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Biological Sciences Publications—Calendar Year 2008
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Books and Book Chapters:

- Keller, M., Schadt, C. W., & Palumbo, A. V. (2008). *Single-Cell Genomics*. United States: ASM Press, Washington, DE, USA; Oak Ridge National Laboratory (ORNL).
- Gilichinsky, D., Vishnivetskaya, T., Petrova, M., Spirina, E., Mamykin, V., & Rivkina, E. (2008). Bacteria in Permafrost. In *Psychrophiles: from Biodiversity to Biotechnology* (pp. 83-102).
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- Rosen, G. D., Chesler, E. J., Manly, K. F., & Williams, R. W. (2008). An Informatics Approach to Systems Neurogenetics. In *Neuroinformatics* (pp. 287-303). Totowa, NJ: Humana Press.
- Schmidt, S. K., Wilson, K., Meyer, A. F., Schadt, C. W., Porter, T. M., & Moncalvo, J. M. (2008). The missing fungi--new insights from culture-independent molecular studies of soil. In K. Zengler (Ed.), *Accessing Uncultivated Microorganisms*. Washington, D.C.: American Society for Microbiology Press.
- Yang, C.-H., & Yang, S. (2008). Managing bacterial plant diseases by modulating quorum sensing and Type III secretory systems. In Z. K. Punja, S. H. De Boer & H. Sanfacon (Eds.), *Biotechnology and Plant Disease Management*. Oxfordshire, UK: CABI Publishing.

Published Conference Proceedings

- Choudhury, A., Vujanic, R., Hesketh, P. J., Thundat, T., & Hu, Z. (2008). *Evaluation of chemical reaction kinetics using a thermally active piezoresistive microcantilever array*. Paper presented at the MEMS 2008, Tucson, AZ.

Crowley, M. F., Uberbacher, E. C., Iii, C. L. B., Walker, R. C., Nimlos, M.

- R., & Himmel, M. E. (2008). *Developing improved MD codes for understanding processive cellulases*. Paper presented at the Journal of Physics: Conference Series.
- George, T., Cheng, Z., Banerjee, D., Blair, S., Cernosek, R. W., Chen, X., Collins, S. D., Fan, X., Garcia, E. J., & Getty, S. A. (2008). *Micro (MEMS) and Nanotechnologies for Space, Defense, and Security II*. Paper presented at the Proceedings of the SPIE.
- Palumbo, A. V., Schryver, J. C., Pfiffner, S. M., Marsh, T., & Brandt, C. C. (2008). *Relating Microbial Community Structure to a Dominant Environmental Variable in a Complex Environment; An Example from a Chromium Contaminated Site*. Paper presented at the Biocomp '08, United States.
- Petridis, L., & Smith, J. C. (2008). *Cellulosic ethanol: progress towards a simulation model of lignocellulosic biomass*. Paper presented at the Journal of Physics Conference Series.
- Rawn, C. J., Sassen, R., Ulrich, S. M., Phelps, T. J., Chakoumakos, B. C., & Payzant, E. A. (2008). *LOW TEMPERATURE X-RAY DIFFRACTION STUDIES OF NATURAL GAS HYDRATE SAMPLES FROM THE GULF OF MEXICO*. Paper presented at the Proceedings of the 6th International Conference on Gas Hydrates, Vancouver, British Columbia.

Journal Articles:

- 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.
- Anderson, I., Rodriguez, J., Susanti, D., Porat, I., Reich, C., Ulrich, L., Elkins, J. G., Mavromatis, K., Lykidis, A., & Kim, E. (2008). Genome sequence of the Crenarchaeal hyperthermophile *Thermofilum pendens*. *Journal of Bacteriology*, 190(8), 2957-2965.
- Baker, G. A., Desikan, R., & Thundat, T. (2008). Label-free sugar detection using phenylboronic acid-functionalized piezoresistive microcantilevers. *Analytical Chemistry*, 80(13), 4860-4865.
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- Baumrucker, C., & Vass, A. (2008). Why does organic milk last so much longer than regular milk? *Scientific American*, September 2008.
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