

James Kidder
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Box 2008 Bldg. 4500N MS-6191
865-576-0535
kidderjh@ornl.gov



Environmental Sciences Publications—Calendar Year 2008
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Books Sections:

- Bernier, P., Hanson, P. J., & Curtis, P. S. (2008). Measuring Litterfall and Branchfall. In *Field Measurements for Forest Carbon Monitoring* (pp. 91-101). Heidelberg: Springer.
- Gilichinsky, D., Vishnivetskaya, T., Petrova, M., Spirina, E., Mamikin, V., & Rivkina, E. (2008). Bacteria in Permafrost. In E. Margesin, F. Schinner, J.-C. Marx & C. Gerday (Eds.), *Psychrophiles: From Biodiversity to Biotechnology* (pp. 83-102). Heidelberg: Springer-Verlag.
- Jardine, P. M., & Donald, L. S. (2008). Influence of Coupled Processes on Contaminant Fate and Transport in Subsurface Environments. In D. Sparks (Ed.), *Advances in Agronomy* (Vol. Volume 99, pp. 1-99). New York: Academic Press.
- Johs, A., Liang, L., Gu, B., Ankner, J. F., & Wang, W. (2009). Application of Neutron Reflectivity for Studies of Biomolecular Structures and Functions at Interfaces. In L. Liang, R. Rinaldi & H. Schnoer (Eds.), *Neutron Applications in Earth, Energy and Environmental Sciences* (pp. 463-489). New York: Springer.
- Rinaldi, R., Liang, L., & Schober, H. (2009). Neutron Applications in Earth, Energy, and Environmental Sciences. In *Neutron Applications in Earth, Energy and Environmental Sciences* (pp. 1-14). New York: Springer.
- Tonn, B., Carpenter, P., Sven Erik, J., & Brian, F. (2008). Technology for Sustainability. In S. E. Jorgensen & B. Fath (Eds.), *Encyclopedia of Ecology* (pp. 3489-3493). Oxford: Academic Press.
- Ward, R., Pouchard, L., Munro, N., & Fischer, S. (2008). Virtual Human Problem-Solving Environments. In C. Yang (Ed.), *Digital Human Modeling* (pp. 108-132). New York: Springer.

Conference Proceedings

- Diane, K. D., Hein, F. V., Suresh Santhana, V., & Philip, E. F. (2008). *Near real-time fire alert system in South Africa: from desktop to mobile service*. Paper presented at the Proceedings of the 7th ACM conference on Designing interactive systems.
- Akkurt, H., Bekar, K. B., & Eckerman, K. F. (2008). *Preliminary Results for VOXMAT: Phantom Model with Combination of Voxel and Mathematical Geometry*. Paper presented at the American Nuclear Society 2008 Annual Meeting, Anaheim, CA.
- Schweitzer, M., Martin, M. A., & Schmoyer, R. L. (2008). *Possible Savings Achievable by Recipients of Training and Software Provided by the U.S. Department of Energy's Industrial Technologies Program*. Paper presented at the Industrial Energy Technology Conference, New Orleans, LA.

Journal Articles:

- Ainsworth, E. A., Beier, C., Calfapietra, C., Ceulemans, R., Durand-Tardif, M., Farquhar, G. D., Godbold, D. L., Hendrey, G. R., Hickler, T., Kaduk, J., Karnosky, D. F., Kimball, B. A., Koerner, C., Koornneef, M., Lafarge, T., Leakey, A. D. B., Lewin, K. F., Long, S. P., Manderscheid, R., McNeil, D. L., Mies, T. A., Miglietta, F., Morgan, J. A., Nagy, J., Norby, R. J., Norton, R. M., Percy, K. E., Rogers, A., Soussana, J. F., Stitt, M., Weigel, H. J., & White, J. W. (2008). Next generation of elevated [CO₂] experiments with crops: a critical investment for feeding the future world. *Plant Cell and Environment*, 31(9), 1317-1324.
- Akob, D. M., Mills, H. J., Gihring, T. M., Kerkhof, L., Stucki, J. W., Anastacio, A. S., Chin, K. J., Kusel, K., Palumbo, A. V., Watson, D. B., & Kostka, J. E. (2008). Functional diversity and electron donor dependence of microbial populations capable of U(VI) reduction in radionuclide-contaminated subsurface sediments. *Applied and Environmental Microbiology*, 74(10), 3159-3170.
- Bank, T. L., Kukkadapu, R. K., Madden, A. S., Ginder-Vogel, M. A., Baldwin, M. E., & Jardine, P. M. (2008). Effects of gamma-sterilization on the physico-chemical properties of natural sediments. *Chemical Geology*, 251(1-4), 1-7.
- Bevelhimer, M. S., Stevenson, D. J., Giffen, N. R., & Ravenscroft, K. (2008). Annual surveys of larval *Ambystoma cingulatum* reveal large differences in dates of pond residency. *Southeastern Naturalist*, 7(2), 311-322.
- Bretschger, O., Obraztsova, A., Sturm, C. A., Chang, I. S., Gorby, Y. A., Reed, S. B., Culley, D. E., Reardon, C. L., Barua, S., Romine, M. F.,

- Zhou, J., Beliaev, A. S., Bouhenni, R., Saffarini, D., Mansfeld, F., Kim, B. H., Fredrickson, J. K., & Nealson, K. H. (2008). Current production and metal oxide reduction by *Shewanella oneidensis* MR-1 wild type and mutants (vol 73, pg 7003, 2007). *Applied and Environmental Microbiology*, 74(2), 553-553.
- Brooks, S., Arimoto, R., Lindberg, S., & Southworth, G. (2008). Antarctic polar plateau snow surface conversion of deposited oxidized mercury to gaseous elemental mercury with fractional long-term burial. *Atmospheric Environment*, 42(12), 2877-2884.
- Brooks, S., Lindberg, S., Southworth, G., & Arimoto, R. (2008). Springtime atmospheric mercury speciation in the McMurdo, Antarctica coastal region. *Atmospheric Environment*, 42(12), 2885-2893.
- Cardenas, E., Wu, W. M., Leigh, M. B., Carley, J., Carroll, S., Gentry, T., Luo, J., Watson, D., Gu, B., Ginder-Vogel, M., Kitanidis, P. K., Jardine, P. M., Zhou, J., Criddle, C. S., Marsh, T. L., & Tiedje, J. A. (2008). Microbial communities in contaminated sediments, associated with bioremediation of uranium to submicromolar levels. *Applied and Environmental Microbiology*, 74(12), 3718-3729.
- Cheng, M. D., Corporan, E., DeWitt, M. J., Spicer, C. W., Holdren, M. W., Cowen, K. A., Laskin, A., Harris, D. B., Shores, R. C., Kagann, R., & Hashmonay, R. (2008). Emissions of military cargo aircraft: Description of a joint field measurement strategic environmental research and development program. *Journal of the Air & Waste Management Association*, 58(6), 787-796.
- Chourey, K., Wei, W., Wan, X. F., & Thompson, D. K. (2008). Transcriptome analysis reveals response regulator SO2426-mediated gene expression in *Shewanella oneidensis* MR-I under chromate challenge. *Bmc Genomics*, 9, online.
- Crutsinger, G. M., Habenicht, M. N., Classen, A. T., Schweitzer, J. A., & Sanders, N. J. (2008). Galling by *Rhopalomyia solidaginis* alters *Solidago altissima* architecture and litter nutrient dynamics in an old-field ecosystem. *Plant and Soil*, 303(1-2), 95-103.
- Crutsinger, G. M., Reynolds, W. N., Classen, A. T., & Sanders, N. J. (2008). Disparate effects of plant genotypic diversity on foliage and litter arthropod communities. *Oecologia*, 158(1), 65-75.
- Cruz-Silva, E., Cullen, D. A., Gu, L., Romo-Herrera, J. M., Munoz-Sandoval, E., Lopez-Urias, F., Sumpter, B. G., Meunier, V., Charlier, J. C., Smith, D. J., Terrones, H., & Terrones, M. (2008). Heterodoped nanotubes: Theory, synthesis, and characterization of phosphorus-nitrogen doped multiwalled carbon nanotubes. *Acs Nano*, 2(3), 441-448.
- Custelcean, R., Jiang, D. E., Hay, B. P., Luo, W. S., & Gu, B. H. (2008).

- Hydrogen-bonded helices for anion binding and separation. *Crystal Growth & Design*, 8(6), 1909-1915.
- Dale, V. H., Akhtar, F., Aldridge, M., Baskaran, L., Berry, M., Browne, M., Chang, M., Efroymson, R., Garten, C. T., Lingerfelt, E., & Stewart, C. (2008). Modeling the Effects of Land Use on the Quality of Water, Air, Noise, and Habitat for a Five-County Region in Georgia. *Ecology and society*, 13(1), online.
- Dale, V. H., Biddinger, G. R., Newman, M. C., Oris, J. T., Suter, G. W., Thompson, T., Armitage, T. M., Meyer, J. L., Allen-King, R. M., & Burton, G. A. (2008). Enhancing the Ecological Risk Assessment Process. *Integrated Environmental Assessment and Management*, 4(3), 306-313.
- Dale, V. H., King, A. W., Mann, L. K., Washington-Allen, R. A., & McCord, R. A. (1998). Assessing land-use impacts on natural resources. *Environmental Management*, 22(2), 203-211.
- Dale, V. H., Peacock, A. D., Garten, C. T., Sobek, E., & Wolfe, A. K. (2008). Selecting indicators of soil, microbial, and plant conditions to understand ecological changes in Georgia pine forests. *Ecological Indicators*, 8(6), 818-827.
- Das, S., Tonn, B., & Peretz, J. H. (2008). Application of economic evaluation techniques to automotive lightweighting materials research and development projects. *Research Evaluation*, 17(2), 133-148.
- Dermody, O., Weltzin, J., Engel, E., Allen, P., & Norby, R. (2007). How do elevated [CO₂], warming, and reduced precipitation interact to affect soil moisture and LAI in an old field ecosystem? *Plant and Soil*, 301(1), 255-266.
- Desai, A. R., Noormets, A., Bolstad, P. V., Chen, J., Cook, B. D., Davis, K. J., Euskirchen, E. S., Gough, C., Martin, J. G., & Ricciuto, D. M. (2008). Influence of vegetation and seasonal forcing on carbon dioxide fluxes across the Upper Midwest, USA: Implications for regional scaling. *Agricultural and Forest Meteorology*, 148(2), 288-308.
- Ding, H. B., Zhu, S. J., Hamilton, J. H., Ramayya, A. V., Hwang, J. K., Li, K., Liu, S. H., Luo, Y. X., Rasmussen, J. O., Goodin, C. T., Lee, I. Y., Daniel, A. V., Ter-Akopian, G. M., Wang, J. G., Che, X. L., Gu, L., & Ma, W. C. (2008). Identification of the nu 7/2(+)[404] band in neutron-rich Ru-109. *Physical Review C*, 77(5), online.
- Domec, J. C., Lachenbruch, B., Meinzer, F. C., Woodruff, D. R., Warren, J. M., & McCulloh, K. A. (2008). Maximum height in a conifer is associated with conflicting requirements for xylem design. *Proceedings of the National Academy of Sciences of the United States of America*, 105(33), 12069-12074.

- Dong, W. M., & Brooks, S. C. (2008). Formation of aqueous $\text{MgUO}_2(\text{CO}_3)(3)(2-)$ complex and uranium anion exchange mechanism onto an exchange resin. *Environmental Science & Technology*, 42(6), 1979-1983.
- Dornburg, V., & Marland, G. (2008). Temporary storage of carbon in the biosphere does have value for climate change mitigation: a response to the paper by Miko Kirschbaum. *Mitigation and Adaptation Strategies for Global Change*, 13(3), 211-217.
- Efroymson, R. A., Hargrove, W. W., & Suter, G. W. (2008). The Apache Longbow-Hellfire Missile Test at Yuma Proving Ground: Ecological Risk Assessment for Helicopter Overflight. *Human and Ecological Risk Assessment*, 14(5), 871-897.
- Efroymson, R. A., Peterson, M. J., Giffen, N. R., Ryon, M. G., Smith, J. G., Hargrove, W. W., Roy, W. K., Welsh, C. J., Druckenbrod, D. L., & Quarles, H. D. (2008). Investigating habitat value to inform contaminant remediation options: Case study. *Journal of Environmental Management*, 88(4), 1452-1470.
- Efroymson, R. A., Peterson, M. J., Jones, D. S., & Suter, G. W. (2008). The Apache Longbow-Hellfire Missile Test at Yuma Proving Ground: Introduction and Problem Formulation for a Multiple Stressor Risk Assessment. *Human and Ecological Risk Assessment*, 14(5), 854-870.
- Efroymson, R. A., Peterson, M. J., Welsh, C. J., Druckenbrod, D. L., Ryon, M. G., Smith, J. G., Hargrove, W. W., Giffen, N. R., Roy, W. K., & Quarles, H. D. (2008). Investigating habitat value to inform contaminant remediation options: Approach. *Journal of Environmental Management*, 88(4), 1436-1451.
- Erickson, D. J., Mills, R. T., Gregg, J., Blasing, T. J., Hoffman, F. M., Andres, R. J., Devries, M., Zhu, Z., & Kawa, S. R. (2008). An estimate of monthly global emissions of anthropogenic CO₂: Impact on the seasonal cycle of atmospheric CO₂. *Journal of Geophysical Research-Biogeosciences*, 113(G01023), online.
- Froberg, M., Hanson, P. J., Todd, D. E., & Johnson, D. W. (2008). Evaluation of effects of sustained decadal precipitation manipulations on soil carbon stocks. *Biogeochemistry*, 89(2), 151-161.
- Gao, H. C., Wang, X. H., Yang, Z. K., Palzkill, T., & Zhou, J. Z. (2008). Probing regulon of ArcA in *Shewanella oneidensis* MR-I by integrated genomic analyses. *Bmc Genomics*, 9, online.
- Garten, C. (2008). Changes in Carbon following Forest Soil Transplants along an Altitudinal Gradient. *Communications in Soil Science and Plant Analysis*, 39, 19(20), 2883-2893.
- Garten, C. T., Classen, A. T., Norby, R. J., Brice, D. J., Weltzin, J. F., & Souza, L. (2008). Role of N₂-fixation in constructed old-field communities under different regimes of [CO₂], temperature, and

- water availability. *Ecosystems*, 11(1), 125-137.
- Gerten, D., Luo, Y., Le Maire, G., Parton, W. J., Keough, C., Weng, E., Beier, C., Ciais, P., Cramer, W., Dukes, J. S., Hanson, P. J., Knapp, A. A. K., Linder, S., Nepstad, D., Rustad, L., & Sowerby, A. (2008). Modelled effects of precipitation on ecosystem carbon and water dynamics in different climatic zones. *Global Change Biology*, 14(10), 2365-2379.
- Gil, I. S., Sheldon, W., Schmidt, T., Servilla, M., Aguilar, R., Gries, C., Gray, T., Field, D., Cole, J., Pan, J. Y., Palanisamy, G., Henshaw, D., O'Brien, M., Kinkel, L., McMahon, K., Kottmann, R., Amaral-Zettler, L., Hobbie, J., Goldstein, P., Guralnick, R. P., Brunt, J., & Michener, W. K. (2008). Defining linkages between the GSC and NSF's LTER program: How the Ecological Metadata Language (EML) relates to GCDML and other outcomes. *Omics-a Journal of Integrative Biology*, 12(2), 151-156.
- Gregg, J. S., & Andres, R. J. (2008). A method for estimating the temporal and spatial patterns of carbon dioxide emissions from national fossil-fuel consumption. *Tellus B*, 60(1), 1-10.
- Gregg, J. S., Andres, R. J., & Marland, G. (2008). China: Emissions pattern of the world leader in CO₂ emissions from fossil fuel consumption and cement production. *Geophysical Research Letters*, 35(8).
- Gu, B., Luo, W., & Yan, H. (2008). Roles of humic substances in biological reduction, precipitation, and mobilization of uranium. *Geochimica Et Cosmochimica Acta*, 72(12), A333-A333.
- Gu, L., Hanson, P. J., Mac Post, W., Kaiser, D. P., Yang, B., Nemani, R., Pallardy, S. G., & Meyers, T. (2008). The 2007 eastern US spring freezes: Increased cold damage in a warming world? *Bioscience*, 58(3), 253-262.
- Gu, L. H., Hanson, P. J., Mac Post, W., & Liu, Q. (2008). A novel approach for identifying the true temperature sensitivity from soil respiration measurements. *Global Biogeochemical Cycles*, 22(4).
- Hansel, C. M., Fendorf, S., Jardine, P. M., & Francis, C. A. (2008). Changes in bacterial and archaeal community structure and functional diversity along a geochemically variable soil profile. *Applied and Environmental Microbiology*, 74(5), 1620-1633.
- Hill, W. R., Fanta, S. E., & Roberts, B. J. (2008). C-13 dynamics in benthic algae: Effects of light, phosphorus, and biomass development. *Limnology and Oceanography*, 53(4), 1217-1226.
- Howe, J. Y., Bentley, J., & Wang, W. (2008). Comment on 'Low-temperature synthesis of alpha-Fe₂O₃ nanoparticles with a closed cage structure' by X. Wang et al. [Chem. Phys. Lett. 384 (2004) 391]. *Chemical Physics Letters*, 451(1-3), 68-69.

- Hwang, C., Wu, W., Gentry, T. J., Carley, J., Corbin, G. A., Carroll, S. L., Watson, D. B., Jardine, P. M., Zhou, J., & Criddle, C. S. (2008). Bacterial community succession during in situ uranium bioremediation: spatial similarities along controlled flow paths. *The ISME Journal*, 3(1), 47-64.
- Igathinathane, C., Womac, A. R., Pordesimo, L. O., & Sokhansanj, S. (2008). Mold appearance and modeling on selected corn stover components during moisture sorption. *Bioresource Technology*, 99(14), 6365-6371.
- Igathinathane, C., Womac, A. R., Sokhansanj, S., & Narayan, S. Size reduction of high- and low-moisture corn stalks by linear knife grid system. *Biomass and Bioenergy*, In Press, Corrected Proof.
- Igathinathane, C., Womac, A. R., Sokhansanj, S., & Narayan, S. (2008). Knife grid size reduction to pre-process packed beds of high- and low-moisture switchgrass. *Bioresource Technology*, 99(7), 2254-2264.
- Iversen, C. M., Ledford, J., & Norby, R. J. (2008). CO₂ enrichment increases carbon and nitrogen input from fine roots in a deciduous forest. *New Phytologist*, 179(3), 837-847.
- Iversen, C. M., & Norby, R. J. (2008). Nitrogen limitation in a sweetgum plantation: implications for carbon allocation and storage. *Canadian Journal of Forest Research-Revue Canadienne De Recherche Forestiere*, 38(5), 1021-1032.
- Jager, H. I., Rose, K. A., & Vila-Gispert, A. (2008). Life history correlates and extinction risk of capital-breeding fishes. *Hydrobiologia*, 602, 15-25.
- Jager, H. I., Rose, K. A., & Vila-Gispert, A. (2008). Capital-breeding fishes: Longer spawning intervals are found among species that invest in spawning migration or parental care. *Hydrobiologia*, 602, 15-25.
- Jager, H. I., & Smith, B. T. (2008). Sustainable reservoir operation: Can we generate hydropower and preserve ecosystem values? *River Research and Applications*, 24(3), 340-352.
- Jiang, D. E., Luo, W., Tiago, M. L., & Dai, S. (2008). In search of a structural model for a thiolate-protected Au-38 cluster. *Journal of Physical Chemistry C*, 112(36), 13905-13910.
- Johnson, D. W., Murphy, J. D., Walker, R. F., Miller, W. W., Glass, D. W., & Todd, D. E. (2008). The combined effects of thinning and prescribed fire on carbon and nutrient budgets in a Jeffrey pine forest. *Annals of Forest Science*, 65(6), online.
- Johnson, D. W., Todd, D. E., & Hanson, P. J. (2008). Effects of throughfall manipulation on soil nutrient status: results of 12 years of sustained wet and dry treatments. *Global Change Biology*,

- Johnson, D. W., Todd, D. E., Trettin, C. F., & Mulholland, P. J. (2008). Decadal Changes in Potassium, Calcium, and Magnesium in a Deciduous Forest Soil. *Soil Science Society of America Journal*, 72(6), 1795-1805.
- Jones, D. S., Efroymson, R. A., Hargrove, W. W., Suter, G. W., & Pater, L. L. (2008). The Apache Longbow-Hellfire Missile Test at Yuma Proving Ground: Ecological Risk Assessment for Missile Firing. *Human and Ecological Risk Assessment*, 14(5), 898-918.
- Kelly, S. D., Kemner, K. M., Carley, J., Criddle, C., Jardine, P. M., Marsh, T. L., Phillips, D., Watson, D., & Wu, W. M. (2008). Speciation of uranium in sediments before and after in situ biostimulation. *Environmental Science & Technology*, 42(5), 1558-1564.
- Kilgour, D. W., Moseley, R. B., Barnett, M. O., Savage, K. S., & Jardine, P. M. (2008). Potential Negative Consequences of Adding Phosphorus-Based Fertilizers to Immobilize Lead in Soil. *J Environ Qual*, 37(5), 1733-1740.
- Kline, K. L., & Dale, V. H. (2008). Biofuels: Effects on land and fire. *Science*, 321(5886), 199-199.
- Knapp, A., Beier, C., Briske, D., Classen, A. T., Luo, Y., Reichstein, M., Smith, M. D., Smith, S., Bell, J., Fay, P., Heisler, J. L., Leavitt, R., Sherry, B. S., & Weng, E. (2008). Consequences of more extreme precipitation regimes for terrestrial ecosystems. *Bioscience*, 58(9), 811-821.
- Labbe, J., Zhang, X., Yin, T., Schmutz, J., Grimwood, J., Martin, F., Tuskan, G. A., & Le Tacon, F. (2008). A genetic linkage map for the ectomycorrhizal fungus *Laccaria bicolor* and its alignment to the whole-genome sequence assemblies. *New Phytologist*, 180(2), 316-328.
- Labbe, N., Swamidoss, I. M., Andre, N., Martin, M. Z., Young, T. M., & Rials, T. G. (2008). Extraction of information from laser-induced breakdown spectroscopy spectral data by multivariate analysis. *Applied Optics*, 47(31), G158-G165.
- Leakey, A. D. B., Ainsworth, E. A., Bernard, S. M., Markelz, R. J. C., Ort, D. R., Placella, S. A., Rogers, A., Smith, M. D., Suderth, E. A., Weston, D. J., Wullschleger, S. D., & Yuan, S. (2008). Gene expression profiling--opening the black box of plant ecosystem responses to global change. *Global Change Biology*, In Press.
- Leggett, R. W. (2008). The biokinetics of inorganic cobalt in the human body. *Science of the Total Environment*, 389(2-3), 259-269.
- Levchenko, A. A., Navrotsky, A., Ross, N. L., Spencer, E. C., Kolesnikov, A. I., Wesolowski, D. J., Mamontov, E., Cole, D. R., Wang, W., Boerio-Goates, J., & Woodfield, B. F. (2008). An inelastic neutron

- scattering study of adsorbed water on rutile and cassiterite nanoparticles. *Geochimica Et Cosmochimica Acta*, 72(12), A537-A537.
- Liu, B., Liu, Y., & Braiman, Y. (2008). Coherent addition of high power laser diode array with a V-shape external Talbot cavity. *Optics Express*, 16(25), 20935-20942.
- Liu, Q., Gu, L., Dickinson, R. E., Tian, Y., Zhou, L., & Post, W. M. (2008). Assimilation of satellite reflectance data into a dynamical leaf model to infer seasonally varying leaf areas for climate and carbon models. *Journal of Geophysical Research-Atmospheres*, 113(D19113), online.
- Liu, Y., Liu, C. T., Heatherly, L., & George, E. P. (2008). Effects of alloying elements on dendritic segregation in iridium alloys. *Journal of Alloys and Compounds*, 459(1-2), 130-134.
- Luo, J., Wu, W. M., Carley, J., Fienen, M. N., Cheng, H., Watson, D., Criddle, C. S., Jardine, P. M., & Kitanidis, P. K. (2008). Estimating first-order reaction rate coefficient for transport with nonequilibrium linear mass transfer in heterogeneous media. *Journal of Contaminant Hydrology*, 98(1-2), 50-60.
- Luo, W., D'Angelo, E. M., & Coyne, M. S. (2008). Organic carbon effects on aerobic polychlorinated biphenyl removal and bacterial community composition in soils and sediments. *Chemosphere*, 70(3), 364-373.
- Luo, Y. Q., Gerten, D., Le Maire, G., Parton, W. J., Weng, E. S., Zhou, X. H., Keough, C., Beier, C., Ciais, P., Cramer, W., Dukes, J. S., Emmett, B., Hanson, P. J., Knapp, A., Linder, S., Nepstad, D., & Rustad, L. (2008). Modeled interactive effects of precipitation, temperature, and [CO₂] on ecosystem carbon and water dynamics in different climatic zones. *Global Change Biology*, 14(9), 1986-1999.
- Luxmoore, R. J., Tharp, M. L., & Post, W. M. (2008). Simulated biomass and soil carbon of loblolly pine and cottonwood plantations across a thermal gradient in southeastern United States. *Forest Ecology and Management*, 254(2), 291-299.
- Maloney, K. O., Feminella, J. W., Mitchell, R. M., Miller, S. A., Mulholland, P. J., & Houser, J. N. (2008). Landuse legacies and small streams: identifying relationships between historical land use and contemporary stream conditions. *Journal of the North American Benthological Society*, 27(2), 280-294.
- Maloney, K. O., Garten, C. T., & Ashwood, T. L. (2008). Changes in soil properties following 55 years of secondary forest succession at Fort Benning, Georgia, USA. *Restoration Ecology*, 16(3), 503-510.
- Mamontov, E., Wesolowski, D. J., Vlcek, L., Cummings, P. T., Rosenqvist, J., Wang, W., & Cole, D. R. (2008). Dynamics of hydration water on

- rutile studied by backscattering neutron spectroscopy and molecular dynamics simulation. *Journal of Physical Chemistry C*, 112(32), 12334-12341.
- Marland, G. (2008). Uncertainties in accounting for CO₂ from fossil fuels. *Journal of Industrial Ecology*, 12(2), 136-139.
- Marland, G., & Obersteiner, M. (2008). Large-scale biomass for energy, with considerations and cautions: an editorial comment. *Climatic Change*, 87(3-4), 335-342.
- Martin, F., Aerts, A., Ahren, D., Brun, A., Danchin, E. G. J., Duchaussoy, F., Gibon, J., Kohler, A., Lindquist, E., Pereda, V., Salamov, A., Shapiro, H. J., Wuyts, J., Blaudez, D., Buee, M., Brokstein, P., Canback, B., Cohen, D., Courty, P. E., Coutinho, P. M., Delaruelle, C., Detter, J. C., Deveau, A., DiFazio, S., Duplessis, S., Fraissinet-Tachet, L., Lucic, E., Frey-Klett, P., Fourrey, C., Feussner, I., Gay, G., Grimwood, J., Hoegger, P. J., Jain, P., Kilaru, S., Labbe, J., Lin, Y. C., Legue, V., Le Tacon, F., Marimeisse, R., Melayah, D., Montanini, B., Muratet, M., Nehls, U., Niculita-Hirzel, H., Oudot-Le Secq, M. P., Peter, M., Quesneville, H., Rajashekhar, B., Reich, M., Rouhier, N., Schmutz, J., Yin, T., Chalot, M., Henrissat, B., Kues, U., Lucas, S., de Peer, Y. V., Podila, G. K., Polle, A., Pukkila, P. J., Richardson, P. M., Rouze, P., Sanders, I. R., Stajich, J. E., Tunlid, A., Tuskan, G., & Grigoriev, I. V. (2008). The genome of *Laccaria bicolor* provides insights into mycorrhizal symbiosis. *Nature*, 452(7183), 88-U87.
- Martin, F., Gianinazzi-Pearson, V., Hijri, M., Lammers, P., Requena, N., Sanders, I. R., Shachar-Hill, Y., Shapiro, H., Tuskan, G. A., & Young, J. P. W. (2008). An increasingly scented world. *New Phytologist*, 180(4), 735-738.
- Martin, F., Gianinazzi-Pearson, V., Hijri, M., Lammers, P., Requena, N., Sanders, I. R., Shachar-Hill, Y., Shapiro, H., Tuskan, G. A., & Young, J. P. W. (2008). Getting sick may help plants overcome abiotic stress. *New Phytologist*, 180(4), 738-741.
- Martin, F., Gianinazzi-Pearson, V., Hijri, M., Lammers, P., Requena, N., Sanders, I. R., Shachar-Hill, Y., Shapiro, H., Tuskan, G. A., & Young, J. P. W. (2008). Ectomycorrhizal fungi from Alaska and Pennsylvania: adaptation of mycelial respiratory response to temperature? *New Phytologist*, 180(4), 741-744.
- Martin, F., Gianinazzi-Pearson, V., Hijri, M., Lammers, P., Requena, N., Sanders, I. R., Shachar-Hill, Y., Shapiro, H., Tuskan, G. A., & Young, J. P. W. (2008). Niche picking: the importance of being temporal. *New Phytologist*, 180(4), 745-747.
- Martin, F., Gianinazzi-Pearson, V., Hijri, M., Lammers, P., Requena, N., Sanders, I. R., Shachar-Hill, Y., Shapiro, H., Tuskan, G. A., & Young, J. P. W. (2008). The long hard road to a completed *Glomus intraradices* genome. *New Phytologist*, 180(4), 747-750.

- Martin, M. Z., Labbe, N., Andre, N., Harris, R., Ebinger, M., Wullschleger, S. D., & Vass, A. A. (2007). High resolution applications of laser-induced breakdown spectroscopy for environmental and forensic applications. *Spectrochimica Acta Part B-Atomic Spectroscopy*, 62(12), 1426-1432.
- Matamala, R., Jastrow, J. D., Miller, R. M., & Garten, C. T. (2008). Temporal changes in C and N stocks of restored prairie: Implications for C sequestration strategies. *Ecological Applications*, 18(6), 1470-1488.
- McMurtrie, R. E., Norby, R. J., Medlyn, B. E., Dewar, R. C., Pepper, D. A., Reich, P. B., & Barton, C. V. M. (2008). Why is plant-growth response to elevated CO₂ amplified when water is limiting, but reduced when nitrogen is limiting? A growth-optimisation hypothesis. *Functional Plant Biology*, 35(6), 521-534.
- Morissette, J. T., Richardson, A. D., Knapp, A. K., Fisher, J. I., Graham, E. A., Abatzoglou, J., Wilson, B. E., Breshears, D. D., Henebry, G. M., & Hanes, J. M. (2008). Tracking the rhythm of the seasons in the face of global change: phenological research in the 21st century. *Frontiers in Ecology and the Environment*, 7, In press.
- Moseley, R. A., Barnett, M. O., Stewart, M. A., Mehlhorn, T. L., Jardine, P. M., Ginder-Vogel, M., & Fenclorff, S. (2008). Decreasing Lead Bioaccessibility in Industrial and Firing Range Soils with Phosphate-Based Amendments. *Journal of Environmental Quality*, 37(6), 2116-2124.
- Mukherjee, D., & Cheng, M. D. (2008). Characterization of carbon-containing aerosolized drugs using laser-induced breakdown spectroscopy. *Applied Spectroscopy*, 62(5), 554-562.
- Mukherjee, D., & Cheng, M. D. (2008). Quantitative analysis of carbonaceous aerosols using laser-induced breakdown spectroscopy: a study on mass loading induced plasma matrix effects. *Journal of Analytical Atomic Spectrometry*, 23(1), 119-128.
- Mulholland, P. J., Helton, A. M., Poole, G. C., Hall, R. O., Hamilton, S. K., Peterson, B. J., Tank, J. L., Ashkenas, L. R., Cooper, L. W., Dahm, C. N., Dodds, W. K., Findlay, S. E. G., Gregory, S. V., Grimm, N. B., Johnson, S. L., McDowell, W. H., Meyer, J. L., Valett, H. M., Webster, J. R., Arango, C. P., Beaulieu, J. J., Bernot, M. J., Burgin, A. J., Crenshaw, C. L., Johnson, L. T., Niederlehner, B. R., O'Brien, J. M., Potter, J. D., Sheibley, R. W., Sobota, D. J., & Thomas, S. M. (2008). Stream denitrification across biomes and its response to anthropogenic nitrate loading. *Nature*, 452(7184), 202-205.
- Natali, S. M., Sanudo-Wilhelmy, S. A., Norby, R. J., Zhang, H., Finzi, A. C., & Lerdau, M. T. (2008). Increased mercury in forest soils under elevated carbon dioxide. *Oecologia*, 158(2), 343-354.

- Pan, H., Poh, C. K., Zhu, Y., Xing, G., Chin, K. C., Feng, Y. P., Lin, J., Sow, C. H., Ji, W., & Wee, A. T. S. (2008). Novel CdS nanostructures: Synthesis and field emission. *Journal of Physical Chemistry C*, 112(30), 11227-11230.
- Parker, J. C., Park, E., & Tang, G. P. (2008). Dissolved plume attenuation with DNAPL source remediation, aqueous decay and volatilization - Analytical solution, model calibration and prediction uncertainty. *Journal of Contaminant Hydrology*, 102(1-2), 61-71.
- Peppler, R. A., Long, C. N., Sisterson, D. L., Turner, D. D., Bahrmann, C. P., Christensen, S. W., Doty, K. J., Eagan, R. C., Halter, T. D., & Ivey, M. D. (2008). An Overview of ARM Program Climate Research Facility Data Quality Assurance. *Open Atmospheric Science Journal*, 2, 192-216.
- Pereira, P. M., He, Q., Valente, F. M. A., Xavier, A. V., Zhou, J. Z., Pereira, I. A. C., & Louro, R. O. (2008). Energy metabolism in Desulfovibrio vulgaris Hildenborough: insights from transcriptome analysis. *Antonie Van Leeuwenhoek International Journal of General and Molecular Microbiology*, 93(4), 347-362.
- Pereira, P. M., He, Q., Xavier, A. V., Zhou, J. Z., Periera, I. A. C., & Louro, R. O. (2008). Transcriptional response of Desulfovibrio vulgaris Hildenborough to oxidative stress mimicking environmental conditions. *Archives of Microbiology*, 189(5), 451-461.
- Peterson, M. J., Hargrove, W. W., & Efroymson, R. A. (2008). The Apache Longbow-Hellfire Missile Test at Yuma Proving Ground: Ecological Risk Assessment for Tracked Vehicle Movement across Desert Pavement. *Human and Ecological Risk Assessment*, 14(5), 919-946.
- Phillips, D. H., Gu, B., Watson, D. B., & Parmele, C. S. (2008). Uranium removal from contaminated groundwater by synthetic resins. *Water Research*, 42(1-2), 260-268.
- Phillips, D. H., Watson, D. B., Kelly, S. D., Ravel, B., & Kemner, K. M. (2008). Deposition of uranium precipitates in dolomitic gravel fill. *Environmental Science & Technology*, 42(19), 7104-7110.
- Porcar, L., Liu, Y., Verduzco, R., Hong, K. L., Butler, P. D., Magid, L. J., Smith, G. S., & Chen, W. R. (2008). Structural Investigation of PAMAM Dendrimers in Aqueous Solutions Using Small-Angle Neutron Scattering: Effect of Generation. *Journal of Physical Chemistry B*, 112(47), 14772-14778.
- Quesada, T., Li, Z., Dervinis, C., Li, Y., Bocock, P. N., Tuskan, G. A., Casella, G., Davis, J. M., & Kirst, M. (2008). Comparative analysis of the transcriptomes of Populus trichocarpa and Arabidopsis thaliana suggests extensive evolution of gene expression regulation in angiosperms. *New Phytologist*, 180(2), 408-420.

- Ralph, S., Chun, H. J., Cooper, D., Kirkpatrick, R., Kolosova, N., Gunter, L., Tuskan, G., Douglas, C., Holt, R., Jones, S., Marra, M., & Bohlmann, J. (2008). Analysis of 4,664 high-quality sequence-finished poplar full-length cDNA clones and their utility for the discovery of genes responding to insect feeding. *BMC Genomics*, 9, 57.
- Ranatunga, K., Keenan, R. J., Wullschleger, S. D., Post, W. A., & Tharp, M. L. (2008). Effects of harvest management practices on forest biomass and soil carbon in eucalypt forests in New South Wales, Australia: Simulations with the forest succession model LINKAGES. *Forest Ecology and Management*, 255(7), 2407-2415.
- Robertson, G. P., Dale, V. H., Doering, O. C., Hamburg, S. P., Melillo, J. M., Wander, M. M., Parton, W. J., Adler, P. R., Barney, J. N., Cruse, R. M., Duke, C. S., Fearnside, P. M., Follett, R. F., Gibbs, H. K., Goldemberg, J., Mladenoff, D. J., Ojima, D., Palmer, M. W., Sharpley, A., Wallace, L., Weathers, K. C., Wiens, J. A., & Wilhelm, W. W. (2008). Sustainable biofuels Redux. *Science*, 322(5898), 49-50.
- Schmidt, S. K., Sobieniak-Wiseman, L. C., Kageyama, S. A., Halloy, S. R. P., & Schadt, C. W. (2008). Mycorrhizal and Dark-Septate Fungi in Plant Roots Above 4270 Meters Elevation in the Andes and Rocky Mountains. *Arctic, Antarctic, and Alpine Research*, 40(3), 576-583.
- Sengupta, D., Smith, J. C., & Ullmann, G. M. (2008). Partitioning of amino-acid analogues in a five-slab membrane model. *Biochimica et Biophysica Acta (BBA) - Biomembranes*, 1778(10), 2234-2243.
- Seo, P. N., Barron-Palos, L., Bowman, J. D., Chupp, T. E., Crawford, C., Dabaghyan, M., Dawkins, M., Freedman, S. J., Gentile, T., Gericke, M. T., Gillis, R. C., Greene, G. L., Hersman, F. W., Jones, G. L., Kandes, M., Lamoreaux, S., Lauss, B., Leuschner, M. B., Mahurin, R., Mason, M., Mei, J., Mitchell, G. S., Nann, H., Page, S. A., Penttila, S. I., Ramsay, W. D., Bacci, A. S., Santra, S., Sharma, M., Smith, T. B., Snow, W. M., Wilburn, W. S., & Zhu, H. (2008). High-efficiency resonant rf spin rotator with broad phase space acceptance for pulsed polarized cold neutron beams. *Physical Review Special Topics-Accelerators and Beams*, 11(8), online.
- Singer, S. W., Chan, C. S., Zemla, A., VerBerkmoes, N. C., Hwang, M., Hettich, R. L., Banfield, J. F., & Thelen, M. P. (2008). Characterization of cytochrome 579, an unusual cytochrome isolated from an iron-oxidizing microbial community. *Applied and Environmental Microbiology*, 74(14), 4454-4462.
- Singh, J. P., Martin, M. Z., & Mizolek, A. W. (2008). North American Symposium on Laser-Induced Breakdown Spectroscopy: introduction to the feature issue. *Applied Optics*, 47(31), LIBS1-

LIBS1.

- Smith, P., Nabuurs, G. J., Janssens, I. A., Reis, S., Marland, G., Soussana, J. F., Christensen, T. R., Heath, L., Apps, M., Alexeyev, V., Fang, J. Y., Gattuso, J. P., Guerschman, J. P., Huang, Y., Jobbagy, E., Murdiyarso, D., Ni, J., Nobre, A., Peng, C. H., Walcroft, A., Wang, S. Q., Pan, Y., & Zhou, G. S. (2008). Sectoral approaches to improve regional carbon budgets. *Climatic Change*, 88(3-4), 209-249.
- Spalding, B. P., & Watson, D. B. (2008). Passive sampling and analyses of common dissolved fixed gases in groundwater. *Environmental Science & Technology*, 42(10), 3766-3772.
- Steffen, A., Douglas, T., Amyot, M., Ariya, P., Aspmo, K., Berg, T., Bottenheim, J., Brooks, S., Cobbett, F., & Dastoor, A. (2008). A synthesis of atmospheric mercury depletion event chemistry in the atmosphere and snow. *Atmospheric Chemistry and Physics*, 8(6), 1445-1482.
- Sturchio, N. C., Caffee, M. W., Bohlke, J. K., Gu, B., & Hatzinger, P. B. (2008). Cl-36: Tracer of perchlorate origin? *Geochimica Et Cosmochimica Acta*, 72(12), A910-A910.
- Sykes, R., Kodrzycki, B., Tuskan, G. A., Foutz, K., & Davis, M. F. (2008). Within tree variability of lignin composition in *Populus*. *Wood Science and Technology*, 42(8), online.
- Szymcek, P., McCallum, S. D., Taboada-Serrano, P., & Tsouris, C. (2008). A pilot-scale continuous-jet hydrate reactor. *Chemical Engineering Journal*, 135(1-2), 71-77.
- Tang, G., Perfect, E., van den Berg, E. H., Mayes, M. A., & Parker, J. C. (2008). Estimating effective hydraulic parameters of unsaturated layered sediments using a cantor bar composite medium model. *Vadose Zone Journal*, 7(2), 493-499.
- Tang, G. P., Alshawabkeh, A. N., & Mayes, M. A. (2008). Automatic time stepping with global error control for groundwater flow models. *Journal of Hydrologic Engineering*, 13(9), 803-810.
- Thompson, M. R., Thompson, D. K., & Hettich, R. L. (2008). Systematic assessment of the benefits and caveats in mining microbial post-translational modifications from shotgun proteomic data: The response of *Shewanella oneidensis* to chromate exposure. *Journal of Proteome Research*, 7(2), 648-658.
- Valett, H. M., Thomas, S. A., Mulholland, P. J., Webster, J. R., Dahm, C. N., Fellows, C. S., Crenshaw, C. L., & Peterson, C. G. (2008). ENDOGENOUS AND EXOGENOUS CONTROL OF ECOSYSTEM FUNCTION: N CYCLING IN HEADWATER STREAMS. *Ecology*, 89(12), 3515-3527.
- Wang, J. G., Zhu, S. J., Hamilton, J. H., Ramayya, A. V., Hwang, J. K., Li, K., Luo, Y. X., Rasmussen, J. O., Lee, I. Y., Ding, H. B., Xu, Q.,

- Gu, L., Liu, S. H., Goodin, C. T., & Ma, W. C. (2008). First identification of a collective band in the odd-odd Nb-104 nucleus. *Physical Review C*, 78(1), online.
- Wang, J. J. A., Lara-Curzio, E., King, T., Graziano, J. A., & Chan, J. K. (2008). The integrity of ACSR full tension splice connector at higher operation temperature. *Ieee Transactions on Power Delivery*, 23(2), 1158-1165.
- Wang, W., Howe, J. Y., & Gu, B. H. (2008). Structure and morphology evolution of hematite (α -Fe₂O₃) nanoparticles in forced hydrolysis of ferric chloride. *Journal of Physical Chemistry C*, 112(25), 9203-9208.
- Wang, W., Liang, L., Johs, A., Ankner, J. F., & Gu, B. (2008). Controlled synthesis, manipulation of surface hydrophobicity, and self-assembly of hematite nanocrystals. *Geochimica Et Cosmochimica Acta*, 72(12), A1001-A1001.
- Wang, W., Liang, L., Johs, A., & Gu, B. (2008). Thin films of uniform hematite nanoparticles: control of surface hydrophobicity and self-assembly. *Journal of Materials Chemistry*, 18(47), 5770-5775.
- Warren, J. M., Brooks, J. R., Meinzer, F. C., & Eberhart, J. L. (2008). Hydraulic redistribution of water from *Pinus ponderosa* trees to seedlings: evidence for an ectomycorrhizal pathway. *New Phytologist*, 178(2), 382-394.
- Warzinski, R. P., Riesterberg, D. E., Gabitto, J., Haljasmaa, I. V., Lynn, R. J., & Tsouris, C. (2008). Formation and behavior of composite CO₂ hydrate particles in a high-pressure water tunnel facility. *Chemical Engineering Science*, 63(12), 3235-3248.
- Wesolowski, D. J., Mamontov, E., Vlcek, L., Wang, W., Cummings, P. T., Rosenqvist, J., Anovitz, L. M., & Cole, D. R. (2008). Quasielastic neutron scattering coupled with classical molecular dynamics simulations of water diffusion at metal oxide surfaces. *Geochimica Et Cosmochimica Acta*, 72(12), A1015-A1015.
- West, T. O., Brandt, C. C., Wilson, B. S., Hellwinckel, C. M., Tyler, D. D., Marland, G., Ugarte, D. G. D., Larson, J. A., & Nelson, R. G. (2008). Estimating regional changes in soil carbon with high spatial resolution. *Soil Science Society of America Journal*, 72(2), 285-294.
- Weston, D. J., Gunter, L. E., Rogers, A., & Wullschleger, S. D. (2008). Connecting genes, coexpression modules, and molecular signatures to environmental stress phenotypes in plants. *BMC Systems Biology*, 2, 16.
- Wilbanks, T. J. (2008). The Clean Energy Dilemma in Asia: Is There a Way Out? *Eurasian Geography and Economics*, 49(4), 379-390.

- Wilmes, P., Andersson, A. F., Lefsrud, M. G., Wexler, M., Shah, M., Zhang, B., Hettich, R. L., Bond, P. L., VerBerkmoes, N. C., & Banfield, J. F. (2008). Community proteogenomics highlights microbial strain-variant protein expression within activated sludge performing enhanced biological phosphorus removal. *Isme Journal*, 2(8), 853-864.
- With, K. A., King, A. W., & Jensen, W. E. (2008). Remaining large grasslands may not be sufficient to prevent grassland bird declines. *Biological Conservation*, 141(12), 3152-3167.
- Woolbright, S. A., DiFazio, S. P., Yin, T., Martinsen, G. D., Zhang, X., Allan, G. J., Whitham, T. G., & Keim, P. (2008). A dense linkage map of hybrid cottonwood (*Populus fremontii* x *P. angustifolia*) contributes to long-term ecological research and comparison mapping in a model forest tree. *Heredity*, 100, 59 - 70.
- Wu, J., Cho, H. P., Rhee, D. B., Johnson, D. K., Dunlap, J., Liu, Y., & Wang, Y. S. (2008). Cdc14B depletion leads to centriole amplification, and its overexpression prevents unscheduled centriole duplication. *Journal of Cell Biology*, 181(3), 475-483.
- Wu, L., Kellogg, L., Devol, A. H., Tiedje, J. M., & Zhou, J. (2008). Microarray-based characterization of microbial community functional structure and heterogeneity in marine sediments from the gulf of Mexico. *Applied and Environmental Microbiology*, 74(14), 4516-4529.
- Wu, L. Y., Liu, X. D., Fields, M. W., Thompson, D. K., Bagwell, C. E., Tiedje, J. M., Hazen, T. C., & Zhou, J. Z. (2008). Microarray-based whole-genome hybridization as a tool for determining prokaryotic species relatedness. *Isme Journal*, 2(6), 642-655.
- Xiao, J., Zhuang, Q., Baldocchi, D. D., Law, B. E., Richardson, A. D., Chen, J., Oren, R., Starr, G., Noormets, A., Ma, S., Verma, S. B., Wharton, S., Wofsy, S. C., Bolstad, P. V., Burns, S. P., Cook, D. R., Curtis, P. S., Drake, B. G., Falk, M., Fischer, M. L., Foster, D. R., Gu, L., Hadley, J. L., Hollinger, D. Y., Katul, G. G., Litvak, M., Martin, T. A., Matamala, R., McNulty, S., Meyers, T. P., Monson, R. K., Munger, J. W., Oechel, W. C., Paw U, K. T., Schmid, H. P., Scott, R. L., Sun, G., Suyker, A. E., & Torn, M. S. (2008). Estimation of net ecosystem carbon exchange for the conterminous United States by combining MODIS and AmeriFlux data. *Agricultural and Forest Meteorology*, 148(11), 1827-1847.
- Xu, J., Liu, X., Bright, M. A., Hemrick, J. G., Sikka, V., & Barbero, E. (2008). Reactive wetting of an iron-base superalloy MSA2020 and 316L stainless steel by molten zinc-aluminum alloy. *Metallurgical and Materials Transactions a-Physical Metallurgy and Materials Science*, 39A(6), 1382-1391.

- Yan, W. F., Ma, Z., Mahurin, S. M., Jiao, J., Hagaman, E. W., Overbury, S. H., & Dai, S. (2008). Novel Au/TiO₂/Al₂O₃ center dot xH(2)O catalysts for CO oxidation. *Catalysis Letters*, 121(3-4), 209-218.
- Yan, X. D., Radwan, E., Zhang, F., & Parker, J. C. (2008). Evaluation of dynamic passing sight distance problem using a finite-element model. *Journal of Transportation Engineering-Asce*, 134(6), 225-235.
- Yang, B., Brady, M. P., Wang, H., Turner, J. A., More, K. L., Young, D. J., Tortorelli, P. F., Payzant, E. A., & Walker, L. R. (2007). Protective nitride formation on stainless steel alloys for proton exchange membrane fuel cell bipolar plates. *Journal of Power Sources*, 174(1), 228-236.
- Yang, X. H., Kalluri, U. C., Jawdy, S., Gunter, L. E., Yin, T. M., Tschaplinski, T. J., Weston, D. J., Ranjan, P., & Tuskan, G. A. (2008). The F-Box Gene Family Is Expanded in Herbaceous Annual Plants Relative to Woody Perennial Plants. *Plant Physiology*, 148(3), 1189-1200.
- Ye, X. P., Liu, L., Hayes, D., Womac, A., Hong, K. L., & Sokhansanj, S. (2008). Fast classification and compositional analysis of cornstover fractions using Fourier transform near-infrared techniques. *Bioresource Technology*, 99(15), 7323-7332.
- Yin, T., DiFazio, S. P., Gunter, L. E., Zhang, X., Sewell, M. M., Woolbright, S. A., Allan, G. J., Kelleher, C. T., Douglas, C. J., Wang, M., & Tuskan, G. A. (2008). Genome structure and emerging evidence of an incipient sex chromosome in Populus. *Genome Research*, 18(3), 422-430.
- Zhang, F., Jiang, L., Yeh, G. T., & Parker, J. C. (2008). An adaptive local grid refinement and peak/valley capture algorithm to solve nonlinear transport problems with moving sharp-fronts. *Transport in Porous Media*, 72(1), 53-69.
- Zhang, F., Luo, W., Watson, D. B., Parker, J. C., Gu, B., Spalding, B. P., & Jardine, P. M. (2008). A reactive transport model to simulate uranium immobilization through pH manipulation. *Geochimica Et Cosmochimica Acta*, 72(12), A1080-A1080.
- Zhang, F., Luo, W. S., Parker, J. C., Spalding, B. P., Brooks, S. C., Watson, D. B., Jardine, P. M., & Gu, B. H. (2008). Geochemical Modeling of Reactions and Partitioning of Trace Metals and Radionuclides during Titration of Contaminated Acidic Sediments. *Environmental Science & Technology*, 42(21), 8007-8013.
- Zhang, F., Parker, J., Brooks, S., Kim, Y. J., Tang, G., Jardine, P., & Watson, D. (2009). Comparison of Approaches to Calibrate a Surface Complexation Model for U(VI) Sorption to Weathered Saprolite. *Transport in Porous Media*, 78(2), 185-197.
- Zhang, F., Yeh, G. T., Parker, J. C., & Jardine, P. M. (2008). A reaction-

- based river/stream water quality model: Model development and numerical schemes. *Journal of Hydrology*, 348(3-4), 496-509.
- Zhou, J., Kang, S., Schadt, C. W., & Garten Jr., C. T. (2008). Spatial scaling of functional gene diversity across various microbial taxa. *Proceedings of the National Academy of Sciences of the United States of America*, 105, 7768-7773.
- Zhu, H. G., Bao, L. L., Mahurin, S. M., Baker, G. A., Hagaman, E. W., & Dai, S. (2008). Seeded growth of robust SERS-active 2D Au@Ag nanoparticulate films. *Journal of Materials Chemistry*, 18(10), 1079-1081.
- Zou, Y. L., Wu, J., Giannone, R. J., Boucher, L., Du, H. S., Huang, Y., Johnson, D. K., Liu, Y., & Wang, Y. S. (2008). Nucleophosmin/B23 negatively regulates GCN5-dependent histone acetylation and transactivation. *Journal of Biological Chemistry*, 283(9), 5728-5737.

Technical Reports:

- Bevelhimer, M. S., Giffen, N. S., Fields, W. R., & Hargrove, W. W. (2008). *Maximizing Sampling Efficiency and Minimizing Uncertainty in Presence/Absence Classification of Rare Salamander Populations* (No. ORNL/TM-2008/192). Oak Ridge: Oak Ridge National Laboratory.
- Greene, D. L., Leiby, P. N., James, B., Perez, J., Melendez, M., Milbrandt, A., Unnasch, S., Rutherford, D., & Hooks, M. (2008). *Hydrogen Scenario Analysis Summary Report: Analysis of the Transition to Hydrogen Fuel Cell Vehicles and the Potential Hydrogen Energy Infrastructure Requirements* (No. ORNL/TM-2008/030). Oak Ridge: Oak Ridge National Laboratory.
- Gunderson, C. A., Davis, E., Jager, Y., West, T. O., Perlack, R. D., Brandt, C. C., Wullschleger, S. D., Baskaran, L. M., Wilkerson, E., & Downing, M. E. (2008). *Exploring Potential U.S. Switchgrass Production for Lignocellulosic Ethanol* (No. ORNL/TM-2008/103; Other: BM0101020; CEBM001; ORNL/TM-2007/183; TRN: US200818%1223). Oak Ridge: Oak Ridge National Laboratory.
- Kline, K. L., Oladosu, G. A., Wolfe, A. K., Perlack, R. D., & Dale, V. H. (2008). *Biofuel Feedstock Assessment for Selected Countries* (No. ORNL/TM-2007/224). Oak Ridge: Oak Ridge National Laboratory.
- Leggett, R. W., Eckerman, K. F., & Meck, R. A. (2008). *Reliability of Current Biokinetic and Dosimetric Models for Radionuclides: A Pilot Study* (No. ORNL/TM-2008/131; Other: 401001060;; TRN: US200823%419). Oak Ridge: Oak Ridge National Laboratory.
- McCold, L. N., Goeltz, R., Ternes, M. P., & Berry, L. G. (2008). *Texas Field Experiment Results: Performance of the Weatherization Assistance Program in Hot-Climate, Low-Income Homes* (No. ORNL/TM-2008/050). Oak Ridge: Oak Ridge National Laboratory.

- Peterson, M., Southworth, G. R., Bevelhimer, M. S., Adams, S. M., Roy, W. K., Roy, C. A., & Stites, M. (2008). *Evaluation of Polychlorinated Biphenyls in Fish and SPMDs Near the U.S. Department of Energy Kansas City Plant* (No. ORNL/TM-2008/243). Oak Ridge: Oak Ridge National Laboratory.
- Schweitzer, M. (2008). *Suggested Record-Keeping Procedures for DDOE Energy Programs*. Oak Ridge: ORNL/TM-2008/119, Oak Ridge National Laboratory (ORNL).
- Schweitzer, M., Martin, M. A., & Schmoyer, R. L. (2008). *Customer Response to Best Practices Training and Software Tools Provided by DOE's Industrial Technologies Program* (No. ORNL/TM-2007/234; Other: ED1907042; CEED027; ORNL/CON-502; TRN: US20081-294). Oak Ridge: Oak Ridge National Laboratory.
- Smith, E. D., & Saulsbury, J. W. (2008). *Preliminary Feasibility Assessment of Geologic Carbon Sequestration Potential for TVA's John Sevier and Kingston Power Plants* (No. ORNL/TM-2008/024). Oak Ridge: Oak Ridge National Laboratory (ORNL).
- Smith, J. G., Bloom, A. C., Giffen, N. R., Mitchell, E. A., & Robertson, D. E. (2008). *LOW IMPACT DEVELOPMENT: THE FORT STEWART EXPERIENCE* (No. ORNL/PTS-10451; Other: 400403209; TRN: US200823%%33). Oak Ridge: Oak Ridge National Laboratory.
- Sokhansanj, S., Wilkerson, E., & Turhollow Jr, A. F. (2008). *Development of the Integrated Biomass Supply Analysis and Logistics Model (IBSAL)* (No. ORNL/TM-2008/049). Oak Ridge: Oak Ridge National Laboratory.
- Terry, J., Hermes, W., Hylton, T., Mattus, C., Pryor, J., & Spampinato, P. (2008). *Special Testing of Type 5 Mercury Flasks* (No. ORNL/TM-2008/074). Oak Ridge: Oak Ridge National Laboratory.
- Tuskan, G., & Yin, T. (2008). *Aspen Ecology in Ricky Mountain National Park: Age Distribution, Genetics, and the Effects of Elk Herbivory* (No. ORNL/TM-2008/221). Oak Ridge: Oak Ridge National Laboratory.
- Wilkerson, E., Perlack, R. D., Blackwelder, D. B., Muth, D. J., & Hess, J. R. (2008). *A preliminary assessment of the state of harvest and collection technology for forest residues* (No. ORNL/TM-2007/195). Oak Ridge: Oak Ridge National Laboratory.