading and Partial Experimental Data," MIT Press, , USA, 2000.
- Xu, Y. and D. Xu, "Protein Threading Using PROSPECT: Design and Evaluation," *Proteins-Structure Function and Genetics* **40**(3), 343-354 (2000).
- Xu, Y., D. Xu, and H. N. Gabow, "Protein Domain Decomposition using a Graph-Theoretic Approach," *Bioinformatics* **16**(12), 1091–1104 (2000).

- Xu, Y., D. Xu, O. H. Crawford, and J. R. Einstein, "A Computational Method for NMR-Constrained Protein Threading," *J. Comp. Biol.* **7**(3-4), 449-467 (2000).
- Xue, Y., X. X. Bai, I. Lee, G. Kallstrom, J. Ho, J. Brown, A. Stevens, and A. W. Johnson, "Saccharomyces cerevisiae RAI1 (YGL246c) is homologous to human DOM3Z and encodes a protein that binds the nuclear exoribonuclease Rat1p," *Mol. & Cell. Biol.* **20**(11), 4006–4015 (2000).
- Yu, J. F., R. P. Zhang, X. L. Dai, X. F. Min, J. Y. Xu, W. Q. Hu, D. Z. Yin, W. Zhou, H. Xie, Y. X. Wang, and F. F. Knapp, "Intratumoral injection with [Re-188]rhenium sulfide suspension for treatment of transplanted human liver carcinoma in nude mice," *Nucl. Med. & Biol.* **27**(4), 347–352 (2000).

(100 open literature articles)

Miscellaneous Newsletters, Web Pages, Informational Products:

Newsletters

Elledge, T. and G. Caton, *Protecting Human Subjects*, DOE Office of Biological and Environmental Research, Winter 1999/2000, 20 pp (2000).

Elledge, T. and G. Caton, *Protecting Human Subjects*, DOE Office of Biological and Environmental Research, Summer 2000, 16 pp (2000).

Caton, G. M. and T. G. Elledge, *Protecting Human Subjects*, Fall 2000 issue (2000)

Human Genome Management Information Systems, *Human Genome News* **11(1•2)** (November 2000)