

## BIBLIOGRAPHY July 1, 2004-June 30, 2005

## EMBRYOLOGY

- Brown, D. D., The role of deiodinases in amphibian metamorphosis, *Thyroid* 8, 815-821, 2005.
- Brown, D. D., A tribute to the *Xenopus laevis* oocyte and egg, *J. Biol. Chem.* 279, 45291-45299, 2004.
- Brown, D. D., L. Cai, B. Das, N. Marsh-Armstrong, A. M. Schreiber, and R. Juste, Thyroid hormone controls multiple independent programs required for limb development in *Xenopus laevis* metamorphosis, *Proc. Natl. Acad. Sci. USA* 102, 12455-12458, 2005.
- Chen, A. E., and C.-M. Fan, Targeting gene expression in the mouse embryo: adenovirus-mediated gene delivery and whole embryo culture, *Genesis* 42, 71-76, 2005.
- Chen, A. E., D. D. Ginty, and C.-M. Fan, Protein kinase A signaling via CREB controls myogenesis induced by Wnt proteins, *Nature* 433, 317-322, 2005.
- Decotto, E., and A. C. Spradling, The *Drosophila* ovarian and testis stem cell niches: similar somatic stem cells and signals, *Dev. Cell*, in press.
- Duffy, K. T., M. F. McAleer, W. R. Davidson, L. Kari, C. Kari, C. C. Liu, S. A. Farber, K. C. Cheng, J. R. Mest, E. Wickstrom, A. P. Dicker, and U. Rodeck, Coordinate control of cell cycle regulatory genes in zebrafish development tested by cyclin D1 knockdown with morpholino phosphorodiamidates and hydroxypropyl-phosphono peptide nucleic acids, *Nucl. Acids Res.* 33, 4914-4921, 2005.
- Gall, J. G., Werner Franke, *Eur. J. Cell Biol.* 84, 89-90, 2005.
- Gamse, J. T., Y. S. Kuan, M. Macurak, C. Brosamle, B. Thisse, C. Thisse, and M. E. Halpern, Directional asymmetry of the zebrafish epithalamus guides dorsoventral innervation of the midbrain target, *Development* 13, 4869-4881, 2005.
- Ghiselli, G., M. C. Mullins, and S. A. Farber, D-glucuronyl C5-epimerase acts in dorsoventral axis formation in zebrafish, *Dev. Biol.* 5, 19, 2005.
- Glynn, E. F., P. C. Megee, H. G. Yu, C. Mistrot, E. Unal, D. E. Koshland, J. L. DeRisi, and J. L. Gerton, Genome-wide mapping of the cohesin complex in the yeast *Saccharomyces cerevisiae*, *PLoS Biol.* 2, E259, 2004.
- Halpern, M. E., O. Güntürkün, W. Hopkins, and L. J. Rogers, Lateralization of the vertebrate brain: taking the side of model systems, *J. Neurosci.*, in press.
- Handwerger, K. E., J. A. Cordero, and J. G. Gall, Cajal bodies, nucleoli, and speckles in the *Xenopus* oocyte nucleus have a low density, sponge-like structure, *Mol. Biol. Cell* 16, 202-211, 2005.
- Handwerger, K. E., and J. G. Gall, Subnuclear organelles: new insights into form and function, *Trends Cell Biol.*, in press.
- Ho, S. Y., J. L. Thorpe, Y. Deng, E. Santana, R. A. DeRose, and S. A. Farber, Lipid metabolism in zebrafish, in *Methods in Cell Biology*, Vol. 77: *The Zebrafish: Genetics, Genomics, and Informatics*, 2nd ed., W. Detrich, M. Westerfield, and L. Zon, eds., Elsevier/Academic Press, San Diego, 2004.
- Huang, C. E., M. Milutinovich, and D. Koshland, Rings, bracelet, or snaps: fashionable alternatives for Smc

complexes, *Phil. Trans.: Biol. Sci.* 360, 537-542, 2005.

- Kai, T., D. Williams, and A. C. Spradling, The expression profile of purified *Drosophila* germline stem cells, *Dev. Biol.* 283, 486-502, 2005.
- Markova, M., R. A. Koratkar, K. A. Silverman, V. E. Sollars, M. MacPhee-Pellini, R. Walters, J. P. Palazzo, A. M. Buchberg, L. D. Siracusa, and S. A. Farber, Diversity in secreted PLA2-IIA activity among inbred mouse strains that are resistant or susceptible to ApcMin tumorigenesis, *Oncogene* 24, 6450-6458, 2005.
- Mashek, D. G., K. E. Bornfeldt, R. A. Coleman, J. Berger, D. A. Bernlohr, P. Black, C. C. DiRusso, S. A. Farber, W. Guo, N. Hashimoto, V. Khodiyar, F. A. Kuypers, L. J. Maltais, D. W. Nebert, A. Renier, J. E. Schaffer, A. Stahl, P. A. Watkins, U. Vasilou, and T. T. Yamamoto, Revised nomenclature for the mammalian long chain acyl-CoA synthetase (ACS) gene family, *J. Lipid Res.* 45, 1958-1961, 2004.
- McAleer, M. F., C. Davidson, W. R. Davidson, B. Yentzer, S. A. Farber, U. Rodeck, and A. P. Dicker, Novel use of zebrafish as a vertebrate model to screen radiation protectors and sensitizers, *Int. J. Radiat. Oncol. Biol. Phys.* 61, 10-13, 2004.
- Mulligan, T. S., and S. A. Farber, A "block and rescue" pharmacogenetic approach to dissecting a biochemical pathway controlling germ cell migration, *Zebrafish* 1, 343-347, 2005.
- Ohlstein, B., T. Kai, E. Decotto, and A. C. Spradling, The stem cell niche: theme and variations, *Curr. Opin. Cell Biol.* 16, 693-699, 2004.
- Ohlstein, B., and A. C. Spradling, The adult *Drosophila* adult midgut is maintained by pluripotent stem cells, *Nature*, Epub Dec.7.
- Rubinstein, A. L., S. Y. Ho, and S. A. Farber, Zebrafish model of lipid metabolism for drug discovery, in *Unravelling Lipid Metabolism with Microarrays*, A. Berger and M. Roberts, eds., pp. 423-432, Marcel Dekker, New York, in press.
- Schaefer, J., and S. A. Farber, Breaking down the stereotypes of science by recruiting young scientists, *PLoS Biol.* 2, E279, 2004.
- Schreiber, A. M., Asymmetric craniofacial remodeling and lateralized behavior in flatfish, *J. Exp. Biol.*, in press.
- Schreiber, A. M., L. Cai, and D. D. Brown, Remodeling of the intestine during metamorphosis of *Xenopus laevis*, *Proc. Nat. Acad. Sci. USA* 102, 3720-3725, 2005.
- Spradling, A. C., Looking ahead, in *Centennial History of the Carnegie Institution of Washington*, Vol. 5: *The Department of Embryology*, J. Maienschein, M. Glitz, and G. E. Allen, eds., pp. 209-217, Cambridge University Press, Cambridge, UK, 2005.
- Tsai, M.-Y., and Y. Zheng, Aurora A kinase-coated beads function as microtubule organizing centers and enhance RanGTP-induced spindle assembly, *Curr. Biol.*, submitted.
- Tulin, A., and A. C. Spradling, *Drosophila* poly (ADP)-ribose glycohydrolase (PARG) mediates chromatin structure and Sir2-dependent silencing, *Genetics*, in press.
- Unal, E., A. Arbel-Eden, U. Sattler, R. Shroff, M. Lichten, J. E. Haber, and D. Koshland, DNA damage response pathway uses histone modification to assemble a dou-

ble-strand break specific cohesin domain, *Mol. Cell* 16, 991-1002, 2004.

- Vong, Q. P., K. Cao, Y. Y. Li, P. A. Iglesias, and Y. Zheng, Chromosome segregation regulated by ubiquitination of survivin, *Science*, in press.
- Weber, S. A., J. Gerton, J. E. Polancic, J. L. DeRisi, D. Koshland, and P. C. Megee, The kinetochore is an enhancer of pericentric cohesin binding, *PLoS Biol.* 2, E260, 2004.
- Wickstrom, E., M. Choo, K. A. Urtshak, X. Tian, N. Sternheim, S. Talbot, J. Archdeacon, V. A. Efimov, and S. A. Farber, Sequence specificity of alternating hydroxypropyl/phosphono peptide nucleic acids against zebrafish embryo mRNAs, *J. Drug Target.* 12, 363-372, 2005.
- Wilhelm, J. E., and C. A. Smibert, Mechanisms of translational regulation in *Drosophila*, *Biol. Cell.* 97, 235-252, 2005.

## GEOPHYSICAL LABORATORY

- Here updated through September 30, 2005. Reprints of the numbered publications listed below are available, except where noted, at no charge from the Librarian, Geophysical Laboratory, 5251 Broad Branch Road, N.W., Washington, D.C. 20015-1305, U.S.A. (e-mail: library@dtm.ciw.edu). Please give reprint number(s) when ordering. The list is regularly updated on the Geophysical Laboratory Web site (<http://www.gl.ciw.edu/library/>).
- \_\_\_\_ Abbott, R. N., G. Draper, and S. Keshav, Garnet clinopyroxene and high-pressure fractional crystallization of magmas in an arc setting: Dominican Republic as an example, *Geol. Soc. Am. Memoir*, in press.
- \_\_\_\_ Abbott, R. N., G. Draper, and S. Keshav, UHP magma genesis, garnet peridotite and garnet clinopyroxene: an example from Dominican Republic, *Int. Geol. Rev.*, in press.
- 3363 Ahart, M., R. E. Cohen, V. Struzhkin, E. Gregoryanz, D. Rytz, S. A. Prossandeev, H. K. Mao, and R. J. Hemley, High-pressure Raman scattering and x-ray diffraction of the relaxer ferroelectric 0.96Pb(Zn<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-0.04PbTiO<sub>3</sub>, *Phys. Rev. B* 71, 144102, 2005.
- \_\_\_\_ Ahart, M., J. L. Yarger, K. M. Lantzky, S. Nakano, H. K. Mao, and R. J. Hemley, High-pressure Brillouin scattering of amorphous BeH<sub>2</sub>, *J. Chem. Phys.*, in press.
- 3364 Asthagiri, A., and D. S. Sholl, DFT study of Pt adsorption on low index SrTiO<sub>3</sub> surfaces: SrTiO<sub>3</sub>(1 0 0), SrTiO<sub>3</sub>(1 1 1), and SrTiO<sub>3</sub>(1 1 0), *Surf. Sci.* 581, 66-87, 2005.
- \_\_\_\_ Asthagiri, A., Z. Wu, N. Choudhury, and R. E. Cohen, Advances in first-principles studies of transducer materials, *Ferroelectrics*, in press.
- 3347 Avci, R., M. Schweitzer, R. D. Boyd, J. Wittmeyer, A. Steele, J. Toporski, I. Beech, F. Teran Arce, B. Spangler, K. M. Cole, and D. S. McKay, Comparison of antibody-antigen interactions on collagen measured by conventional immunological techniques and atomic force microscopy, *Langmuir* 20, 11053-11063, 2004. (No reprints available.)
- 3496 Barley, M. E., A. Bekker, and B. Krape, Late Archean to early Paleoproterozoic global tectonics,

- environmental change, and the rise of atmospheric oxygen, *Earth Planet. Sci. Lett.* **238**, 156-171, 2005. (No reprints available.)
- 3365 Behrends, B., G. Hertweck, G. Liebezeit, and G. Goodfriend, Earliest Holocene occurrence of the soft-shell clam, *Mya arenaria*, in the Greifswalder Bodden, Southern Baltic, *Mar. Geol.* **216**, 79-82, 2005. (No reprints available.)
- 3407 Bizimis, M., G. Sen, V. J. M. Salters, and S. Keshav, Hf-Nd-Sr isotope systematics of garnet pyroxenites from Salt Lake Crater, Oahu, Hawaii: evidence for a depleted component in Hawaiian volcanism, *Geochim. Cosmochim. Acta* **69**, 2629-2646, 2005. (No reprints available.)
- 3366 Borkowski, L. A., and C. L. Cahill, A novel uranium-containing coordination polymer: poly[dioxouranium(VI)- $\mu_4$ -*n*-pentane-1,5-dicarboxylato], *Acta Crystallogr. E61*, M816-M817, 2005. (No reprints available.)
- 3348 Boyce, C. K., M. A. Zwieniecki, G. D. Cody, C. Jacobsen, S. Wirick, A. H. Knoll, and N. M. Holbrook, Evolution of xylem lignification and hydrogel transport regulation, *Proc. Natl. Acad. Sci. USA* **101**, 17555-17558, 2004. (No reprints available.)
- \_\_\_\_ Brandes, J. A., R. M. Hazen, and H. S. Yoder, Jr., Inorganic nitrogen reduction and stability under hydrothermal conditions, *Geochim. Cosmochim. Acta*, in press.
- 3349 Brandes, J. A., C. Lee, S. Wakeham, M. Peterson, C. Jacobsen, S. Wirick, and G. Cody, Examining marine particulate organic matter at sub-micron scales using scanning transmission X-ray microscopy and carbon X-ray absorption near edge structure spectroscopy, *Mar. Chem.* **92**, 107-121, 2004. (No reprints available.)
- \_\_\_\_ Brasier, M. D., O. R. Green, J. F. Lindsay, N. McLoughlin, A. Steele, and C. Stoakes, Critical testing of Earth's oldest putative fossil assemblage from the ~3.5 Ga Apex chert, Chinaman Creek, Western Australia, *Precamb. Res.*, in press.
- \_\_\_\_ Brglez, F., X. Y. Li, M. F. Stallmann, and B. Militzer, Evolutionary and alternative algorithms: reliable cost predictions for finding optimal solutions to the LABS problem, *Inform. Sci.*, in press.
- 3367 Cai, Y. Q., H. K. Mao, P. C. Chow, J. S. Tse, Y. Ma, S. Patchkovskii, J. F. Shu, V. Struzhkin, R. J. Hemley, H. Ishii, C. C. Chen, I. Jarrige, C. T. Chen, S. R. Shieh, E. P. Huang, and C. C. Kao, Ordering of hydrogen bonds in high-pressure low-temperature H<sub>2</sub>O, *Phys. Rev. Lett.* **94**, 025502, 2005. (No reprints available.)
- 3368 Caracas, R., and R. E. Cohen, Prediction of a new phase transition in Al<sub>2</sub>O<sub>3</sub> at high pressures, *Geophys. Res. Lett.* **32**, L06303, 10.1029/2004GL022204, 2005.
- 3408 Caracas, R., and R. E. Cohen, Effect of chemistry on the stability and elasticity of the perovskite and post-perovskite phases in the MgSiO<sub>3</sub>-FeSiO<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> system and implications for the lowermost mantle, *Geophys. Res. Lett.* **32**, L16310, 10.1029/2005GL023164, 2005.
- 3409 Caracas, R., and X. Gonze, First-principle study of materials involved in incommensurate transitions, *Z. Kristallogr.* **220**, 511-520, 2005.
- 3410 Caro, G., B. Bourdon, B. J. Wood, and A. Corgne, Trace-element fractionation in Hadean mantle generated by melt segregation from a magma ocean, *Nature* **436**, 246-249, 2005. (No reprints available.)
- 3351 Chen, X.-J., V. V. Struzhkin, R. J. Hemley, H. K. Mao, and C. Kendziora, High-pressure phase diagram of Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+ $\delta$</sub>  single crystals, *Phys. Rev. B* **70**, 214502, 2004.
- 3470 Chen, X.-J., V. V. Struzhkin, Z. Wu, R. E. Cohen, S. Kung, H. K. Mao, R. J. Hemley, and A. N. Christensen, Electronic stiffness of a superconducting niobium nitride single crystal under pressure, *Phys. Rev. B* **72**, 094514, 2005.
- 3370 Chen, X.-J., V. V. Struzhkin, Z. Wu, M. Somayazulu, J. Qian, S. Kung, A. N. Christensen, Y. Zhao, R. E. Cohen, H. K. Mao, and R. J. Hemley, Hard superconducting nitrides, *Proc. Natl. Acad. Sci. USA* **102**, 3198-3201, 2005.
- 3369 Chen, X.-J., and H. Su, Electronic mechanism of critical temperature variation in RBa<sub>2</sub>Cu<sub>3</sub>O<sub>7- $\delta$</sub> , *Phys. Rev. B* **71**, 094512, 2005.
- 3489 Chestnut, G. N., B. D. Streetman, D. Schiferl, R. S. Hixson, W. M. Anderson, M. Nicol, and Y. Meng, Static x-ray diffraction study of cerium: the standard approach and the magic-angle approach, in *Shock Compression of Condensed Matter—2003*, M. D. Furnish, Y. M. Gupta, and J. W. Forbes, eds., pp. 37-40, AIP Conference Proceedings 706, American Institute of Physics, Melville, N.Y., 2004. (No reprints available.)
- \_\_\_\_ Choudhury, N., R. E. Cohen, and E. J. Walter, First principles studies of the Born effective charges and electronic dielectric tensors for the relaxor PMN (PbMg<sub>1/3</sub>Nb<sub>2/3</sub>O<sub>3</sub>), *Comput. Mater. Sci.*, in press.
- 3371 Choudhury, N., Z. Wu, E. J. Walter, and R. E. Cohen, *Ab initio* linear response and frozen phonons for the relaxor PbMg<sub>1/3</sub>Nb<sub>2/3</sub>O<sub>3</sub>, *Phys. Rev. B* **71**, 125134, 2005. (No reprints available.)
- 3403 Cody, G. D., Geochemical connections to primitive metabolism, *Elements* **1**, 139-143, 2005.
- 3398 Cody, G. D., and C. M. O'D. Alexander, NMR studies of chemical structural variation of insoluble organic matter from different carbonaceous chondrite groups, *Geochim. Cosmochim. Acta* **69**, 1085-1097, 2005.
- 3372 Cody, G. D., B. O. Mysen, and S. K. Lee, Structure vs. composition: a solid-state <sup>1</sup>H and <sup>29</sup>Si NMR study of quenched glasses along the Na<sub>2</sub>O-SiO<sub>2</sub>-H<sub>2</sub>O join, *Geochim. Cosmochim. Acta* **69**, 2373-2384, 2005.
- \_\_\_\_ Cody, G. D., and J. H. Scott, The roots of metabolism, in *Planets and Life: The Emerging Science of Astrobiology*, W. T. Sullivan and J. A. Baross, eds., Cambridge University Press, in press.
- 3460 Cohen, R. E., ed., *High-Performance Computing Requirements for the Computational Solid Earth Sciences*, 96 pp., January 2005. (Available online at [http://www.geo-prose.com/computational\\_SES.html](http://www.geo-prose.com/computational_SES.html))
- 3471 Colman, A. S., R. E. Blake, D. M. Karl, M. L. Fogel, and K. K. Turekian, Marine phosphate oxygen isotopes and organic matter remineralization in the oceans, *Proc. Natl. Acad. Sci. USA* **102**, 13023-13028, 2005.
- 3373 Corgne, A., and B. J. Wood, Trace element partitioning and substitution mechanisms in calcium perovskites, *Contrib. Mineral. Petrol.* **149**, 85-97, 2005.
- 3411 Cosca, M. A., D. Giorgis, D. Rumble, and J. G. Liou, Limiting effects of UHP metamorphism on length scales of oxygen, hydrogen, and argon isotope exchange: an example from the Qinglongshan UHP eclogites, Sulu Terrain, China, *Int. Geol. Rev.* **47**, 716-749, 2005. (No reprints available.)
- 3414 Degtyareva, O., E. Gregoryanz, H. K. Mao, and R. J. Hemley, Crystal structure of sulfur and selenium at pressures up to 160 GPa, *High Pressure Res.* **25**, 17-33, 2005.
- 3375 Degtyareva, O., E. Gregoryanz, M. Somayazulu, P. Dera, H. K. Mao, and R. J. Hemley, Novel chain structures in group VI elements, *Nature Mater.* **4**, 152-155, 2005.
- 3415 Degtyareva, O., E. Gregoryanz, M. Somayazulu, H. K. Mao, and R. J. Hemley, Crystal structure of the superconducting phases of S and Se, *Phys. Rev. B* **71**, 214104, 2005.
- \_\_\_\_ Degtyareva, V. F., M. K. Sakharov, N. I. Novokhatskaya, O. Degtyareva, P. Dera, H. K. Mao, and R. J. Hemley, Stability of Hume-Rothery phases in Cu-Zn alloys at pressures up to 50 GPa, *J. Phys. Cond. Matter*, in press.
- 3412 de Lill, D. T., D. J. Bozzuto, and C. L. Cahill, Templated metal-organic frameworks: synthesis, structures, thermal properties, and solid-state transformation of two novel calcium adipate frameworks, *Dalton Trans.* **2005** (no. 12), 2111-2115, 2005. (No reprints available.)
- 3413 de Lill, D. T., W. W. Brennessel, L. A. Borkowski, N. S. Gunning, and C. L. Cahill, Poly[( $\mu_3$ -*n*-hexane-1,6-dicarboxylato)dysprosium(III)], *Acta Crystallogr. E61*, m1343-m1345, 2005. (No reprints available.)
- 3374 de Lill, D. T., N. S. Gunning, and C. L. Cahill, Toward templated metal-organic frameworks: synthesis, structures, thermal properties, and luminescence of three novel lanthanide-adipate frameworks, *Inorg. Chem.* **44**, 258-266, 2005. (No reprints available.)
- 3472 Dera, P., C. T. Prewitt, and S. D. Jacobsen, Structure determination by single-crystal X-ray diffraction (SXD) at megabar pressures, *J. Synchrotron Rad.* **12**, 547-548, 2005. (No reprints available.)
- 3416 Ding, Y., H. Liu, J. Xu, C. T. Prewitt, R. J. Hemley, and H. K. Mao, Zone-axis diffraction study of pressure-induced inhomogeneity in single-crystal Fe<sub>1-x</sub>O, *Appl. Phys. Lett.* **87**, 041912, 2005.
- \_\_\_\_ Ding, Y., H. K. Mao, H. Liu, J. Shu, J. Xu, R. J. Hemley, and D. Häusermann, Comparison of pressure standards MgO, platinum, and ruby fluorescence, *J. Appl. Phys.*, in press.
- 3477 Ding, Y., C. T. Prewitt, and D. R. Veblen, Possible Fe/Cu ordering schemes in the 2a superstructure of bornite (Cu<sub>5</sub>FeS<sub>4</sub>), *Am. Mineral.* **90**, 1265-1269, 2005. (No reprints available.)
- 3476 Ding, Y., D. R. Veblen, and C. T. Prewitt, High-resolution transmission electron microscopy (HRTEM) study of the 4a and 6a superstructure of bornite Cu<sub>5</sub>FeS<sub>4</sub>, *Am. Mineral.* **90**, 1256-1264, 2005. (No reprints available.)
- 3376 Ding, Y., J. Xu, C. T. Prewitt, R. J. Hemley, H. K. Mao, J. A. Cowan, J. Zhang, J. Qian, S. C. Vogel, K. Lokshin, and Y. Zhao, Variable pressure-temperature neutron diffraction of wüstite (Fe<sub>1-x</sub>O): absence of long-range magnetic order to 20 GPa, *Appl. Phys. Lett.* **86**, 052505, 2005.
- 3417 Ehm, L., P. Dera, K. Knorr, B. Winkler, A. Krimmel, and P. Bouvier, Crystal structure of the Chevrel phase SnMo<sub>6</sub>S<sub>8</sub> at high pressure, *Phys. Rev. B* **72**, 014113, 2005.
- 3352 Eremets, M. I., A. G. Gavriluk, N. R. Serebryanaya, I. A. Trojan, D. A. Dzivenko, R. Boehler, H. K. Mao, and R. J. Hemley, Structural transformation of molecular nitrogen to a single-bonded atomic state at high pressures, *J. Chem. Phys.* **121**, 11296-11300, 2004.
- 3377 Errandonea, D., Y. Meng, M. Somayazulu, and D. Häusermann, Pressure-induced  $\alpha \rightarrow \beta$  transition in titanium metal: a systematic study of the effects of uniaxial stress, *Physica B* **355**, 116-125, 2005. (No reprints available.)
- 3478 Evans, W. J., M. J. Lipp, H. Cynn, C. S. Yoo, M. Somayazulu, D. Häusermann, G. Shen, and V. Prakapenka, X-ray diffraction and Raman studies of beryllium: static and elastic properties at high pressures, *Phys. Rev. B* **72**, 094113, 2005. (No reprints available.)
- \_\_\_\_ Fehr, M. A., M. Rehkämper, A. N. Halliday, U. H. Wiechert, B. Hattendorf, D. Günther, S. Ono, J. L. Eigenbrode, and D. Rumble, Tellurium isotopes in meteorites and Archean sulfides: a search for effects resulting from stellar nucleosynthesis, <sup>126</sup>Sn decay, and mass independent fractionation, *Geochim. Cosmochim. Acta*, in press.
- 3418 Fei, Y., and C. Bertka, The interior of Mars, *Science* **308**, 1120-1121, 2005.
- 3419 Feng, Y., M. S. Somayazulu, R. Jaramillo, T. F. Rosenbaum, E. D. Isaacs, J. Hu, and H. K. Mao, Energy dispersive x-ray diffraction of charge density waves via

- chemical filtering, *Rev. Sci. Instrum.* **76**, 063913, 2005. (No reprints available.)
- 3420 Ferry, J. M., D. Rumble, III, B. A. Wing, and S. C. Penniston-Dorland, A new interpretation of centimetre-scale variations in the progress of infiltration-driven metamorphic reactions: case study of carbonated meta-peridotite, Val d'Éfra, Central Alps, Switzerland, *J. Petrol.* **46**, 1725-1746, 2005. (No reprints available.)
- 3421 Floss, C., L. A. Taylor, P. Promprated, and D. Rumble, Northwest Africa O11: a "eucritic" basalt from a non-eucrite parent body, *Meteoritics Planet. Sci.* **40**, 343-360, 2005. (No reprints available.)
- 3492 Foulger, G. R., J. H. Natland, D. C. Presnall, and D. L. Anderson, eds., *Plates, Plumets, and Paradigms*, Special Paper 388, Geological Society of America, Boulder, Colo., 881 pp., 2005. (Available for purchase from the publisher.)
- 3422 Freiman, Yu. A., S. M. Tretyak, H. K. Mao, and R. J. Hemley, Entropy-driven reentrant phase transitions in even-J/odd-J mixtures of linear rotors, *J. Low Temp. Phys.* **139**, 765-772, 2005. (No reprints available.)
- 3378 Frisch, M., and C. L. Cahill, Syntheses, structures, and fluorescent properties of two novel coordination polymers in the U-Cu-Hapdc system, *Dalton Trans.* **2005** (no. 8), 1518-1523, 2005. (No reprints available.)
- \_\_\_ Gangopadhyay, A., G. Sen, and S. Keshav, Experimental crystallization of Deccan basalts at low pressure: effect of contamination on phase equilibrium, *Proc. Ind. Acad. Sci.*, in press.
- 3423 Gasparov, L. V., D. Arenas, K.-Y. Choi, G. Güntherodt, H. Berger, L. Forro, G. Margaritondo, V. V. Struzhkin, and R. Hemley, Magnetite: Raman study of the high-pressure and low-temperature effects, *J. Appl. Phys.* **97**, 10A922, 2005. (No reprints available.)
- 3485 Gavriluk, A. G., V. V. Struzhkin, I. S. Lyubutin, M. Y. Hu, and H. K. Mao, Phase transition with suppression of magnetism in BiFeO<sub>3</sub> at high pressure, *JETP Lett.* **82**, 224-227, 2005. (No reprints available.)
- 3350 Giorgis, D., D. Rumble, and M. Cosca, Pre-metamorphic  $\delta^{18}\text{O}$  signatures in morphologically complex zircons from the Qinglongshan UHP meta-granite (Sulu terrain, China), *Schweiz. Mineral. Petrogr. Mitt.* **83**, 133-144, 2003. (No reprints available.)
- 3483 Goncharov, A. F., J. C. Crowhurst, J. K. Dewhurst, and S. Sharma, Raman spectroscopy of cubic boron nitride under extreme conditions of high pressure and temperature, *Phys. Rev. B* **72**, 100104, 2005.
- 3426 Goncharov, A., and E. Gregoryanz, Solid nitrogen at extreme conditions of high pressure and temperature, in *Chemistry at Extreme Conditions*, M. R. Manaa, ed., pp. 241-267, Elsevier, Amsterdam, 2005. (No reprints available.)
- 3427 Goncharov, A. F., V. V. Struzhkin, H. K. Mao, and R. J. Hemley, Spectroscopic evidence for broken-symmetry transitions in dense lithium up to megabar pressures, *Phys. Rev. B* **71**, 184114, 2005.
- 3428 Goncharov, A. F., J. M. Zaug, J. C. Crowhurst, and E. Gregoryanz, Optical calibration of pressure sensors for high pressures and temperatures, *J. Appl. Phys.* **97**, 094917, 2005.
- 3429 Gonze, X., G.-M. Rignanese, and R. Caracas, First-principle studies of the lattice dynamics of crystals, and related properties, *Z. Kristallogr.* **220**, 458-472, 2005. (No reprints available.)
- 3379 Gregoryanz, E., O. Degtyareva, M. Somayazulu, R. J. Hemley, and H. K. Mao, Melting of dense sodium, *Phys. Rev. Lett.* **94**, 185502, 2005.
- 3430 Gudfinnsson, G. H., and D. C. Presnall, Continuous gradations among primary carbonatitic, kimberlitic, melilitic, basaltic, picritic, and komatiitic melts in equilibrium with garnet lherzolite at 3-8GPa, *J. Petrol.* **46**, 1645-1659, 2005. (No reprints available.)
- 3431 Gunning, N. S., and C. L. Cahill, Novel coordination polymers and structural systematics in the hydrothermal M,M' trans-3-(3-pyridyl)acrylic acid system, *Dalton Trans.* **2005** (no. 16), 2788-2792, 2005. (No reprints available.)
- \_\_\_ Halevy, I., S. Salhov, A. Broide, A. Robin, O. Yehekel, I. Yaar, A. F. Yue, and J. Hu, High pressure study and electronic structure of the super-alloy HfIr<sub>3</sub>, in *Proceedings of Joint 20th AIRAPT - 43rd EHPRG International Conference on High Pressure Science and Technology*, E. Dinjus and N. Dahmen, eds., Karlsruhe, in press.
- \_\_\_ Halevy, I., S. Salhov, A. Broide, O. Yehekel, I. Yaar, A. F. Yue, and J. Hu, High pressure study and electronic structure of NiAl and Ni<sub>3</sub>Al, in *Proceedings of Joint 20th AIRAPT - 43rd EHPRG International Conference on High Pressure Science and Technology*, E. Dinjus and N. Dahmen, eds., Karlsruhe, in press.
- 3380 Hall, J. A., B. J. Mailloux, T. C. Onstott, T. D. Scheibe, M. E. Fuller, H. Dong, and M. F. DeFlaun, Physical versus chemical effects on bacterial and bromide transport as determined from on site sediment column pulse experiments, *J. Contamin. Hydrol.* **76**, 295-314, 2005. (No reprints available.)
- 3353 Halter, W. E., and B. O. Mysen, Melt speciation in the system Na<sub>2</sub>O-SiO<sub>2</sub>, *Chem. Geol.* **213**, 115-123, 2004.
- 3401 Hazen, R. M., Genesis: rocks, minerals, and the geochemical origin of life, *Elements* **1**, 135-137, 2005.
- 3402 Hazen, R. M., *Genesis: the Scientific Quest for Life's Origin*, Joseph Henry Press, Washington, D.C., 339 pp., 2005. (Available for purchase from the publisher.)
- 3494 Hazen, R. M., *Origins of Life* [24 lectures on videocassette, DVD, and audio CD, with course guide], The Teaching Company, Chantilly, Virginia, 2005. (Available for purchase from the publisher.)
- \_\_\_ Hazen, R. M., Modesty in science, *Character*, in press.
- \_\_\_ Hazen, R. M., Science under attack, *Elements*, in press.
- \_\_\_ Hazen, R. M., M. H. Hazen, and S. E. Pober, *American Geological Literature, 1669-1850*, 2nd ed., Pober Publishing, Staten Island, N.Y., in press.
- 3400 Hemley, R. J., Y.-C. Chen, and C.-S. Yan, Growing diamond crystals by chemical vapor deposition, *Elements* **1**, 105-108, 2005.
- 3381 Hemley, R. J., H. K. Mao, and V. V. Struzhkin, Synchrotron radiation and high pressure: new light on materials under extreme conditions, *J. Synchrotron Rad.* **12**, 135-154, 2005.
- 3495 Huntress, W. T., Jr., and S. Di Pippo, La lunga strada verso Marte [The long road to Mars] (in Italian), *Le Scienze* **438**, 52-59, February 2005. (No reprints available.)
- 3474 Ice, G. E., P. Dera, W. Liu, and H. K. Mao, Adapting polychromatic X-ray microdiffraction techniques to high-pressure research: energy scan approach, *J. Synchrotron Rad.* **12**, 608-617, 2005. (No reprints available.)
- 3382 Ilton, E. S., A. Haiduc, C. L. Cahill, and A. R. Felmy, Mica surfaces stabilize pentavalent uranium, *Inorg. Chem.* **44**, 2986-2988, 2005. (No reprints available.)
- 3383 Jackson, J. M., W. Sturhahn, G. Shen, J. Zhao, M. Y. Hu, D. Errandonea, J. D. Bass, and Y. Fei, A synchrotron Mössbauer spectroscopy study of (Mg,Fe)SiO<sub>3</sub> perovskite up to 120 GPa, *Am. Mineral.* **90**, 199-205, 2005. (No reprints available.)
- \_\_\_ Jackson, J. M., J. Zhang, J. Shu, S. V. Sinogeikin, and J. D. Bass, High-pressure sound velocities and elasticity of aluminous MgSiO<sub>3</sub> perovskite to 45 GPa: implications for lateral heterogeneity in Earth's lower mantle, *Geophys. Res. Lett.*, in press.
- 3384 Jacobsen, S. D., S. Demouchy, D. J. Frost, T. B. Ballaran, and J. Kung, A systematic study of OH in hydrous wadsleyite from polarized FTIR spectroscopy and single-crystal X-ray diffraction: oxygen sites for hydrogen storage in Earth's interior, *Am. Mineral.* **90**, 61-70, 2005.
- 3473 Jacobsen, S. D., J.-F. Lin, R. J. Angel, G. Y. Shen, V. B. Prakapenka, P. Dera, H. K. Mao, and R. J. Hemley, Single-crystal synchrotron X-ray diffraction study of wüstite and magnesiowüstite at lower-mantle pressures, *J. Synchrotron Rad.* **12**, 577-583, 2005.
- 3463 Jacobsen, S. D., H. J. Reichmann, A. Kantor, and H. A. Spetzler, A gigahertz ultrasonic interferometer for the diamond anvil cell and high-pressure elasticity of some iron-oxide minerals, in *Advances in High-Pressure Technology for Geophysical Applications*, J. Chen et al., eds., pp. 25-48, Elsevier, Amsterdam, 2005. (No reprints available.)
- 3468 Johnson, B. J., G. H. Miller, J. W. Magee, M. K. Gagan, M. L. Fogel, and P. D. Quay, Carbon isotope evidence for an abrupt reduction in grasses coincident with European settlement of Lake Eyre, South Australia, *Holocene* **16**, 888-896, 2005. (No reprints available.)
- \_\_\_ Jung, H., Y. Fei, P. Silver, and H. Green, A new system for detecting acoustic emission in multianvil experiments: applications to deep seismicity in the Earth, *Rev. Sci. Instrum.*, in press.
- 3432 Keshav, S., A. Corgne, G. H. Gudfinnsson, M. Bizimis, W. F. McDonough, and Y. Fei, Kimberlite petrogenesis: insights from clinopyroxene-melt partitioning experiments at 6 GPa in the CaO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-CO<sub>2</sub> system, *Geochim. Cosmochim. Acta* **69**, 2829-2845, 2005.
- 3491 Keshav, S., and G. H. Gudfinnsson, Silica-poor, mafic alkaline lavas from ocean islands and continents: petrogenetic constraints from major elements, *Proc. Ind. Acad. Sci.: Earth Planet. Sci.* **113**, 723-736, 2004. (No reprints available. Available online at <http://www.ias.ac.in/jessci/>)
- 3469 Knorr, K., S. Rath, L. Peters, W. Depmeier, and L. Ehm, Structure of Fe<sub>0.47</sub>NbS<sub>2</sub>: corrigendum, *J. Alloys Compounds* **395**, L1-L2, 2005. (No reprints available.)
- 3479 Koch-Müller, M., P. Dera, Y. Fei, H. Hellwig, Z. Liu, J. Van Orman, and R. Wirth, Polymorphic phase transition in superhydrous phase B, *Phys. Chem. Minerals* **32**, 349-361, 2005. (No reprints available.)
- 3385 Krivovichev, S. V., C. L. Cahill, E. V. Nazarchuk, P. C. Burns, T. Armbruster, and W. Depmeier, Chiral open-framework uranyl molybdates. 1. Topological diversity: synthesis and crystal structure of [(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>NH<sub>2</sub>]<sub>2</sub>[(UO<sub>2</sub>)<sub>4</sub>(MoO<sub>4</sub>)<sub>5</sub>(H<sub>2</sub>O)](H<sub>2</sub>O), *Microporous Mesoporous Mater.* **78**, 209-215, 2005. (No reprints available.)
- 3386 Lager, G. A., W. G. Marschall, Z. Liu, and R. T. Downs, Re-examination of the hydrogarnet structure at high pressure using neutron powder diffraction and infrared spectroscopy, *Am. Mineral.* **90**, 639-644, 2005. (No reprints available.)
- \_\_\_ Lazicki, A., B. Maddox, W. J. Evans, C.-S. Yoo, A. K. McMahan, W. E. Pickett, R. T. Scalettar, M. Y. Hu, and P. Chow, New cubic phase of Li<sub>3</sub>N: stability of the N<sup>3-</sup> ion to 200 GPa, *Phys. Rev. Lett.*, in press.
- 3433 Lee, S. K., Microscopic origins of macroscopic properties of silicate melts and glasses at ambient and high pressure: implications for melt generation and dynamics, *Geochim. Cosmochim. Acta* **69**, 3695-3710, 2005. (No reprints available.)
- 3434 Lee, S. K., G. D. Cody, and B. O. Mysen, Structure and the extent of disorder in quaternary (Ca-Mg and Ca-Na) aluminosilicate glasses and melts, *Am. Mineral.* **90**, 1393-1401, 2005.

- 3464 Lee, S. K., Y. Fei, G. D. Cody, and B. O. Mysen, The application of  $^{17}\text{O}$  and  $^{27}\text{Al}$  solid-state (3Q MAS) NMR to structures of non-crystalline silicates at high pressure, in *Advances in High-Pressure Technology for Geophysical Applications*, J. Chen et al., eds., pp. 241-261, Elsevier, Amsterdam, 2005. (No reprints available.)
- 3387 Lee, S. K., K. Mibe, Y. Fei, G. D. Cody, and B. O. Mysen, Structure of  $\text{B}_2\text{O}_3$  glass at high pressure: a  $^{11}\text{B}$  solid-state NMR study, *Phys. Rev. Lett.* **94**, 165507, 2005. (No reprints available.)
- 3435 Lin, J.-F., E. Gregoryanz, V. V. Struzhkin, M. Somayazulu, H. K. Mao, and R. J. Hemley, Melting behavior of  $\text{H}_2\text{O}$  at high pressures and temperatures, *Geophys. Res. Lett.* **32**, L11306, 10.1029/2005GL022499, 2005.
- 3436 Lin, J.-F., V. V. Struzhkin, S. D. Jacobsen, M. Y. Hu, P. Chow, J. Kung, H. Liu, H. K. Mao, and R. J. Hemley, Spin transition of iron in magnesiowüstite in the Earth's lower mantle, *Nature* **436**, 377-380, 2005.
- 3475 Lin, J.-F., V. V. Struzhkin, S. D. Jacobsen, G. Shen, V. B. Prakapenka, H. K. Mao, and R. J. Hemley, X-ray emission spectroscopy with a laser-heated diamond anvil cell: a new experimental probe of the spin state of iron in the Earth's interior, *J. Synchrotron Rad.* **12**, 637-641, 2005.
- 3354 Lin, J.-F., V. V. Struzhkin, H. K. Mao, R. J. Hemley, P. Chow, M. Y. Hu, and J. Li, Magnetic transition in compressed  $\text{Fe}_3\text{C}$  from x-ray emission spectroscopy, *Phys. Rev. B* **70**, 212405, 2004.
- 3437 Lin, J.-F., W. Sturhahn, J. Zhao, G. Shen, H. K. Mao, and R. J. Hemley, Sound velocities of hot dense iron: Birch's law revisited, *Science* **308**, 1892-1894, 2005.
- 3465 Lin, J.-F., W. Sturhahn, J. Zhao, G. Shen, H. K. Mao, and R. J. Hemley, Nuclear resonant inelastic X-ray scattering and synchrotron Mössbauer spectroscopy with laser-heated diamond anvil cells, in *Advances in High-Pressure Technology for Geophysical Applications*, J. Chen et al., eds., pp. 397-411, Elsevier, Amsterdam, 2005. (No reprints available.)
- 3438 Lin, L.-H., J. Hall, J. Lippmann-Pipke, J. A. Ward, B. S. Lollar, M. DeFlaun, R. Rothmel, D. Moser, T. M. Gihring, B. Mislowski, and T. C. Onstott, Radiolytic  $\text{H}_2$  in continental crust: nuclear power for deep subsurface microbial communities, *Geochem. Geophys. Geosyst.* **6**, Q07003, 10.1029/2004GC000907, 2005. (No reprints available.)
- 3439 Lin, T., W. Schildkamp, K. Brister, P. C. Doerschuk, M. Somayazulu, H. K. Mao, and J. E. Johnson, The mechanism of high-pressure-induced ordering in a macromolecular crystal, *Acta Crystallogr. D* **61**, 737-743, 2005. (No reprints available.)
- \_\_\_\_ Lipinska-Kalita, K. E., S. A. Gramsch, P. E. Kalita, and R. J. Hemley, In situ Raman scattering studies of high-pressure stability and transformations in the matrix of a nanostructured glass-ceramic composite, *J. Raman Spectrosc.*, in press.
- 3480 Lipinska-Kalita, K. E., D. M. Krol, R. J. Hemley, P. E. Kalita, C. L. Gobin, and Y. Ohki, Temperature effects on luminescence properties of  $\text{Cr}^{3+}$  ions in alkali gallium silicate nanostructured media, *J. Appl. Phys.* **98**, 054302, 2005. (No reprints available.)
- 3481 Lipinska-Kalita, K. E., D. M. Krol, R. J. Hemley, G. Mariotto, P. E. Kalita, and Y. Ohki, Synthesis and characterization of metal-dielectric composites with copper nanoparticles embedded in a glass matrix: a multi-technique approach, *J. Appl. Phys.* **98**, 054301, 2005. (No reprints available.)
- 3389 Liu, H.-Z., J. Chen, J. Hu, C. D. Martin, D. J. Weidner, D. Häusermann, and H. K. Mao, Octahedral tilting evolution and phase transition in orthorhombic  $\text{NaMgF}_3$  perovskite under pressure, *Geophys. Res. Lett.* **32**, L04304, 10.1029/2004GL022068, 2005. (No reprints available.)
- 3440 Liu, H., Y. Ding, M. Somayazulu, J. Qian, J. Shu, D. Häusermann, and H. K. Mao, Rietveld refinement study of the pressure dependence of the internal structural parameter  $u$  in the wurtzite phase of  $\text{ZnO}$ , *Phys. Rev. B* **71**, 212103, 2005. (No reprints available.)
- 3486 Liu, H., C. Jin, J. Chen, and J. Hu, Anomalous dynamical charge change behavior of nanocrystalline 3C-SiC upon compression, *J. Am. Ceram. Soc.* **87**, 2291-2293, 2004. (No reprints available.)
- 3388 Liu, H., J. S. Tse, J. Hu, Z. Liu, L. Wang, J. Chen, D. K. Weidner, Y. Meng, D. Häusermann, and H. K. Mao, Structural refinement of the high-pressure phase of aluminum trihydroxide: in-situ high-pressure angle dispersive synchrotron X-ray diffraction and theoretical studies, *J. Phys. Chem. B* **109**, 8857-8860, 2005. (No reprints available.)
- 3355 Magnien, V., D. R. Neuville, L. Cormier, B. O. Mysen, V. Briois, S. Belin, O. Pinet, and P. Richet, Kinetics of iron oxidation in silicate melts: a preliminary XANES study, *Chem. Geol.* **213**, 253-263, 2004. (No reprints available.)
- 3441 Mao, W. L., Y. Meng, G. Shen, V. B. Prakapenka, A. J. Campbell, D. L. Heinz, J. Shu, R. Caracas, R. E. Cohen, Y. Fei, R. J. Hemley, and H. K. Mao, Iron-rich silicates in the Earth's  $\text{D}''$  layer, *Proc. Natl. Acad. Sci. USA* **102**, 9751-9753, 2005.
- 3390 Mao, W. L., V. V. Struzhkin, H. K. Mao, and R. J. Hemley, Pressure-temperature stability of the van der Waals compound  $(\text{H}_2)_4\text{C}_6$ , *Chem. Phys. Lett.* **402**, 66-70, 2005. (No reprints available.)
- 3405 Maule, J., M. Fogel, A. Steele, N. Wainwright, D. L. Pierson, and D. S. McKay, Antibody binding in altered gravity: implications for immunosorbent assay during spaceflight, *J. Grav. Physiol.* **10** (no. 2), 47-55, 2003.
- \_\_\_\_ Maule, J., A. Steele, N. Wainwright, D. Pierson, and M. Ott, Microbial monitoring by aquanauts in the underwater habitat Aquarius: a comparison of in situ and culture-dependent methods, *Appl. Environ. Microbiol.*, in press.
- 3356 McCarthy, M. D., R. Benner, C. Lee, J. I. Hedges, and M. L. Fogel, Amino acid carbon isotopic fractionation patterns in oceanic dissolved organic matter: an unaltered photoautotrophic source for dissolved organic nitrogen in the ocean? *Mar. Chem.* **92**, 123-134, 2004. (No reprints available.)
- 3497 Medvedev, P., A. Bekker, J. A. Karhu, and N. Kortelainen, Testing the biostratigraphic potential of early Paleoproterozoic microdigitate stromatolites, *Rev. Esp. Micropaleontol.* **37**, 41-56, 2005. (No reprints available.)
- 3442 Merkel, S., J. Shu, P. Gillet, H. K. Mao, and R. J. Hemley, X-ray diffraction study of the single-crystal elastic moduli of  $\epsilon\text{-Fe}$  up to 30 GPa, *J. Geophys. Res.* **110**, B05201, 10.1029/2004JB003197, 2005.
- 3357 Mibe, K., M. Kanzaki, T. Kawamoto, K. N. Matsukage, Y. Fei, and S. Ono, Determination of the second critical end point in silicate- $\text{H}_2\text{O}$  systems using high-pressure and high-temperature X-ray radiography, *Geochim. Cosmochim. Acta* **68**, 5189-5195, 2004. (No reprints available.)
- 3443 Miltitzer, B., Hydrogen-helium mixtures at high pressure, *J. Low Temp. Phys.* **139**, 739-752, 2005.
- 3391 Miltitzer, B., and E. L. Pollock, Equilibrium contact probabilities in dense plasmas, *Phys. Rev. B* **71**, 134303, 2005.
- 3444 Miller, G. H., M. L. Fogel, J. W. Magee, M. K. Gagan, S. J. Clarke, and B. J. Johnson, Ecosystem collapse in Pleistocene Australia and a human role in megafaunal extinction, *Science* **309**, 287-290, 2005.
- 3487 Ming, L. C., S. K. Sharma, A. J. Jayaraman, Y. Kobayashi, E. Suzuki, S. Endo, V. Prakapenka, and D. Yang, X-ray diffraction and Raman studies of the  $\text{CuGeO}_3(\text{III})\text{-IV}$  transformation under high pressures, *Spectrochim. Acta A* **61**, 2418-2422, 2005. (No reprints available.)
- 3445 Mora, A. E., J. W. Steeds, J. E. Butler, C.-S. Yan, H. K. Mao, and R. J. Hemley, Direct evidence of interaction between dislocations and point defects in diamond, *Phys. Status Solidi (a)* **202**, R69-R71, 2005. (No reprints available.)
- 3462 Morowitz, H., R. Hazen, and J. Trefil, Intelligent design has no place in the science curriculum, *Chronicle Higher Educ., Chronicle Rev.*, B6-B8, 2 September, 2005. (No reprints available.)
- 3358 Mysen, B. O., Element partitioning between minerals and melt, melt composition, and melt structure, *Chem. Geol.* **213**, 1-16, 2004.
- 3359 Mysen, B. O., and G. D. Cody, Solubility and solution mechanism of  $\text{H}_2\text{O}$  in alkali silicate melts and glasses at high pressure and temperature, *Geochim. Cosmochim. Acta* **68**, 5113-5126, 2004.
- \_\_\_\_ Mysen, B. O., and G. D. Cody, Solution mechanisms of  $\text{H}_2\text{O}$  in depolymerized peralkaline melts at high pressure and temperature, *Geochim. Cosmochim. Acta*, in press.
- 3404 Mysen, B. O., and P. Richet, *Silicate Melts and Glasses: Properties and Structure*, Elsevier, Amsterdam, 544 pp., 2005. (Available for purchase from the publisher.)
- 3446 Mysen, B. O., and J. Shang, Evidence from olivine/melt element partitioning that nonbridging oxygen in silicate melts are not equivalent, *Geochim. Cosmochim. Acta* **69**, 2861-2875, 2005.
- \_\_\_\_ Neelson, K. H., and J. H. Scott, Ecophysiology of the genus *Shewanella*, in *The Prokaryotes: A Handbook on the Biology of Bacteria*, Vol. 6: *Proteobacteria: Gamma Subclass*, 3rd rev. ed., M. Dworkin et al., eds., Springer, in press.
- 3482 O'Brien, D. M., C. L. Boggs, and M. L. Fogel, The amino acids used in reproduction by butterflies: a comparative study of dietary sources using compound-specific stable isotope analysis, *Physiol. Biochem. Zool.* **78**, 819-827, 2005. (No reprints available.)
- 3447 Okuchi, T., G. D. Cody, H. K. Mao, and R. J. Hemley, Hydrogen bonding and dynamics of methanol by high-pressure diamond-anvil cell NMR, *J. Chem. Phys.* **122**, 244509, 2005.
- 3392 Okuchi, T., R. J. Hemley, and H. K. Mao, Radio frequency probe with improved sensitivity for diamond anvil cell nuclear magnetic resonance, *Rev. Sci. Instrum.* **76**, Q26111, 2005.
- 3467 Okuchi, T., H. K. Mao, and R. J. Hemley, A new gasket material for higher resolution NMR in diamond anvil cells, in *Advances in High-Pressure Technology for Geophysical Applications*, J. Chen et al., eds., pp. 503-509, Elsevier, Amsterdam, 2005. (No reprints available.)
- \_\_\_\_ Ono, S., B. Wing, J. Farquhar, and D. Rumble, Measurements of all four isotopes of sulfur in nanomole level samples by isotope-ratio-monitoring gas-chromatography mass-spectrometry, *Chem. Geol.*, in press.
- 3493 Presnall, D. C., and G. H. Gudfinnsson, Carbonate-rich melts in the oceanic low-velocity zone and deep mantle, in *Plates, Plumes, and Paradigms*, G. R. Foulger et al., eds., pp. 207-216, Special Paper 388, Geological Society of America, Boulder, Colo., 2005. (No reprints available.)
- 3393 Rouxel, O. J., A. Bekker, and K. J. Edwards, Iron isotope constraints on the Archean and Paleoproterozoic ocean redox state, *Science* **307**, 1088-1091, 2005. (No reprints available.)
- \_\_\_\_ Rouxel, O., A. Bekker, and K. Edwards, Reply to technical comment on "Iron isotope constraints on the Archean and Paleoproterozoic ocean redox state," *Science*, in press.

- 3448 Rumble, D., A mineralogical and geochemical record of atmospheric photochemistry, *Am. Mineral.* 90, 918-930, 2005.
- 3396 Ruzicka, A., M. Killgore, D. W. Mittlefehldt, and M. D. Fries, Portales Valley: petrology of a metallic-melt meteorite breccia, *Meteoritics Planet. Sci.* 40, 261-295, 2005. (No reprints available.)
- 3360 Santoro, M., E. Gregoryanz, H. K. Mao, and R. J. Hemley, New phase diagram of oxygen at high pressures and temperatures, *Phys. Rev. Lett.* 93, 265701, 2004. (No reprints available.)
- 3466 Santoro, M., J.-F. Lin, V. V. Struzhkin, H. K. Mao, and R. J. Hemley, *In situ* Raman spectroscopy with laser-heated diamond anvil cells, in *Advances in High-Pressure Technology for Geophysical Applications*, J. Chen et al., eds., pp. 413-423, Elsevier, Amsterdam, 2005. (No reprints available.)
- \_\_\_\_ Schelble, R. T., G. D. McDonald, J. A. Hall, and K. H. Nealson, Community structure comparison using FAME analysis of desert varnish and soil, Mojave Desert, California, *Geomicrobiol. J.*, in press.
- 3394 Schweitzer, M. H., J. L. Wittmeyer, J. R. Horner, and J. K. Toporski, Soft-tissue vessels and cellular preservation in *Tyrannosaurus rex*, *Science* 307, 1952-1955, 2005. (No reprints available.)
- \_\_\_\_ Schweizer, M. K., M. J. Wooller, J. Toporski, M. L. Fogel, and A. Steele, Examination of an Oligocene lacustrine ecosystem using C and N stable isotopes, *Palaeogeogr. Palaeoclimatol. Palaeoecol.*, in press.
- 3449 Sen, G., S. Keshav, and M. Bizimis, Hawaiian mantle xenoliths and magmas: composition and thermal character of the lithosphere, *Am. Mineral.* 90, 871-887, 2005. (No reprints available.)
- 3490 Senter, R. A., C. Pantea, Y. Wang, H. Liu, T. W. Zerda, and J. L. Coffey, Structural influence of erbium centers on silicon nanocrystal phase transitions, *Phys. Rev. Lett.* 93, 175502, 2004. (No reprints available.)
- 3424 Sharma, A., G. D. Cody, J. Scott, and R. J. Hemley, Molecules to microbes: in-situ studies of organic systems under hydrothermal conditions, in *Chemistry at Extreme Conditions*, M. R. Manaa, ed., pp. 83-108, Elsevier, Amsterdam, 2005. (No reprints available.)
- 3484 Signorato, R., D. Häusermann, M. Somayazulu, and J.-F. Carre, Performance of an adaptive  $\mu$ -focusing Kirkpatrick-Baez system for high-pressure studies at the Advanced Photon Source, in *Advances in Mirror Technology for X-Ray, EUV Lithography, Laser, and Other Applications*, A. M. Khounsary, U. Dinger, and K. Ota, eds., pp. 112-123, SPIE Proceedings Vol. 5193, SPIE, Bellingham, Wash., 2004. (No reprints available.)
- 3425 Song, Y., R. J. Hemley, H. K. Mao, and D. R. Herschbach, Nitrogen-containing molecular systems at high pressures and temperature, in *Chemistry at Extreme Conditions*, M. R. Manaa, ed., pp. 189-222, Elsevier, Amsterdam, 2005. (No reprints available.)
- 3450 Song, Y., Z. Liu, H. K. Mao, R. J. Hemley, and D. R. Herschbach, High-pressure vibrational spectroscopy of sulfur dioxide, *J. Chem. Phys.* 122, 174511, 2005.
- 3451 Sturhahn, W., J. M. Jackson, and J.-F. Lin, The spin state of iron in minerals of Earth's lower mantle, *Geophys. Res. Lett.* 32, L12307, 10.1029/2005GL022802, 2005. (No reprints available.)
- 3461 Teece, M. A., and M. L. Fogel, Preparation of ecological and biochemical samples for isotope analysis, in *Handbook of Stable Isotope Analytical Techniques*, P. A. de Groot, ed., Vol. 1, pp. 177-202, Elsevier, Amsterdam, 2004. (No reprints available.)
- 3397 Toporski, J., M. Fries, A. Steele, L. Nittler, and M. Kress, Sweeping the skies: Stardust and the origin of our solar system, *GIT Imaging & Microscopy 04/2004*, 38-40, 2004. (No reprints available.)
- \_\_\_\_ Toporski, J., and A. Steele, Astrobiotechnology: alternative concepts for astrobiology solar system exploration, in *Perspectives in Astrobiology*, R. B. Hoover, A. Y. Rozanov, and R. R. Paepe, eds., IOS Press, Amsterdam, in press.
- 3395 van Westrenen, W., M. R. Frank, Y. Fei, J. M. Hanchar, R. J. Finch, and C.-S. Zha, Compressibility and phase transition kinetics of lanthanide-doped zircon, *J. Am. Ceram. Soc.* 88, 1345-1348, 2005. (No reprints available.)
- 3452 van Westrenen, W., J. Li, Y. Fei, M. R. Frank, H. Hellwig, T. Komabayashi, K. Mibe, W. G. Minarik, J. A. Van Orman, H. C. Watson, K. Funakoshi, and M. W. Schmidt, Thermoelastic properties of  $(\text{Mg}_{0.64}\text{Fe}_{0.36})\text{O}$  ferropericline based on in situ X-ray diffraction to 26.7 GPa and 2173 K, *Phys. Earth Planet. Inter.* 151, 163-176, 2005.
- 3399 Wang, Y., Y. Huang, C. M. O'D. Alexander, M. Fogel, and G. Cody, Molecular and compound-specific hydrogen isotope analyses of insoluble organic matter from different carbonaceous chondrite groups, *Geochim. Cosmochim. Acta* 69, 3711-3721, 2005. (No reprints available.)
- 3453 Wooller, M. J., B. J. Johnson, A. Wilkie, and M. L. Fogel, Stable isotope characteristics across narrow savanna/woodland ecotones in Wolfe Creek Meteorite Crater, Western Australia, *Oecologia* 145, 100-112, 2005. (No reprints available.)
- 3454 Wu, Z., X.-J. Chen, V. V. Struzhkin, and R. E. Cohen, Trends in elasticity and electronic structure of transition-metal nitrides and carbides from first principles, *Phys. Rev. B* 71, 214103, 2005.
- 3455 Wu, Z., and R. E. Cohen, Pressure-induced anomalous phase transitions and colossal enhancement of piezoelectricity in  $\text{PbTiO}_3$ , *Phys. Rev. Lett.* 95, 037601, 2005.
- 3406 Xie, X., M. E. Minitti, M. Chen, H. K. Mao, D. Wang, J. Shu, and Y. Fei, Tuite, a new high-pressure phosphate mineral [in Chinese], *Diqiu Huaxue (Geochimica)* 32 (no. 6), 566-568, 2003. (No reprints available.)
- 3456 Xie, X., J. Shu, and M. Chen, Synchrotron radiation X-ray diffraction in situ study of fine-grained minerals in shock veins of Suizhou meteorite, *Sci. China D* 48, 815-821, 2005. (No reprints available.)
- 3457 Yang, J., W. Bai, H. Rong, Z. Zhang, Z. Xu, Q. Fang, B. Yang, T. Li, Y. Ren, S. Chen, J. Hu, J. Shu, and H. K. Mao, Discovery of  $\text{Fe}_2\text{P}$  alloy in garnet peridotite from the Chinese Continental Scientific Drilling Project (CCSD) main hole [in Chinese], *Acta Petrol. Sin.* 21, 271-276, 2005. (No reprints available.)
- 3488 Yoo, C. S., B. Maddox, J.-H. P. Klepeis, V. Iota, W. Evans, A. McMahan, M. Y. Hu, P. Chow, M. Somayazulu, D. Häusermann, R. T. Scalettar, and W. E. Pickett, First-order isostructural Mott transition in highly-compressed  $\text{MnO}$ , *Phys. Rev. Lett.* 94, 115502, 2005. (No reprints available.)
- 3361 Yoshimura, Y., H. K. Mao, and R. J. Hemley, Transformation of ice in aqueous KCl solution to a high-pressure, low-temperature phase, *Chem. Phys. Lett.* 400, 511-514, 2004. (No reprints available.)
- 3458 Zhang, Z. M., D. Rumble, J. G. Liou, Y. L. Xiao, and Y. J. Gao, Oxygen isotope geochemistry of rocks from the pre-pilot hole of the Chinese Continental Scientific Drilling Project (CCSD-PPH1), *Am. Mineral.* 90, 857-863, 2005. (No reprints available.)
- 3362 Zhao, J., W. Sturhahn, J.-F. Lin, G. Shen, E. E. Alp, and H. K. Mao, Nuclear resonant scattering at high pressure and high temperature, *High Pressure Res.* 24, 447-457, 2004. (No reprints available.)
- 3459 Zotov, N., W. Kockelmann, S. D. Jacobsen, I. Mitov, D. Paneva, R. D. Vassileva, and I. K. Bonev, Structure and cation order in manganilvaite: a combined X-ray-diffraction, neutron-diffraction, and Mössbauer study, *Can. Mineral.* 43, 1043-1053, 2005. (No reprints available.)

## GLOBAL ECOLOGY

- Ananyev, G., Z. S. Kolber, D. Klimov, P. G. Falkowski, J. A. Berry, U. Rascher, R. Martin, and B. Osmond, Remote sensing of heterogeneity in photosynthetic efficiency, electron transport, and dissipation of excess light in *Populus deltoides* stands under ambient and elevated  $\text{CO}_2$  concentrations, and in a tropical forest canopy, using a new laser-induced fluorescence transient device, *Glob. Change Biol.* 11, 1195-1206, 2005.
- Asner, G. P., K. M. Carlson, and R. E. Martin, Substrate and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy, *Remote Sens. Environ.* 98, 457-467, 2005.
- Asner, G. P., A. J. Elmore, R. F. Hughes, A. S. Warner, and P.M. Vitousek, Ecosystem structure along bioclimatic gradients in Hawaii from imaging spectroscopy, *Remote Sens. Environ.* 96, 497-508, 2005.
- Asner, G. P., M. Keller, R. Pereira, J. Zweede, and J. N. M. Silva, Canopy damage and recovery following selective logging in an Amazon forest: integrating field and satellite studies, *Ecol. Appl.* 14, 280-298, 2004.
- Asner, G. P., M. Keller, and J. N. M. Silva, Spatial and temporal dynamics of forest canopy gaps following selective logging in the eastern Amazon, *Glob. Change Biol.* 10, 765-783, 2004.
- Asner, G. P., D. E. Knapp, E. N. Broadbent, P. J. C. Oliveira, M. Keller, and J. N. Silva, Selective logging in the Brazilian Amazon, *Science* 310, 480-482, 2005.
- Asner, G. P., D. E. Knapp, A. N. Cooper, M. M. C. Bustamante, and L. O. Olander, Ecosystem structure throughout the Brazilian Amazon from Landsat observations and Automated Spectral Unmixing, *Earth Interact.* 9, 1-31, 2005.
- Asner, G. P., and P. M. Vitousek, Remote analysis of biological invasion and biogeochemical change, *Proc. Natl. Acad. Sci. USA* 102, 4383-4386, 2005.
- Betts, A. K., B. Helliker, and J. Berry, Coupling between  $\text{CO}_2$ , water vapor, temperature, and radon and their fluxes in an idealized equilibrium boundary layer over land, *J. Geophys. Res.* 109, 1-20, 2004.
- Boyer, E. W., R. W. Howarth, J. N. Galloway, F. J. Dentener, C. Cleveland, G. P. Asner, P. Green, and C. Vörösmarty, Current nitrogen inputs to world regions, in *Agriculture and the Nitrogen Cycle: Assessing the Impact of Fertilizer Use on Food Production and the Environment*, A. R. Mosier, K. Syers, and J. R. Freney, eds., pp. 221-230, Island Press, Washington, D.C., 2004.
- Dukes, J. S., N. R. Chiariello, E. E. Cleland, L. A. Moore, M. R. Shaw, S. S. Thayer, T. Tobeck, H. A. Mooney, and C. Field, Responses of grassland production to single and multiple global environmental changes, *PLoS Biol.* 3, 1-9, 2005.
- Elmore, A. J., G. P. Asner, and R. F. Hughes, Satellite monitoring of vegetation phenology and fire fuel conditions in Hawaiian drylands, *Earth Interact.*, 9, paper 21, 1-21, 2005.
- Field, C., and J. Kaduk, The carbon balance of an old-growth forest: building across approaches, *Ecosystems* 7, 525-533, 2004.
- Foley, J. A., R. DeFries, and G. P. Asner, Global consequences of land use, *Science* 309, 570-574, 2005.
- Helliker, B. R., J. A. Berry, A. K. Betts, P. S. Bakwin, K. J. Davis, J. R. Ehleringer, M. P. Butler, and D. M. Ricciuto, Regional-scale estimates of forest  $\text{CO}_2$  and isotope flux based on monthly  $\text{CO}_2$  budgets of the atmospheric boundary layer, in *The Carbon Balance of Forest Biomes*, H. Griffiths and P. G. Jarvis, eds., pp. 77-92, Taylor & Francis Group, London, 2005.
- Hicke, J. A., R. L. Sherriff, T. T. Veblen, and G. P. Asner, Carbon accumulation in Colorado ponderosa pine stands, *Canadian J. Forest Res.* 34, 1283-1295, 2004.

- Keller, M., M. Palace, G. P. Asner, R. Pereira, Jr., and J. N. M. Silva, Coarse woody debris in undisturbed and logged forests in the Eastern Brazilian Amazon, *Glob. Change Biol.* 10, 784-795, 2004.
- Keller, M., R. K. Varner, J. Dias, H. Silva, P. Crill, R. De Oliveira, Jr., and G. P. Asner, Soil-atmosphere exchange of nitrous oxide, nitric oxide, methane, and carbon dioxide in logged and undisturbed forest in the Tapajós National Forest, Brazil, *Earth Interact.*, 9, paper 23, 1-28, 2005.
- Lobell, D. B., I. Ortiz-Monasterio, and G. P. Asner, Relative importance of soil and climate variability for nitrogen management in irrigated wheat, *Field Crops Res.* 87, 155-165, 2004.
- Lobell, D. B., I. Ortiz-Monasterio, G. P. Asner, R. L. Naylor, and W. P. Falcon, Combining field surveys, remote sensing, and regression trees to understand yield variations in an irrigated wheat landscape, *Agron. J.* 97, 241-249, 2005.
- Martin, R. E., and G. P. Asner, Regional estimate of nitric oxide emissions following woody encroachment: linking imaging spectroscopy and field studies, *Ecosystems* 8, 33-47, 2005.
- Moore, L. A., and C. B. Field, A technique for identifying the roots of different species in mixed samples using nuclear ribosomal DNA, *J. Veg. Sci.* 16, 131-134, 2005.
- Mouillot, F., and C. B. Field, Fire history and the global carbon budget: a 1° x 1° fire history reconstruction for the 20<sup>th</sup> century, *Glob. Change Biol.* 11, 1-23, 2005.
- Olander, L. O., M. M. C. Bustamante, G. P. Asner, E. Telles, and Z. A. do Prado, Surface soil changes following selective logging in an Eastern Amazon forest, *Earth Interact.* 9, 1-19, 2005.
- Porder, S., G. P. Asner, and P. M. Vitousek, Ground-based and remotely sensed nutrient availability across a tropical landscape, *Proc. Natl. Acad. Sci.* 102, 10909-10912, 2005.
- Suits, N. S., A. S. Denning, J. A. Berry, C. J. Still, J. Kaduk, J. B. Miller, and I. T. Baker, Simulation of carbon isotope discrimination of the terrestrial biosphere, *Global Biogeochem. Cycl.* 19, 1-15, 2005.
- Wessman, C. A., S. Archer, L. C. Johnson, and G. P. Asner, Woodland expansion in the US grasslands: assessing land-cover change and biogeochemical impacts, in *Land Change Science: Observing, Monitoring, and Understanding Trajectories of Change on the Earth's Surface*, G. Gutman, A. C. Janetos, C. O. Justice, et al., eds., pp. 185-208, Springer, Berlin, 2004.
- OBSERVATORIES**
- Abazajian, K., J. K. Adelman-McCarthy, M. A. Agueros, S. S. Allam, K. S. J. Anderson, . . . A. Uomoto, et al., The third data release of the Sloan Digital Sky Survey, *Astron. J.* 129, 1755, 2005.
- Abazajian, K., J. K. Adelman-McCarthy, M. A. Agueros, S. S. Allam, K. S. J. Anderson, . . . A. Uomoto, et al., The second data release of the Sloan Digital Sky Survey, *Astron. J.* 1289, 502, 2004.
- Abraham, R. G., K. Glazebrook, P. J. McCarthy, et al., Star-forming, recently star-forming, and "red and dead" galaxies at  $1 < z < 2$ , in *Starbursts: From 30 Doradus to Lyman Break Galaxies*, Astrophysics. Space Sci. Library 329, R. de Grijs and R. M. Gonzalez Delgado, eds., p. 195, Springer, Dordrecht, 2005.
- Adelberger, K. L., Estimating the galaxy correlation length  $r_0$  from the number of galaxy pairs with similar redshifts, *Astrophys. J.* 621, 574, 2005.
- Adelberger, K. L., Measuring the radiative histories of high-redshift QSOs with the transverse proximity effect, *Astrophys. J.* 612, 706, 2004.
- Adelberger, K. L., et al., The spatial clustering of star-forming galaxies at redshifts  $1.4 < z < 3.5$ , *Astrophys. J.* 619, 697, 2005.
- Adelberger, K. L., et al., Strong spatial clustering of ultraviolet-selected galaxies with magnitude  $K_s < 20.5$  and redshift  $z \sim 2$ , *Astrophys. J. Lett.*, 620, L75, 2005.
- Arnouts, S., D. Schiminovich, O. Ilbert, L. Tresse, B. Milliary, . . . B. F. Madore, et al., The GALEX VIMOS-VLT Deep Survey measurement of the evolution of the 1500 angstrom luminosity function, *Astrophys. J. Lett.* 619, L43, 2005.
- Athey, A. E., S. Shectman, et al., The GMT ground-layer AO experiment at the Magellan telescopes, in *Advancements in Adaptive Optics*, SPIE Proc. 5490, D. B. Calia, B. L. Ellerbroek, and R. Ragazzoni, eds., p. 960, International Society for Optical Engineering, Bellingham, Wash., 2004.
- Barmby, P., J.-S. Huang, G. G. Fazio, J. A. Surace, R. G. Arendt, J. L. Hora, M. A. Pahre, K. L. Adelberger, et al., Deep mid-infrared observations of Lyman break galaxies. *Astrophys. J. Supp.* 154, 97, 2004.
- Barrientos, L. F., M. D. Gladders, et al., RCS 043938-2904.9: a new rich cluster of galaxies at  $z = 0.951$ , *Astrophys. J. Lett.* 617, L17, 2004.
- Barrientos, L. F., M. C. Manterola, M. D. Gladders, et al., Cluster ellipticals at  $z \sim 1$  from the Red-Sequence Cluster Survey, in *Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution*, Carnegie Observatories Astrophysics Series 3, J. S. Mulchaey, A. Dressler, and A. Oemler, eds., <http://www.ociw.edu/ociw/symposia/series/symposium3/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Barth, A. J., J. E. Greene, and L. C. Ho, Dwarf Seyfert 1 nuclei and the low-mass end of the black hole mass versus velocity dispersion relation, *Astrophys. J. Lett.* 619, L151, 2005.
- Barth, A. J., J. E. Greene, and L. C. Ho, Intermediate-mass black holes in active galactic nuclei, in *Growing Black Holes: Accretion in a Cosmological Context*, A. Merloni, S. Nayakshin, and R. Sunyaev, eds., p. 154, Springer-Verlag, New York, 2005.
- Barth, A. J., L. C. Ho, and W. L. W. Sargent, An intermediate-mass black hole in the dwarf Seyfert 1 galaxy POX 52, in *AGN Physics with the Sloan Digital Sky Survey*, ASP Conf. Series 311, G. T. Richards and P. B. Hall, eds., p. 91, Astronomical Society of the Pacific, San Francisco, 2004.
- Becker, G. D., W. L. W. Sargent, and M. Rauch, Large-scale correlations in the Ly-alpha forest at  $z = 3-4$ , *Astrophys. J.* 613, 61, 2004.
- Bergeron, P., M. T. Ruiz, M. Hamuy, et al., A detailed photometric analysis of halo white dwarf candidates, in *14<sup>th</sup> European Workshop on White Dwarfs*, ASP Conf. Series 334, D. Koester and S. Moehler, eds., p. 27, Astronomical Society of the Pacific, San Francisco, 2005.
- Bergeron, P., M. T. Ruiz, M. Hamuy, et al., On the interpretation of high-velocity white dwarfs as members of the Galactic halo, *Astrophys. J.* 625, 838, 2005.
- Bianchi, L., M. Seibert, W. Zheng, D. A. Thilker, P. G. Friedman, . . . B. F. Madore, et al., Classification and characterization of objects from the *Galaxy Evolution Explorer* Survey and the Sloan Digital Sky Survey, *Astrophys. J. Lett.* 619, L27, 2005.
- Bianchi, L., D. A. Thilker, D. Burgarella, P. G. Friedman, C. G. Hoopes, S. Boissier, A. Gil de Paz, . . . B. F. Madore, et al., Recent star formation in nearby galaxies from *Galaxy Evolution Explorer* imaging: M101 and M51, *Astrophys. J. Lett.* 619, L71, 2005.
- Blain, A. W., C. Carilli, and J. Darling, Searching for high-redshift centimeter-wave continuum, line, and maser emission using the Square Kilometer Array, *New Astron. Rev.* 48, 1247, 2004.
- Blindert, K., H. K. C. Yee, M. D. Gladders, and E. Ellingson, Dynamical masses of RCS galaxy clusters, in *Outskirts of Galaxy Clusters: Intense Life in the Suburbs*, IAU Coll. 195, A. Diaferio, ed., p. 215, Cambridge University Press, Cambridge, U.K., 2004.
- Boeker, T., C.-J. Walcher, H.-W. Rix, N. Haering, E. Schinnerer, . . . L. C. Ho, et al., The nuclei of late-type spiral galaxies, in *The Formation and Evolution of Massive Young Star Clusters*, ASP Conf. Series 322, H. J. G. L. M. Lamers, L. J. Smith, and A. Nota, eds., p. 39, Astronomical Society of the Pacific, San Francisco, 2004.
- Bohigas, J., M. Tapia, M. Roth, and M. T. Ruiz, Physical properties of the giant H II region G353.2+0.9 in NGC 6357, *J. Korean Astron. Soc.* 37, 281, 2004.
- Bossier, S., et al., The radial extinction profiles of late-type galaxies, *Astron. Astrophys.* 424, 465, 2004.
- Boissier, S., A. Gil de Paz, B. F. Madore, et al., Extinction radial profiles of M83 from GALEX ultraviolet imaging, *Astrophys. J. Lett.* 619, L83, 2005.
- Boselli, A., S. Boissier, L. Cortese, A. Gil de Paz, V. Buat, J. Iglesias-Paramo, B. F. Madore, et al., GALEX ultraviolet observations of the interacting galaxy NGC 4438 in the Virgo Cluster, *Astrophys. J. Lett.* 623, L13, 2005.
- Buat, V., J. Iglesias-Paramo, M. Seibert, D. Burgarella, S. Charlot, D. C. Martin, C. K. Xu, T. M. Heckman, S. Boissier, . . . B. F. Madore, et al., Dust attenuation in the nearby universe: a comparison between galaxies selected in the ultraviolet and in the far-infrared, *Astrophys. J. Lett.* 619, L51, 2005.
- Budavari, T., A. S. Szalay, S. Charlot, M. Seibert, T. K. Wyder, . . . B. F. Madore, et al., The ultraviolet luminosity function of GALEX galaxies at photometric redshifts between 0.07 and 0.25, *Astrophys. J. Lett.* 619, L31, 2005.
- Burgarella, D., V. Buat, T. Small, T. A. Barlow, S. Boissier, A. Gil de Paz, T. M. Heckman, B. F. Madore, et al., *Galaxy Evolution Explorer* ultraviolet spectroscopy and deep imaging of luminous infrared galaxies in the European Large-Area ISO Survey S1 field, *Astrophys. J. Lett.* 619, L63, 2005.
- Burley, G., I. Thompson, and C. Hull, Compact CCD guider camera for Magellan, in *Scientific Detectors for Astronomy, The Beginning of a New Era*, P. Amico, J. W. Beletic, and J. E. Beletic, eds., p. 431, Kluwer Academic Publishers, Dordrecht, 2004.
- Burstein, D., L. C. Ho, J. P. Huchra, and L. M. Macri, The K-band luminosities of galaxies: do S0s come from spiral galaxies? *Astrophys. J.* 621, 246, 2005.
- Cappi, M., G. di Cocco, F. Panessa, L. Foschini, M. Trifoglio, . . . L. C. Ho, J. S. Mulchaey, et al., XMM-Newton Survey of a distance-limited sample of Seyfert galaxies, in *Coevolution of Black Holes and Galaxies*, Carnegie Observatories Astrophysics Series 1, L. C. Ho, ed., <http://www.ociw.edu/ociw/symposia/series/symposium1/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Chen, H.-W., R. C. Kennicutt, Jr., and M. Rauch, Abundance profiles and kinematics of damped Ly-alpha absorbing galaxies at  $z < 0.651$ , *Astrophys. J.* 620, 703, 2005.
- Clocchiatti, A., B. Leibundgut, J. Spyromilio, S. Benetti, E. Cappellaro, M. Turatto, and M. M. Phillips, SN 1997b and the different types of Type Ic supernovae, in *Cosmic Explosions in Three Dimensions: Asymmetries in Supernovae and Gamma-Ray Bursts*, P. Hofilich, P. Kumar, and J. C. Wheeler, eds., p. 50, Cambridge University Press, Cambridge, U.K., 2004.
- Cohen, J. G., N. Christlieb, A. McWilliam, S. Shectman, I. Thompson, et al., Abundances in very metal-poor dwarf stars, *Astrophys. J.* 612, 1107, 2004.

- Colbert, J. W., H. I. Teplitz, L. Yan, M. A. Malkan, and P. J. McCarthy, Near-infrared properties of faint x-ray sources from NICMOS imaging in the Chandra Deep Fields, *Astrophys. J.* 621, 587, 2005.
- Cortese, L., A. Boselli, G. Gavazzi, J. Iglesias-Paramo, B. F. Madore, et al., The GALEX ultraviolet luminosity function of the cluster of galaxies A1367, *Astrophys. J. Lett.* 623, L17, 2005.
- Crenshaw, D. M., S. B. Kraemer, J. R. Gabel, H. R. Schmitt, A. V. Filippenko, L. C. Ho, et al., High-resolution ultraviolet spectra of the dwarf Seyfert 1 galaxy NGC 4395: evidence for intrinsic absorption, *Astrophys. J.* 612, 152, 2004.
- Curran, S. J., N. Kanekar, and J. K. Darling, Measuring changes in the fundamental constants with redshifted radio absorption lines, *New Astron. Rev.* 48, 1095, 2004.
- Darling, J., A laboratory for constraining cosmic evolution of the Fine-Structure Constant: Conjugate 18 centimeter OH lines toward PKS 1413+135 at  $z = 0.24671$ , *Astrophys. J.* 612, 58, 2004.
- Darling, J., et al., Detection of 21 centimeter H I absorption at  $z = 0.78$  in a survey of radio continuum sources, *Astrophys. J. Lett.* 613, L101, 2004.
- della Valle, M., D. Malesani, S. Benetti, V. Testa, M. Hamuy, et al., SN 2002lt and GRB 021211: a SN/GRB connection at  $z = 1$ , in *Gamma-Ray Bursts: 30 Years of Discovery*, AIP Conf. Proc. 727, E. E. Fenimore and M. Galassi, eds., p. 403, American Institute of Physics, Melville, N.Y., 2004.
- Dressler, A., Infall and starbursts in  $z \sim 0.5$  clusters, in *Outskirts of Galaxy Clusters: Intense Life in the Suburbs*, IAU Colloquium 195, A. Diaferio, ed., p. 341, Cambridge University Press, Cambridge, U.K., 2004.
- Dressler, A., Star-forming galaxies in clusters, in *Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Formation*, Carnegie Observatories Astrophysics Series 3, J. S. Mulchaey, A. Dressler, and A. Oemler, eds., p. 206, Cambridge University Press, Cambridge, U.K., 2004.
- Dressler, A., A. Oemler, B. M. Poggianti, I. Smail, S. Trager, S. A. Shectman, et al., Studying the star formation histories of galaxies in clusters from composite spectra, *Astrophys. J.* 617, 867, 2004.
- Elmhamdi, A., I. J. Danziger, E. Cappellaro, M. della Valle, C. Gouffes, M. M. Phillips, and M. Turatto, SN 1b 1990l: Clumping and dust in the ejecta? *Astron. Astrophys.* 426, 963, 2004.
- Erb, D. K., C. C. Steidel, A. E. Shapley, M. Pettini, and K. L. Adelberger, The kinematics of morphologically selected  $z \sim 2$  galaxies in the GOODS-North Field, *Astrophys. J.* 612, 122, 2004.
- Erb, D. K., C. C. Steidel, A. E. Shapley, M. Pettini, N. A. Reddy, and K. L. Adelberger, Star-forming galaxies at  $z \sim 2$ : stellar and dynamical masses, in *Starbursts: From 30 Doradus to Lyman Break Galaxies*, Astrophys. Space Sci. Library 329, R. de Grijs and R. M. Gonzalez Delgado, eds., p. 303, Springer, Dordrecht, 2005.
- Filho, M. E., F. Fraternali, S. Markoff, N. M. Nagar, P. D. Barthel, L. C. Ho, and F. Yuan, Emission mechanisms in composite galaxies, in *The Interplay Among Black Holes, Stars and ISM in Galactic Nuclei*, IAU Symposium 222, T. Storchi-Bergmann, L. C. Ho, and H. R. Schmitt, eds., p. 91, Cambridge University Press, Cambridge, U.K., 2004.
- Finkbeiner, D. P., N. Padmanabhan, D. J. Schlegel, M. A. Carr, J. E. Gunn, . . . A. Uomoto, et al., Sloan Digital Sky Survey imaging of low galactic latitude fields: Technical Summary and Data Release, *Astron. J.* 128, 2577, 2004.
- Firpo, V., G. Bosch, and N. Morrell, New giant HII regions in the southern sky, *Mon. Not. Roy. Astron. Soc.* 356, 1357, 2005.
- Freedman, W. L., and M. S. Turner, Status of cosmology on the occasion of the Carnegie Centennial, in *Measuring and Modeling the Universe*, Carnegie Observatories Astrophysics Series 2, W. L. Freedman, ed., p. 79, Cambridge University Press, Cambridge, U.K., 2004.
- Freedman, W. L., ed., *Measuring and Modeling the Universe*, Carnegie Observatories Astrophysics Series 2, Cambridge University Press, Cambridge, U.K., 2004.
- Fulbright, J. P., Abundances in outer halo globular clusters and field stars, in *Origin and Evolution of the Elements*, Carnegie Observatories Astrophysics Series 4, A. McWilliam and M. Rauch, eds., <http://www.ociw.edu/ociw/symposia/series/symposium4/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Fulbright, J. P., et al., Draco 119: A giant lacking neutron-capture elements, in *Origin and Evolution of the Elements*, Carnegie Observatories Astrophysics Series 4, A. McWilliam and M. Rauch, eds., <http://www.ociw.edu/ociw/symposia/series/symposium4/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Fulbright, J. P., et al., Draco 119: A remarkable heavy-element-deficient giant, *Astrophys. J.* 612, 447, 2004.
- Gai-Yam, A., D.-S. Moon, D. B. Fox, A. M. Soderberg, S. R. Kulkarni, E. Berger, S. B. Cenko, S. Yost, D. A. Frail, M. Sako, W. L. Freedman, S. E. Persson, P. Wyatt, D. C. Murphy, M. M. Phillips, et al., The J-band light curve of SN 2003lw, associated with GRB 031203, *Astrophys. J. Lett.* 609, L59, 2004.
- Garnavich, P. M., A. Z. Bonanos, K. Krisciunas, S. Jha, R. P. Kirshner, . . . W. L. Freedman, et al., The luminosity of SN 1999by in NGC 2841 and the nature of "peculiar" type Ia supernovae, *Astrophys. J.* 613, 1120, 2004.
- Geha, M., P. Guhathakurta, and R. P. van der Marel, NGC 770: a counterrotating core in a low-luminosity elliptical galaxy, *Astron. J.* 129, 2617, 2005.
- Gil de Paz, A., and B. F. Madore, Palomar/Las Campanas Imaging Atlas of Blue Compact Dwarf Galaxies. II. Surface photometry and the properties of the underlying stellar population, *Astrophys. J. Suppl.* 156, 345, 2005.
- Gil de Paz, A., B. F. Madore, et al., *Galaxy Evolution Explorer* observations of the ultraviolet surface brightness and color profiles of the Local Group elliptical galaxy M32 (NGC 221), *Astrophys. J. Lett.* 619, L115, 2005.
- Gladders, M. D., The Red Sequence Technique and high-redshift galaxy clusters, in *Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution*, Carnegie Observatories Astrophysics Series 3, J. S. Mulchaey, A. Dressler, and A. Oemler, eds., p. 89, Cambridge University Press, Cambridge, U.K., 2004.
- Gladders, M. D., Strong lensing by high-redshift red-sequence selected galaxy clusters, in *Gravitational Lensing Impact on Cosmology*, IAU Symposium 225, Y. Mellier and G. Meylan, eds., p. 149, Cambridge University Press, Cambridge, U.K., 2005.
- Gladders, M. D., and H. K. C. Yee, The Red-Sequence Cluster Survey. I. The survey and cluster catalogs for patches RCS 0926+37 and RCS 1327+29, *Astrophys. J. Suppl.* 157, 1, 2005.
- Glazebrook, K., R. G. Abraham, P. J. McCarthy, et al., A high abundance of massive galaxies 3-6 billion years after the Big Bang, *Nature* 430, 181, 2004.
- Gomez, M., P. Persi, A. R. Marenzi, M. Roth, and M. Tapia, A search for shock-excited molecular hydrogen knots in Chamaeleon I very low mass YSOs, *Astron. Astrophys.* 423, 629, 2004.
- Gonzalez, J. F., P. Ostrov, N. Morrell, and D. Minniti, Absolute parameters for eight eclipsing binaries in the Large Magellanic Cloud: the mass-luminosity relation, *Astrophys. J.* 624, 946, 2005.
- Goudfrooij, P., D. Gilmore, B. C. Whitmore, and F. Schweizer, Deep luminosity functions of old and intermediate-age globular clusters in NGC 1316: evidence for dynamical evolution of second-generation globular clusters, *Astrophys. J. Lett.* 613, L121, 2004.
- Greene, J. E., and L. C. Ho, Active galactic nuclei with candidate intermediate-mass black holes, *Astrophys. J.* 610, 722, 2004.
- Greene, J. E., L. C. Ho, and A. J. Barth, Intermediate-mass black holes in galactic nuclei, in *The Interplay Among Black Holes, Stars and ISM in Galactic Nuclei*, IAU Symposium 222, T. Storchi-Bergmann, L. C. Ho, and H. R. Schmitt, eds., p. 33, Cambridge University Press, Cambridge, U.K., 2004.
- Hamuy, M., Observed and physical properties of Type II plateau supernovae, in *Cosmic Explosions in Three Dimensions: Asymmetries in Supernovae and Gamma-Ray Bursts*, P. Hoflich, P. Kumar, and J. C. Wheeler, eds., p. 43, Cambridge University Press, Cambridge, U.K., 2004.
- Hamuy, M., The latest version of the standardized candle method for type II supernovae, in *Measuring and Modeling the Universe*, Carnegie Observatories Astrophysics Series 2, W. L. Freedman, ed., <http://www.ociw.edu/ociw/symposia/series/symposium2/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Hamuy, M., The standard candle method for type II supernovae and the Hubble Constant, in *Cosmic Explosions, On the Anniversary of SN1993J*, IAU Coll. 192, J. M. Marcaide and K. W. Weiler, eds., p. 535, Springer, Berlin, 2005.
- Heckman, T. M., C. G. Hoopes, M. Seibert, D. C. Martin, S. Salim, . . . B. F. Madore, et al., The properties of ultraviolet-luminous galaxies at the current epoch, *Astrophys. J. Lett.* 619, L35, 2005.
- Helsdon, S. F., T. J. Ponman, and J. S. Mulchaey, *Chandra* observations of low velocity dispersion groups, *Astrophys. J.* 618, 679, 2005.
- Hibbard, J. E., L. Bianchi, D. A. Thilker, R. M. Rich, D. Schiminovich, . . . B. F. Madore, et al., Ultraviolet morphology and star formation in the tidal tails of NGC 4038/39, *Astrophys. J. Lett.* 619, L87, 2005.
- Ho, L. C., Black hole demography from nearby active galactic nuclei, in *Coevolution of Black Holes and Galaxies*, Carnegie Observatories Astrophysics Series 1, L. C. Ho, ed., p. 292, Cambridge University Press, Cambridge, U.K., 2004.
- Ho, L. C., What can we learn from nearby AGNs? in *Multiwavelength AGN Surveys*, R. Maiolino and R. Mujica, eds., p. 143, World Scientific, Singapore, 2004.
- Ho, L. C., ed., *Coevolution of Black Holes and Galaxies*, Carnegie Observatories Astrophysics Series 1, Cambridge University Press, Cambridge, U.K., 2004.
- Hoekstra, H., H. K. C. Yee, and M. D. Gladders, Properties of galaxy dark matter halos from weak lensing, in *Dark Matter in Galaxies*, IAU Symp. 220, S. D. Ryder, et al., eds., p. 439, Astronomical Society of the Pacific, San Francisco, 2004.
- Hoopes, C. G., T. M. Heckman, D. K. Strickland, M. Seibert, B. F. Madore, R. M. Rich, L. Bianchi, A. Gil de Paz, et al., GALEX observations of the ultraviolet halos of NGC 253 and M82, *Astrophys. J. Lett.* 619, L99, 2005.
- Hsieh, B. C., H. K. C. Yee, H. Lin, and M. D. Gladders, A Photometric Redshift Galaxy Catalog from the Red-Sequence Cluster Survey, *Astrophys. J. Suppl.* 158, 161, 2005.
- Ivans, I. I., C. Sneden, C. R. James, G. W. Preston, J. P. Fulbright, et al., A new population of old stars, in *Origin and Evolution of the Elements*, Carnegie Observatories

- Astrophysics Series 4, A. McWilliam and M. Rauch, eds., <http://www.ociw.edu/ociw/symposia/series/symposium4/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Ivans, I. I., C. Sneden, G. Wallerstein, R. P. Kraft, J. E. Norris, J. P. Fulbright, and G. Gonzalez, On the question of a metallicity spread in globular cluster M22 (NGC 6656), *Mem. Soc. Astron. Italiana* 75, 286, 2004.
- Johns, M., Giant Magellan Telescope (GMT), in *Second Backaskog Workshop on Extremely Large Telescopes*, SPIE Proc. 5382, A. L. Ardeberg and T. Andersen, eds., p. 85, International Society for Optical Engineering, Bellingham, Wash., 2004.
- Johns, M., R. Angel, S. Sheckman, R. Bernstein, D. Fabricant, P. McCarthy, and M. Phillips, Status of the Giant Magellan Telescope (GMT) Project, in *Ground-based Telescopes*, SPIE Proc. 5489, J. M. Oschmann, Jr., ed., p. 441, International Society for Optical Engineering, Bellingham, Wash., 2004.
- Juneau, S., K. Glazebrook, D. Crampton, P. J. McCarthy, et al., Cosmic star formation history and its dependence on galaxy stellar mass, *Astrophys. J.* 619, L135, 2005.
- Kaluzny, J., A. Olech, I. B. Thompson, W. Pych, W. Krzeminski, and A. Schwarzenberg-Czerny, Cluster AgeS Experiment Catalog of variable stars in the globular cluster omega Centauri, *Astron. Astrophys.* 424, 1101, 2004.
- Kaluzny, J., P. Pietrukowicz, I. B. Thompson, W. Krzeminski, et al., Cluster Ages Experiment (CASE): detection of a dwarf nova in the globular cluster M55, *Mon. Not. Roy. Astron. Soc.* 359, 677, 2005.
- Kaluzny, J., I. B. Thompson, W. Krzeminski, G. W. Preston, W. Pych, S. M. Rucinski, C. A. Schwarzenberg-Czerny, S. A. Sheckman, and G. Stachowski, Eclipsing binaries in globular clusters as age and distance indicators, in *Stellar Astrophysics with the World's Largest Telescopes*, AIP Conf. Proc. 752, J. Mikolajewska and A. Olech, eds., p. 70, American Institute of Physics, New York, 2005.
- Kerber, F., T. Rauch, E. M. Pauli, E. Furlan, H. R. Muller, and M. Roth, Interaction of planetary nebulae with the interstellar medium: a progress report, in *Asymmetrical Planetary Nebulae III*, ASP Conf. Series 313, M. Meixner et al., eds., p. 272, Astronomical Society of the Pacific, San Francisco, 2004.
- Keto, E., L. C. Ho, and K.-Y. Lo, The mass spectrum of the ISM in starbursts, in *The Formation and Evolution of Massive Young Star Clusters*, ASP Conf. Series 322, H. J. G. L. M. Lamers, L. J. Smith, and A. Nota, eds., p. 371, Astronomical Society of the Pacific, San Francisco, 2004.
- Kohley, R., M. Suarez, J. M. Martin, G. Burley, et al., CCD camera systems for the GTC, in *Scientific Detectors for Astronomy, The Beginning of a New Era*, P. Amico, J. W. Beletic, and J. E. Beletic, eds., p. 239, Kluwer Academic Publishers, Dordrecht, 2004.
- Kohley, R., M. S. Valles, G. S. Burley, et al., Acquisition cameras and wavefront sensors for the GTC 10-m telescope, in *Astronomical Structures and Mechanisms Technology*, SPIE Proc. 5495, J. Antebi and D. Lemke, eds., p. 489, International Society for Optical Engineering, Bellingham, Wash., 2004.
- Krisciunas, K., N. B. Suntzeff, M. M. Phillips, P. Candia, J. L. Prieto, . . . M. Hamuy, W. Krzeminski, P. McCarthy, S. E. Persson, M. Roth, et al., Optical and infrared photometry of the type Ia supernovae 1991T, 1991bg, 1999ek, 2001bt, 2001cn, 2001cz, and 2002bo, *Astron. J.* 128, 3034, 2004.
- Labbe, I., et al., IRAC mid-infrared imaging of the Hubble Deep Field-South: star formation histories and stellar masses of red galaxies at  $z > 2$ , *Astrophys. J. Lett.* 624, L81, 2005.
- Laird, E. S., K. Nandra, K. L. Adelberger, et al., X-ray properties of UV-selected star-forming galaxies at  $z \sim 1$  in the Hubble Deep Field North, *Mon. Not. Roy. Astron. Soc.* 359, 47, 2005.
- Lauer, T. R., S. M. Faber, K. Gebhardt, D. Richstone, E. A. Ajhar, R. Bender, A. Dressler, A. V. Filippenko, R. Green, C. J. Grillmair, L. C. Ho, et al., The centers of early-type galaxies with Hubble Space Telescope. V. New WFC2 photometry, *Astron. J.* 129, 2138, 2005.
- Lee, Y.-W., C. H. Ree, R. M. Rich, J.-M. Deharveng, Y.-J. Sohn, . . . B. F. Madore, et al., The look-back time evolution of far-ultraviolet flux from elliptical galaxies: the Fornax cluster, *Astrophys. J. Lett.* 619, L103, 2005.
- Lisse, C. M., Y. R. Fernandez, M. F. A'Hearn, E. Grun, H. U. Kaufl, D. J. Osip, et al., A tale of two very different comets: ISO and MSX measurements of dust emission from 126/IRAS (1996) and 2P/Encke (1997), *Icarus* 171, 444, 2004.
- Madore, B. F., and W. L. Freedman, New surveys for companions to E and SO galaxies, in *Satellites and Tidal Streams*, ASP Conf. Series 327, F. Prada, D. M. Delgado, and T. J. Mahoney, eds., p. 178, Astronomical Society of the Pacific, San Francisco, 2004.
- Majewski, S. R., W. E. Kunkel, et al., A Two Micron All Sky Survey view of the Sagittarius dwarf galaxy. II. Swope Telescope spectroscopy of M giant stars in the dynamically cold Sagittarius tidal stream, *Astron. J.* 128, 245, 2004.
- Marmo, C., G. Fasano, E. Pignatelli, B. Poggianti, D. Bettoni, C. Halliday, J. Varela, M. Moles, P. Kjaergaard, W. Couch, and A. Dressler, Scaling relations for galaxy clusters, in *Outskirts of Galaxy Clusters: Intense Life in the Suburbs*, IAU Colloquium 195, A. Diaferio, ed., p. 242, Cambridge University Press, Cambridge, U.K., 2004.
- Marmo, C., E. Pignatelli, B. M. Poggianti, D. Bettoni, G. Fasano, M. Moles, P. Kjaergaard, J. Varela, W. Couch, and A. Dressler, WINGS: the first results, in *Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution*, Carnegie Observatories Astrophysics Series 3, J. S. Mulchaey, A. Dressler, and A. Oemler, eds., <http://www.ociw.edu/ociw/symposia/series/symposium3/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Marquez, I., M. Roth, et al., Comparing active and non-active galaxies, *Mem. Soc. Astron. Italiana* 76, 158, 2005.
- Martin, D. C., J. Fanson, D. Schiminovich, P. Morrissey, P. G. Friedman, . . . B. F. Madore, et al., *The Galaxy Evolution Explorer*: a space ultraviolet survey mission, *Astrophys. J. Lett.* 619, L1, 2005.
- Martin, D. C., M. Seibert, V. Buat, J. Iglesias-Paramo, T. A. Barlow, . . . B. F. Madore, et al., The star formation rate function of the local universe, *Astrophys. J. Lett.* 619, L59, 2005.
- Martini, P., and L. C. Ho, A population of massive globular clusters in NGC 5128, *Astrophys. J.* 610, 233, 2004.
- Martini, P., D. D. Kelson, J. S. Mulchaey, and A. Athey, New results on the AGN content of galaxy clusters, in *Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution*, Carnegie Observatories Astrophysics Series 3, J. S. Mulchaey, A. Dressler and A. Oemler, eds., <http://www.ociw.edu/ociw/symposia/series/symposium3/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Martini, P., S. E. Persson, D. C. Murphy, C. Birk, S. A. Sheckman, S. M. Gunnels, and E. Koch, PANIC: a near-infrared camera for the Magellan telescopes, in *Ground-based Instrumentation for Astronomy*, SPIE Proc. 5492, A. F. M. Moorwood and M. Iye, eds., p. 1653, International Society for Optical Engineering, Bellingham, Wash., 2004.
- Mazzali, P. A., S. Benetti, M. Stehle, D. Branch, J. Deng, K. Maeda, K. Nomoto, and M. Hamuy, High-velocity features in the spectra of the type Ia supernova SN 1999ee: a property of the explosion or evidence of circumstellar interaction? *Mon. Not. Roy. Astron. Soc.* 357, 200, 2005.
- McCarthy, P. J., EROs and faint red galaxies, *Annu. Rev. Astron. Astrophys.* 42, 477, 2004.
- McCarthy, P. J., et al., Evolved galaxies at  $z > 1.5$  from the Gemini Deep Deep Survey: the formation epoch of massive stellar systems, *Astrophys. J. Lett.* 614, L9, 2004.
- McWilliam, A., and M. Rauch, eds., *Origin and Evolution of the Elements*, Carnegie Observatories Astrophysics Series 4, Cambridge University Press, Cambridge, U.K., 2004.
- McWilliam, A., and R. M. Rich, Composition of the galactic bulge, in *Origin and Evolution of the Elements*, Carnegie Observatories Astrophysics Series 4, A. McWilliam and M. Rauch, eds., <http://www.ociw.edu/ociw/symposia/series/symposium4/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- McWilliam, A., and T. A. Smecker-Hane, The unusual abundance of copper in the Sagittarius dwarf spheroidal galaxy and implications for the origin of omega Centauri, *Astrophys. J. Lett.* 622, L29, 2005.
- Miller, J. M., A. Zezas, G. Fabbiano, and F. Schweizer, XMM-Newton spectroscopy of four bright ultraluminous x-ray sources in The Antennae Galaxies (NGC 4038/4039), *Astrophys. J.* 609, 728, 2004.
- Moran, E. C., M. Eracleous, K. M. Leighy, G. Chartas, A. V. Filippenko, L. C. Ho, and P. R. Blanco, Extreme x-ray behavior of the low-luminosity active nucleus of NGC 4395, *Astron. J.* 129, 2108, 2005.
- Morrissey, P., D. Schiminovich, T. A. Barlow, D. C. Martin, B. Blakkolb, . . . B. F. Madore, et al., The on-orbit performance of the *Galaxy Evolution Explorer*, *Astrophys. J. Lett.* 619, L7, 2005.
- Mulchaey, J. S., The intragroup medium, in *Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution*, Carnegie Observatories Astrophysics Series 3, J. S. Mulchaey, A. Dressler, and A. Oemler, eds., p. 353, Cambridge University Press, Cambridge, U.K., 2004.
- Mulchaey, J. S., A. Dressler, and A. Oemler, eds., *Clusters of Galaxies: Probes of Cosmological Structure and Galaxy Evolution*, Carnegie Observatories Astrophysics Series 3, Cambridge University Press, Cambridge, U.K., 2004.
- Nandra, K., E. S. Laird, K. L. Adelberger, et al., A deep Chandra survey of the Groth Strip - I. The x-ray data, *Mon. Not. Roy. Astron. Soc.* 356, 568, 2005.
- Neff, S. G., D. A. Thilker, M. Seibert, A. Gil de Paz, L. Bianchi, D. Schiminovich, D. C. Martin, B. F. Madore, et al., Ultraviolet emission from stellar populations within tidal tails: catching the youngest galaxies in formation? *Astrophys. J. Lett.* 619, L91, 2005.
- Noeske, K., D. Koo, P. Papaderos, J. Melbourne, A. Gil de Paz, et al., Blue compact galaxies in the Ultra Deep Field, in *Starbursts: From 30 Doradus to Lyman Break Galaxies*, Astrophys. Space Sci. Library 329, R. de Grijs and R. M. Gonzalez Delgado, eds., p. 52, Springer, Dordrecht, 2005.
- Nolan, L. A., T. J. Ponman, A. M. Read, and F. Schweizer, XMM-Newton observations of the merger-remnant galaxies NGC 3921 and NGC 7252, *Mon. Not. Roy. Astron. Soc.* 353, 221, 2004.
- Noll, K. S., D. C. Stephens, W. M. Grundy, D. J. Osip, and I. Griffin, The orbit and albedo of trans-Neptunian binary (58534) 1997 CQ<sub>29</sub>, *Astron. J.* 128, 2547, 2004.
- Osip, D. J., M. M. Phillips, R. Bernstein, G. Burley, A. Dressler, J. L. Elliot, E. Persson, S. A. Sheckman, and I. Thompson, First-generation instruments for the Magellan telescopes: characteristics, operation, and performance, in *Ground-based Instrumentation for Astronomy*, SPIE Proc. 5492, A. F. M. Moorwood and M. Iye, eds., p. 49, International Society for Optical Engineering, Bellingham, Wash., 2004.

- Persi, P., M. Gomez, M. Tapia, M. Roth, et al., Molecular hydrogen knots in Chamaeleon I dark cloud, *Mem. Soc. Astron. Italiana* 76, 384, 2005.
- Persi, P., M. Tapia, M. Gomez, M. Roth, and A. R. Marenzi, The enigmatic brown dwarf candidate [KG2001] 102 in the Chamaeleon I cloud: is it a multiple system? *Astron. Astrophys.* 431, 539, 2005.
- Persi, P., M. Tapia, M. Roth, et al., High mass star formation in the molecular cloud complex NGC 6334: NGC 6334E, in *Proceedings of the Dusty and Molecular Universe: A Prelude to Herschel and ALMA*, ESA SP 577, A. Wilson, ed., p. 407, European Space Agency Publications Division, Noordwijk, Netherlands, 2005.
- Persson, S. E., B. F. Madore, W. Krzemiński, W. L. Freedman, M. Roth, and D. C. Murphy, New Cepheid period-luminosity relations for the Large Magellanic Cloud: 92 near-infrared light curves, *Astron. J.* 128, 2239, 2004.
- Pihlstrom, Y. M., W. A. Baan, J. Darling, and H.-R. Kloeckner, High-resolution imaging of the OH megamaser emission in IRAS 12032+1707 and IRAS 14070+0525, *Astrophys. J.* 618, 705, 2005.
- Popescu, C. C., R. J. Tuffs, B. F. Madore, A. Gil de Paz, et al., A comparative study of the spatial distribution of ultraviolet and far-infrared fluxes from M101, *Astrophys. J. Lett.* 619, L75, 2005.
- Pourbaix, D., A. A. Tokovinin, A. H. Batten, F. C. Fekel, W. I. Hartkopf, H. Levato, N. Morrell, et al., S<sub>9</sub>: The ninth catalogue of spectroscopic binary orbits, *Astron. Astrophys.* 424, 727, 2004.
- Preston, G. W., Mount Wilson Observatory contributions to the study of cosmic abundances of the chemical elements, in *Origins and Evolution of the Elements*, Carnegie Observatories Astrophysics Series 4, A. McWilliam and M. Rauch, eds., p. 1, Cambridge University Press, Cambridge, U.K., 2004.
- Preston, G. W., and C. Sneden, Blue metal-poor stars, in *The A-Star Puzzle*, IAU Symp. 224, J. Zverko, et al., eds., p. 403, Cambridge University Press, Cambridge, U.K., 2004.
- Prochaska, J. X., J. S. Bloom, H.-W. Chen, K. C. Hurley, J. Melbourne, A. Dressler, D. J. Osip, and W. D. Vacca, The host galaxy of GRB 031203: implications of its low metallicity, low redshift, and starburst nature, *Astrophys. J.* 611, 200, 2004.
- Prochaska, J. X., H.-W. Chen, J. C. Howk, B. J. Weiner, and J. S. Mulchaey, Probing the intergalactic medium-galaxy connection toward PKS 0405-123. I. Ultraviolet spectroscopy and metal-line systems, *Astrophys. J.* 617, 718, 2004.
- Ravindranath, S., L. C. Ho, and A. V. Filippenko, Interpreting the nuclear cusp slopes and cores in early-type galaxies, in *Coevolution of Black Holes and Galaxies*, Carnegie Observatories Astrophysics Series 1, L. C. Ho, ed., <http://www.ociw.edu/ociw/symposia/series/symposium1/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Reindl, B., G. A. Tammann, A. Sandage and A. Saha, Reddening, absorption, and decline rate corrections for a complete sample of type Ia supernovae leading to a fully corrected Hubble Diagram to  $v < 30,000 \text{ km s}^{-1}$ , *Astrophys. J.* 624, 532, 2005.
- Rey, S.-C., R. M. Rich, Y.-W. Lee, S.-J. Yoon, S. K. Yi, . . . B. F. Madore, et al., *Galaxy Evolution Explorer* ultraviolet photometry of globular clusters in M31, *Astrophys. J. Lett.* 619, L119, 2005.
- Rich, R. M., C. E. Corsi, C. Cacciari, L. Federici, F. Fusi Pecci, S. G. Djorgovski, and W. L. Freedman, Hubble Space Telescope WFC2 color-magnitude diagrams for globular clusters in M31, *Astron. J.* 129, 2670, 2005.
- Rich, R. M., S. Salim, J. Brinchmann, S. Charlot, M. Seibert, . . . B. F. Madore, et al., Systematics of the ultraviolet rising flux in a GALEX/SDSS sample of early-type galaxies, *Astrophys. J. Lett.* 619, L107, 2005.
- Sadat, R., A. Blanchard, J.-P. Kneib, G. Mathez, B. Madore, and J. M. Mazzarella, Introducing BAX: a database for x-ray clusters and groups of galaxies, *Astron. Astrophys.* 424, 1097, 2004.
- Salim, S., S. Charlot, R. M. Rich, G. Kaufmann, T. M. Heckman, . . . B. F. Madore, et al., New constraints on the star formation histories and dust attenuation of galaxies in the local universe from GALEX, *Astrophys. J. Lett.* 619, L39, 2005.
- Sanchez Contreras, C., A. Gil de Paz, and R. Sahai, The companion to the central Mira star of the protoplanetary nebula OH 231.8+4.2, *Astrophys. J.* 616, 519, 2004.
- Sandage, A., Episodes in the development of the Hubble Galaxy Classification, in *Penetrating Bars through Masks of Cosmic Dust: The Hubble Tuning Fork Strikes a New Note*, Astrophys. Space Sci. Library 319, D. L. Block, et al., eds. p. 39, Springer, Dordrecht, 2004.
- Sandage, A., The metallicity dependence of the Fourier components of RR Lyrae light curves is the Oosterhoff-Arp-Preston Period Ratio Effect in disguise, *Astron. J.* 128, 858, 2004.
- Sandage, A., *The Mount Wilson Observatory: Breaking the Code of Cosmic Evolution (Centennial History of the Carnegie Institution of Washington)*, Vol. 1, Cambridge University Press, Cambridge, U.K., 2004.
- Sandage, A., G. A. Tammann, and B. Reindl, New period-luminosity and period-color relations of classical Cepheids. II. Cepheids in LMC, *Astron. Astrophys.* 424, 43, 2004.
- Sarzi, M., H.-W. Rix, J. C. Shields, L. C. Ho, et al., The stellar populations in the central parsecs of galactic bulges, in *The Interplay Among Black Holes, Stars, and ISM in Galactic Nuclei*, IAU Symposium 222, T. Storchi-Bergmann, L. C. Ho, and H. R. Schmitt, eds., p. 145, Cambridge University Press, Cambridge, U.K., 2004.
- Schiminovich, D., O. Ilbert, S. Arnouts, B. Milliard, L. Tresse, . . . B. F. Madore, et al., The GALEX-VVDS measurement of the evolution of the far-ultraviolet luminosity density and the cosmic star formation rate, *Astrophys. J. Lett.* 619, L47, 2005.
- Schweizer, F., Luminosity profiles of resolved young massive clusters, in *Formation and Evolution of Massive Young Star Clusters*, ASP Conf. Series 322, H. J. G. L. M. Lamers, A. Nota and L. J. Smith, eds., p. 111, Astronomical Society of the Pacific, San Francisco, 2004.
- Schweizer, F., Merger-induced starbursts, in *Starbursts: From 30 Doradus to Lyman-Break Galaxies*, R. de Grijs and R. M. Gonzalez Delgado, eds., p. 143, Springer, Dordrecht, 2005.
- Schweizer, F., P. Seitzer, and J. P. Brodie, Keck spectroscopy of two young globular clusters in the merger remnant NGC 3921, *Astron. J.* 128, 202, 2004.
- Seibert, M., T. Budavari, J. Rhee, S.-C. Rey, D. Schiminovich, . . . B. F. Madore, et al., GALEX observations of the Sloan Digital Sky Survey: a comparison, *Astrophys. J. Lett.* 619, L23, 2005.
- Seibert, M., D. C. Martin, T. M. Heckman, V. Buat, C. Hoopes, . . . B. F. Madore, et al., Testing the empirical relation between ultraviolet color and attenuation of galaxies, *Astrophys. J. Lett.* 619, L55, 2005.
- Shapley, A. E., D. K. Erb, M. Pettini, C. C. Steidel, and K. L. Adelberger, Evidence for solar metallicities in massive star-forming galaxies at  $z > 2$ , *Astrophys. J.* 612, 108, 2004.
- Shapley, A. E., C. C. Steidel, D. K. Erb, N. A. Reddy, K. L. Adelberger, et al., Ultraviolet to mid-infrared observations of star-forming galaxies at  $z \sim 2$ : stellar masses and stellar populations, *Astrophys. J.* 626, 698, 2005.
- Shectman, S., Instrumentation for the Giant Magellan Telescope, in *Second Backaskog Workshop on Extremely Large Telescopes*, SPIE Proc. 5382, A. L. Ardeberg and T. Andersen, eds., p. 699, International Society for Optical Engineering, Bellingham, Wash., 2004.
- Shields, J. C., A. J. Barth, A. V. Filippenko, L. C. Ho, et al., Nebular excitation of low-luminosity emission nuclei, in *The Interplay Among Black Holes, Stars, and ISM in Galactic Nuclei*, IAU Symposium 222, T. Storchi-Bergmann, L. C. Ho, and H. R. Schmitt, eds. p. 295, Cambridge University Press, Cambridge, U.K., 2004.
- Shields, J. C., H.-W. Rix, A. J. Barth, A. V. Filippenko, L. C. Ho, et al., Black holes as traced by weak active nuclei, in *Coevolution of Black Holes and Galaxies*, Carnegie Observatories Astrophysics Series 1, L. C. Ho, ed., <http://www.ociw.edu/symposia/series/symposium1/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Siegel, M. H., S. R. Majewski, C. Gallart, S. T. Sohn, W. E. Kunkel, and R. Braun, A search for stellar populations in high-velocity clouds, *Astrophys. J.* 623, 181, 2005.
- Simcoe, R. A., W. L. W. Sargent, and M. Rauch, Enrichment patterns of heavy elements in the tenuous IGM, in *Origin and Evolution of the Elements*, Carnegie Observatories Astrophysics Series 4, A. McWilliam and M. Rauch, eds., <http://www.ociw.edu/ociw/symposia/series/symposium4/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Smith, G. P., T. Treu, R. S. Ellis, S. M. Moran, and A. Dressler, Evolution since  $z = 1$  of the morphology-density relation for galaxies, *Astrophys. J.* 620, 78, 2005.
- Sneden, C., I. I. Ivans, and J. P. Fulbright, Globular clusters and halo field stars, in *Origin and Evolution of the Elements*, Carnegie Observatories Astrophysics Series 4, A. McWilliam and M. Rauch, eds., p. 170, Cambridge University Press, Cambridge, U.K., 2004.
- Soderberg, A. M., S. R. Kulkarni, E. Berger, et al., The radio and x-ray-luminous type Ibc supernova 2003L, *Astrophys. J.* 621, 908, 2005.
- Soderberg, A. M., S. R. Kulkarni, E. Berger, D. W. Fox, M. Sako, D. A. Frail, A. Gal-Yam, D. S. Moon, S. B. Cenko, S. A. Yost, M. M. Phillips, S. E. Persson, W. L. Freedman, P. Wyatt, et al., The sub-energetic gamma-ray burst 031203 as a cosmic analogue to the nearby GRB 980425, *Nature* 430, 648, 2004.
- Stanek, K. Z., P. M. Garnavich, P. A. Nutzman, J. D. Hartman, A. Garg, K. Adelberger, . . . D. Osip, et al., Deep photometry of GRB 041006 afterglow: hypernova bump at redshift  $z = 0.716$ , *Astrophys. J. Lett.* 626, L5, 2005.
- Steidel, C. C., K. L. Adelberger, et al., Spectroscopic identification of a protocluster at  $z = 2.300$ : environmental dependence of galaxy properties at high redshift, *Astrophys. J.* 626, 44, 2005.
- Stocke, J. T., B. A. Keeney, K. M. McLin, J. L. Rosenberg, R. J. Weymann, and M. L. Giroux, Discovery of a dwarf poststarburst galaxy near a high column density local Ly-alpha absorber, *Astrophys. J.* 609, 94, 2004.
- Storchi-Bergmann, T., L. C. Ho, and H. R. Schmitt, eds., *The Interplay Among Black Holes, Stars, and ISM in Galactic Nuclei*, IAU Symposium 222, Cambridge University Press, Cambridge, U.K., 2004.
- Suarez, M., R. Kohley, G. Burley, et al., GTC acquisition cameras and wavefront sensors, in *Scientific Detectors for Astronomy, The Beginning of a New Era*, P. Amico, J. W. Beletic and J. E. Beletic, eds., p. 459, Kluwer Academic Publishers, Dordrecht, 2004.
- Tapia, M., P. Persi, M. Roth, et al., The photodissociation region Car I: optical and near-infrared imaging, in *Proceedings of the Dusty and Molecular Universe: A Prelude to Herschel and ALMA*, ESA SP 577, A. Wilson, ed., p. 421, European Space Agency Publications Division, Noordwijk, Netherlands, 2005.
- Tapia, M., M. Roth, et al., Young and very young stars in NGC 3372, the Carina Nebula, in *Gravitational Collapse:*

- From Massive Stars to Planets, Rev. Mex. A & A Conf. Series 22, G. Garcia-Segura et al., eds., p. 73, Inst. Aston. Univ. Nacional Mexico, Mexico, D. F., 2004.
- Terashima, Y., L. C. Ho, and J. S. Ulvestad, Chandra detection of ultra-low-luminosity AGNs in nearby galaxies, in *The Interplay Among Black Holes, Stars, and ISM in Galactic Nuclei*, IAU Symposium 222, T. Storchi-Bergmann, L. C. Ho, and J. R. Schmitt, eds., p. 61, Cambridge University Press, Cambridge, U.K., 2004.
- Thilker, D. A., L. Bianchi, S. Boissier, A. Gil de Paz, B. F. Madore, et al., Recent star formation in the extreme outer disk of M83, *Astrophys. J. Lett.* 619, L79, 2005.
- Thilker, D. A., C. G. Hoopes, L. Bianchi, S. Boissier, R. M. Rich, . . . B. F. Madore, et al., Panoramic GALEX far- and near-ultraviolet imaging of M31 and M33, *Astrophys. J. Lett.* 619, L67, 2005.
- Tran, K.-V. H., M. Franx, G. D. Illingworth, D. D. Kelson, and P. van Dokkum, E+A galaxies in intermediate redshift clusters, in *Outskirts of Galaxy Clusters: Intense Life in the Suburbs*, IAU Colloquium 195, A. Diaferio, ed., p. 483, Cambridge University Press, Cambridge, U.K., 2004.
- Tran, K.-V. H., M. Franx, G. D. Illingworth, P. van Dokkum, D. D. Kelson, and D. Magee, Field E+A galaxies at intermediate redshifts ( $0.3 < z < 1$ ), *Astrophys. J.* 609, 683, 2004.
- Tran, K.-V. H., P. van Dokkum, G. D. Illingworth, D. Kelson, et al., Infall, the Butcher-Oemler Effect, and the descendants of blue cluster galaxies at  $z \sim 0.6$ , *Astrophys. J.* 619, 134, 2005.
- Trancho, G., B. W. Miller, F. Schweizer, and B. Whitmore, Star cluster population in NGC 7727, in *The Formation and Evolution of Massive Young Star Clusters*, ASP Conf. Series 322, H. J. G. L. M. Lamers, A. Nota, and L. J. Smith, eds., p. 219, Astronomical Society of the Pacific, San Francisco, 2004.
- Tremonti, C. A., T. M. Heckman, G. Kauffmann, J. Brinchmann, S. Charlot, . . . A. Uomoto, et al., The origin of the mass-metallicity relation: insights from 53,000 star-forming galaxies in the Sloan Digital Sky Survey, *Astrophys. J.* 613, 898, 2004.
- Treyer, M., T. K. Wyder, D. Schiminovich, S. Arnouts, T. Budavari, . . . B. F. Madore, et al., The ultraviolet galaxy luminosity function from GALEX data: color-dependent evolution at low redshift, *Astrophys. J. Lett.* 619, L19, 2005.
- Tuffs, R. J., C. C. Popescu, H. J. Volk, B. F. Madore, and A. Gil de Paz, The nature of the cold dust surrounding gas-rich dwarf galaxies in the Virgo cluster, in *Proceedings of the Dusty and Molecular Universe*, ESA SP-577, A. Wilson, ed., p. 333, ESA Publications Division, Noordwijk, Netherlands, 2005.
- Venemans, B. P., H. J. A. Rottgering, G. K. Miley, J. D. Kurk, C. de Breuck, . . . P. J. McCarthy, Properties of Ly-alpha emitters around radio galaxy MRC 0316 257, *Astron. Astrophys.* 431, 793, 2005.
- Venemans, B. P., H. J. A. Rottgering, R. A. Overzier, G. K. Miley, C. de Breuck, . . . P. McCarthy, et al., Discovery of six Ly-alpha emitters near a radio galaxy at  $z \sim 5.2$ , *Astron. Astrophys.* 424, L17, 2004.
- von Braun, K., B. L. Lee, S. Seager, H. K. C. Yee, G. Mallen-Ornelas, and M. D. Gladders, Searching for planetary transits in galactic open clusters: EXPLORE/OC, *Pub. Astron. Soc. Pacific* 117, 141, 2005.
- Walcher, C. J., N. Haering, T. Boeker, H.-W. Rix, R. van der Marel, J. Gerssen, L. C. Ho, and J. C. Shields, Nuclear star clusters in bulgeless galaxies, in *Coevolution of Black Holes and Galaxies*, Carnegie Observatories Astrophysics Series 1, L. C. Ho, ed., <http://www.ociw.edu/ociw/symposia/sier/symposium1/proceedings.html>, Carnegie Observatories, Pasadena, Calif., 2004.
- Walcher, C. J., R. P. van der Marel, D. McLaughlin, H.-W. Rix, T. Boeker, N. Haering, L. C. Ho, et al., Masses of star clusters in the nuclei of bulgeless spiral galaxies, *Astrophys. J.* 618, 237, 2005.
- Wang, J.-M., B. Luo, and L. C. Ho, The connection between jets, accretion disks, and black hole mass in blazars, *Astrophys. J. Lett.* 615, L9, 2004.
- Wang, J.-M., Y.-F. Yuan, and L. C. Ho, The afterglows of ultraluminous quasars, *Astrophys. J. Lett.* 625, L5, 2005.
- Webb, T., H. K. C. Yee, H. Hoekstra, and M. D. Gladders, A submm survey of high-redshift galaxy clusters: a submm Butcher-Oemler effect? in *Outskirts of Galaxy Clusters: Intense Life in the Suburbs*, IAU Coll. 195, A. Diaferio, ed., p. 357, Cambridge University Press, Cambridge, U.K., 2004.
- Wheatley, J. M., B. Y. Welsh, O. H. W. Siegmund, Y.-I. Byun, S. Yi, Y.-W. Lee, B. F. Madore, et al., Large-amplitude ultraviolet variations in the RR Lyrae star ROTSE-I J143753.84+345924.8, *Astrophys. J. Lett.* 619, L123, 2005.
- Wilman, D. J., M. L. Balogh, R. G. Bower, J. S. Mulchaey, A. Oemler, et al., Galaxy groups at  $0.3 \leq z \leq 0.55$  - I. Group properties, *Mon. Not. Roy. Astron. Soc.* 358, 71, 2005.
- Wilman, D. J., M. L. Balogh, R. G. Bower, J. S. Mulchaey, A. Oemler, et al., Galaxy groups at  $0.3 \leq z \leq 0.55$  - II. Evolution to  $z \sim 0$ , *Mon. Not. Roy. Astron. Soc.* 358, 88, 2005.
- Wyder, T. K., M. A. Treyer, B. Milliard, D. Schiminovich, S. Arnouts, . . . B. F. Madore, et al., The ultraviolet galaxy luminosity function in the local universe from GALEX data, *Astrophys. J. Lett.* 619, L15, 2005.
- Xu, C. K., J. Donas, S. Arnouts, T. K. Wyder, M. Seibert, . . . B. F. Madore, et al., Number counts of GALEX sources in far-ultraviolet (1530 angstroms) and near-ultraviolet (2310 angstroms) bands, *Astrophys. J. Lett.* 619, L11, 2005.
- Xu, C. K., J. Iglesias-Paramo, D. Bugarella, R. M. Rich, S. G. Neff, . . . B. F. Madore, et al., Ultraviolet emission and star formation in Stephan's Quartet, *Astrophys. J. Lett.* 619, L95, 2005.
- Yi, S. K., S.-J. Yoon, S. Kaviraj, J.-M. Deharveng, R. M. Rich, . . . B. F. Madore, et al., *Galaxy Evolution Explorer* ultraviolet color-magnitude relations and evidence of recent star formation in early-type galaxies, *Astrophys. J. Lett.* 619, L111, 2005.
- Zaritsky, D., J. Harris, I. B. Thompson, and E. K. Grebel, The Magellanic Clouds Photometric Survey: The Large Magellanic Cloud Stellar Catalog and Extinction Map, *Astron. J.* 128, 1606, 2004.
- Zezas, A., G. Fabbiano, A. Baldi, A. R. King, T. J. Ponman, J. C. Raymond, and F. Schweizer, Chandra monitoring observation of The Antennae Galaxies: the x-ray source populations and the shape of their luminosity function, *Rev. Mex. Astron. Astrofis.* 20, 53, 2004.
- PLANT BIOLOGY**
- Bard, J., S. Y. Rhee, and M. Ashburner, An ontology for cell types, *Genome Biol.* 6, R21, 2005.
- Berardini, T. A., and S. Y. Rhee, *Arabidopsis thaliana*: characteristics and annotation of a model genome, in *Encyclopedia of Plant and Crop Science*, R. M. Goodman, ed., pp. 47-50, Marcel Dekker, New York, 2004.
- Bogomolni, R. A., T. E. Swartz, and W. R. Briggs, Proton transfer reactions in VLO-domain photochemistry, in *Light Sensing in Plants*, M. Wada, K. Shimizaki, and M. Iino, eds., pp. 147-154, Springer-Verlag, Tokyo, 2005.
- Briggs, W. R., Coe kaleidoscope: a year of colors on Pine Ridge, *Bay Nature* 5, 6-9, 23, 2005.
- Briggs, W. R., Epilogue: eighteen years of progress in photomorphogenesis, in *Light Sensing in Plants*, M. Wada, K. Shimizaki, and M. Iino, eds., pp. 357-362, Springer-Verlag, Tokyo, 2005.
- Briggs, W. R., Phototropin overview, in *Light Sensing in Plants*, M. Wada, K. Shimizaki, and M. Iino, eds., pp. 139-146, Springer-Verlag, Tokyo, 2005.
- Chang, C. W., J. L. Moseley, D. Wykoff, and A. R. Grossman, The LPB1 gene is important for acclimation of *Chlamydomonas reinhardtii* to phosphorus and sulfur deprivation, *Plant Physiol.* 138, 319-329, 2005.
- Christie, J. M., and W. R. Briggs, Blue light sensing and signaling by the phototropins, in *Handbook of Photosensory Receptors*, W. R. Briggs and J. L. Spudis, eds., pp. 277-303, John Wiley, Hoboken, N.J., 2005.
- Cutler, S., and C. R. Somerville, GFP-Nit1 aggregation marks an early step of wound and herbicide induced cell death, *BMC Plant Biol.* 5, 4, 2005.
- Deuschle, K., M. Fehr, M. Hilpert, I. Lager, S. Lalonde, L. L. Looger, S. Okumoto, J. Persson, A. Schmidt, and W. B. Frommer, Genetically encoded sensors for metabolites, *Cytometry* 64A, 3-9, 2005.
- Deuschle, K., S. Okumoto, M. Fehr, L. L. Looger, L. Kozhukh, and W. B. Frommer, Construction and optimization of a family of genetically encoded metabolite sensors by semirational protein engineering, *Protein Sci.* 14, 2304-2314, 2005.
- Elrad, D., and A. R. Grossman, A genome's-eye view of the light-harvesting polypeptides of *Chlamydomonas reinhardtii*, *Curr. Genetics* 45, 61-75, 2004.
- Eriksson, M., J. L. Moseley, S. Tottey, J. A. del Campo, J. Quinn, Y. Kim, and S. Merchant, Genetic dissection of nutritional copper signaling in *Chlamydomonas* distinguishes regulatory and target genes, *Genetics* 168, 795-807, 2004.
- Fehr, M., S. Okumoto, K. Deuschle, I. Lager, L. L. Looger, J. Persson, L. Kozhukh, S. Lalonde, and W. B. Frommer, Development and use of fluorescent nanosensors for metabolite imaging in living cells, *Biochem. Soc. Trans.* 33, 287-290, 2005.
- Fehr, M., H. Takanaga, D. W. Ehrhardt, and W. B. Frommer, Evidence for high-capacity bidirectional glucose transport across the ER membrane by genetically encoded FRET nanosensors, *Mol. Cell Biol.*, in press, 2005.
- Gillmor, C. S., W. Lukowitz, G. Brininstool, J. C. Sedbrook, T. Hamann, P. Poindexter, and C. Somerville, Lycopylphosphatidyl inositol-anchored proteins are required for cell wall synthesis and morphogenesis in *Arabidopsis*, *Plant Cell* 17, 1128-1140, 2005.
- Grossman, A.R., Paths toward algal genomics, *Plant Physiol.* 137, 410-437, 2005.
- He, J. X., J. M. Gendron, Y. Sun, S. S. L. Gampala, N. Gendron, C. Q. Sun, and Z. Y. Wang, BZR1 is a transcriptional repressor with dual roles in brassinosteroid homeostasis and growth responses, *Science* 307, 1634-1638, 2005.
- Im, C. S., M. Lohr, and A. R. Grossman, Genome-Based Examination of Chlorophyll and Carotenoid Biosynthesis in *Chlamydomonas reinhardtii*, *Plant Physiol.* 138, 490-515, 2005.
- Jenik, P. D., and M. K. Barton, Surge and destroy: the role of auxin in plant embryogenesis, *Development* 132, 3577-3585, 2005.
- Jenik, P. D., R. J. Jurkuta, and K. Barton, Interactions between the cell cycle and embryonic patterning in *Arabidopsis* uncovered by a mutation in DNA polymerase epsilon, *Dev. Biol.* 283, 627, 2005.
- Jenkins, H., N. Hardy, M. Beckmann, J. Draper, A. R. Smith, J. Taylor, O. Fiehn, R. Goodacre, R. J. Bino, R. Hall, K. Kopka, B. M. Lange, J. R. Liu, P. Mendes, B. J. Nikolau, S. G. Oliver, N. W. Paton, S. Y. Rhee, U.

- Roessner-Tunali, K. Saito, J. Smedsgaard, L. W. Sumner, E. S. Wurtele, and D. B. Kell, A proposed framework for the description of plant metabolomics experiments and their results, *Nature Biotechnology* 22, 1601-1606, 2004.
- Kaplinsky, N. J., and M. K. Barton, Plant biology-plant acupuncture: sticking PINs in the right places, *Science* 306, 822-823, 2004.
- Koh, S., A. André, H. Edwards, D. Ehrhardt, and S. Somerville, *Arabidopsis thaliana* subcellular responses to compatible *Erysiphe cichoracearum* infections, *Plant J.* 44, 516-529, 2005.
- Krummenacker, M., S. Paley, L. Mueller, T. Yan, and P. D. Karp, Querying and computing with BioCyc databases, *Bioinformatics* 21, 3454-3455, 2005. [Epub 2005 Jun 16. PMID: 15961440]
- Lalonde, S., L. L. Looger, and W. B. Frommer, Shining light on signaling and metabolic networks by genetically encoded biosensors, *Curr. Opin. Plant Sci.* 8, 1-8, 2005.
- Lalonde, S., D. Wipf, and W. B. Frommer, Transport mechanisms for carbon and nitrogen between source and sink, *Annu. Rev. Plant Biol.* 55, 341-372, 2004.
- Lohr, M., C. S. Im, and A. R. Grossman, Genome-based examination of chlorophyll and carotenoid biosynthesis in *Chlamydomonas reinhardtii*, *Plant Physiol.* 138, 490-515, 2005.
- Looger, L. L., S. Lalonde, and W. B. Frommer, Genetically encoded FRET sensors for visualizing metabolites with subcellular resolution in living cells, *Plant Physiol.* 138, 555-557, 2005.
- Mission, J., K. G. Roghothama, A. Jain, J. Jouhet, M. A. Block, R. Bigny, P. Ortet, A. Creff, S. Somerville, N. Rolland, P. Doumas, P. Nacry, L. Herrera-Estrella, L. Nussaume, and M.-C. Thibaud, A genome-wide transcriptional analysis using *Arabidopsis thaliana* Affymetrix gene chips determined plant responses to phosphate deprivation, *Proc. Natl. Acad. Sci. USA* 102, 11934-11939, 2005.
- Okumoto, S., K. Deuschle, M. Fehr, M. Hilpert, I. Lager, S. Lalonde, L. L. Looger, J. Persson, A. Schmidt, and W. B. Frommer, Genetically encoded sensors for ions and metabolites, *J. Plant Nutr. Soil Sci.* 50, 947-953, 2004.
- Okumoto, S., L. L. Looger, K. D. Micheva, R. J. Reimer, S. J. Smith, and W. B. Frommer, Detection of glutamate release from neurons by genetically encoded surface-displayed FRET nanosensors, *Proc. Natl. Acad. Sci. USA* 102, 8740-8745, 2005.
- Okumoto, S., M. Tegeder, W. N. Fischer, W. Koch, and W. B. Frommer, Phloem-specific expression in roots of the plasma membrane amino acid proton co-transporter AAP3, *J. Exp. Bot.* 55, 2155-2168, 2004.
- Persson, S., H. R. Wei, J. Milne, G. P. Page, and C. R. Somerville, Large-scale coexpression analysis reveals novel genes involved in cellulose biosynthesis, *Proc. Natl. Acad. Sci. USA* 102, 8633-8638, 2005.
- Pott, M. B., F. Hippauf, S. Saschenbrecker, F. Chen, J. Ross, I. Kiefer, A. Slusarenko, J. P. Noel, E. Pichersky, U. Efmert, and B. Piechulla, Biochemical and structural characterization of benzenoid carboxyl methyltransferases involved in floral scent production in *Stephanotis floribunda* and *Nicotiana suaveolens*, *Plant Physiol.* 135, 1946-1955, 2004.
- Ramonell, K., M. Berrocal-Lobo, S. Koh, J. Wan, H. Edwards, G. Stacey, and S. Somerville, Loss-of-function mutations in four chitin responsive genes show increased susceptibility to the powdery mildew pathogen, *Erysiphe cichoracearum*, *Plant Physiol.* 138, 1027-1036, 2005.
- Rhee, S. Y., Bioinformatics. Current limitations and insights for the future, *Plant Physiol.* 138, 569-570, 2005.
- Rhee, S. Y., and B. Crosby, Biological databases for plant research, *Plant Physiol.* 138, 1-3, 2005.
- Schlueter, S. D., M. D. Wilkerson, E. Huala, S. Y. Rhee, and V. Brendel, Community-based gene structure annotation, *Trends Plant Sci.* 10, 9-14, 2005.
- Sedbrook, J. C., S. E. Fisher, W. Scheible, C. R. Somerville, and D. W. Ehrhardt, The *Arabidopsis* SPR1 gene encodes a novel plant specific microtubule plus-end interacting protein involved in directional cell expansion, paper delivered at the 44<sup>th</sup> Annual Meeting of the American Society for Cell Biology, Washington, D.C., December 4-8, 2004.
- Silady, R. A., T. Kato, W. Lukowitz, P. Sieber, M. Tasaka, and C. R. Somerville, The gravitropism defective 2 Mutants of *Arabidopsis* are deficient in a protein implicated in endocytosis in *Caenorhabditis elegans*, *Plant Physiol.* 136, 3095-3103, 2004.
- Somerville, C., S. Bauer, G. Brininistool, M. Facette, T. Hamann, J. Milne, E. Osborne, A. Paredez, S. Persson, T. Raab, S. Vorwerk, and H. Youngs, Toward a systems approach to understanding plant cell walls, *Science* 306, 2206-2211, 2004.
- Su, Y. H., W. B. Frommer, and U. Ludewig, Molecular and functional characterization of a family of amino acid transporters from *Arabidopsis*, *Plant Physiol.* 136, 3104-3113, 2004.
- Swartz, T. E., H. G. Tran, S. A. Kay, W. R. Briggs, and R. Bogomolni, LOV-domain containing proteins in *Arabidopsis*, in *Light Sensing in Plants*, M. Wada, K. Shimizaki, M. Iino, eds., pp. 163-169, Springer-Verlag, Tokyo, 2005.
- Tseng, T. S., P. A. Salome, C. R. McClung, and N. E. Olszewski, SPINDLY and GIGANTEA interact and act in *Arabidopsis thaliana* pathways involved in light responses, flowering, and rhythms in cotyledon movements, *Plant Cell* 16, 1550-1563, 2004.
- Vogel, J. P., T. K. Raab, C. R. Somerville, and S. C. Somerville, Mutations in PMR5 result in powdery mildew resistance and altered cell wall composition, *Plant J.* 40, 968-978, 2004.
- Wang, Y., Z. H. Sun, K. M. Horken, C. S. Im, Y. B. Xiang, A. R. Grossman, and D. P. Weeks, Analyses of CIA5, the master regulator of the carbon-concentrating mechanism in *Chlamydomonas reinhardtii*, and its control of gene expression, *Canadian Journal of Botany-Revue Canadienne de Botanique* 83, 765-779, 2005.
- Wang, Z. Y., and J. X. He, Brassinosteroid signal transduction: choices of signals and receptors, *Trends Plant Sci.* 9, 91-96, 2004.
- Yan, T., D. Yoo, T. Z. Berardini, L. A. Mueller, D. C. Weems, S. Weng, J. M. Cherry, and S. Y. Rhee, PatMatch: a program for finding patterns in peptide and nucleotide sequences, *Nucl. Acids Res.* 33, W262-W266, 2005.
- Zhang, P. F., H. Foerster, C. P. Tissier, L. Mueller, S. Paley, P. D. Karp, and S. Y. Rhee, MetaCyc and AraCyc. Metabolic pathway databases for plant research, *Plant Physiol.* 138, 27-37, 2005.
- Zhang, X., S. G. Fowler, H. M. Cheng, Y. G. Lou, S. Y. Rhee, E. J. Stockinger, and M. F. Thomashow, Freezing-sensitive tomato has a functional CBF cold response pathway, but a CBF regulon that differs from that of freezing-tolerant *Arabidopsis*, *Plant J.* 39, 905-919, 2004.
- Zimmerli, L., and S. Somerville, Transcriptomics in plants: from expression to gene function in *Plant Functional Genomics*, D. Leister, ed., pp. 55-84, Haworth Food Products Press, Binghamton, N.Y., 2005.
- Zimmerli, L., M. Stein, V. Lipka, P. Schulze-Lefert, and S. Somerville, Host and nonhost pathogens elicit different jasmonate/ethylene response in *Arabidopsis*, *Plant J.* 40, 633-646, 2004.

## TERRESTRIAL MAGNETISM

Here updated through September 30, 2005. Reprints of the numbered publications listed below can be obtained, except where noted, at no charge from the Librarian, Department of Terrestrial Magnetism, 5241 Broad Branch Road, N.W., Washington, D.C. 20015-1305 (e-mail: library@dtm.ciw.edu). When ordering, please give reprint number(s). The list is regularly updated on the DTM Web site (<http://www.dtm.ciw.edu/content/view/116/132/>).

- 6192 Alard, O., A. Lugué, N. J. Pearson, W. L. Griffin, J.-P. Lorand, A. Gannoun, K. W. Burton, and S. Y. O'Reilly, *In situ* Os isotopes in abyssal peridotites bridge the isotopic gap between MORBs and their source mantle, *Nature* 436, 1005-1008, 2005. (No reprints available.)
- 6193 Alexander, C. M. O'D., Re-examining the role of chondrules in producing the elemental fractionations in chondrites, *Meteoritics Planet. Sci.* 40, 943-965, 2005.
- \_\_\_\_ Alexander, C. M. O'D., From supernovae to planets: the view from meteorites and IDPs, in *Chondrites and the Protoplanetary Disk*, A. N. Krot, E. R. D. Scott, and B. Reipurth, eds., Astronomical Society of the Pacific, San Francisco, in press.
- 6189 Alexander, C. M. O'D., and J. N. Grossman, Alkali elemental and potassium isotopic compositions of Semarkona chondrites, *Meteoritics Planet. Sci.* 40, 541-556, 2005.
- 6143 Arrowsmith, S. J., M. Kendall, N. White, J. C. VanDecar, and D. C. Booth, Seismic imaging of a hot upwelling beneath the British Isles, *Geology* 33, 345-348, 2005. (No reprints available.)
- 6136 Aubaud, C., E. H. Hauri, and M. M. Hirschmann, Hydrogen partition coefficients between nominally anhydrous minerals and basaltic melts, *Geophys. Res. Lett.* 31, L20611, 10.1029/2004GL021341, 2004. (No reprints available.)
- \_\_\_\_ Becklin, E. E., J. Farihi, M. Jura, I. Song, A. J. Weinberger, and B. Zuckerman, A dusty disk around GD 362, a white dwarf with a uniquely high photospheric metal abundance, *Astrophys. J.*, in press.
- 6144 Bedding, T. R., H. Kjeldsen, F. Bouchy, H. Bruntt, R. P. Butler, D. L. Buzasi, J. Christensen-Dalsgaard, S. Frandsen, J.-C. Lebrun, M. Maric, and J. Schou, The non-detection of oscillations in Procyon by MOST: is it really a surprise?, *Astron. Astrophys.* 432, L43-L48, 2005. (No reprints available.)
- 6137 Behn, M. D., J. Lin, and M. T. Zuber, Effects of hydrothermal cooling and magma injection on mid-ocean ridge temperature structure, deformation, and axial morphology, in *Mid-Ocean Ridges: Hydrothermal Interactions between the Lithosphere and Oceans*, C. R. German, J. Lin, and L. M. Parson, eds., pp. 151-166, American Geophysical Union, Washington, D.C., 2004. (No reprints available.)
- \_\_\_\_ Bell, D., M. Gregoire, T. Grove, N. Chatterjee, R. Carlson, and P. Buseck, Silica and volatile-element metasomatism of Archean mantle: a xenolith-scale example from the Kaapvaal Craton, *Contrib. Mineral. Petrol.*, in press.
- 6194 Bickford, M. E., T. D. Mock, W. E. Steinhart, III, K. D. Collerson, and J. F. Lewry, Origin of the Archean Sask craton and its extent within the Trans-Hudson orogen: evidence from Pb and Nd isotopic compositions of base-metal rocks and post-orogenic intrusions, *Can. J. Earth Sci.* 42, 659-684, 2005. (No reprints available.)
- 6172 Borucki, W., D. Koch, A. Boss, E. Dunham, A. Dupree, J. Geary, R. Gilliland, S. Howell, J. Jenkins, Y. Kondo, D. Latham, J. Lissauer, and H. Reitsema, The Kepler mission: a technical overview, in *Second Eddington Workshop: Stellar Structure and Habitable Planet Finding*, F. Favata, S. Aigrain, and A. Wilson, eds., pp. 177-182, Special Publication SP-538, European Space Agency, Noordwijk, Netherlands, 2004. (No reprints available.)

- 6135 Boss, A. P., Evolution of the solar nebula. VI. Mixing and transport of isotopic heterogeneity, *Astrophys. J.* 616, 1265-1277, 2004.
- 6139 Boss, A. P., Early solar system: shock fronts in Hawaii, *Nature* 432, 957-958, 2004.
- 6146 Boss, A. P., Collapse and fragmentation of molecular cloud cores. VIII. Magnetically supported infinite sheets, *Astrophys. J.* 622, 393-403, 2005.
- 6174 Boss, A. P., Modes of gaseous planet formation, in *Planetary Systems in the Universe: Observation, Formation, and Evolution*, A. Penny et al., eds., pp. 141-148, International Astronomical Union Symposium 202, Astronomical Society of the Pacific, San Francisco, 2004.
- 6175 Boss, A. P., From molecular clouds to circumstellar disks, in *Comets II*, M. C. Festou, H. U. Keller, and H. A. Weaver, eds., pp. 67-80, University of Arizona Press, Tucson, 2004.
- 6191 Boss, A. P., Evolution of the solar nebula. VII. Formation and survival of protoplanets formed by disk instability, *Astrophys. J.* 629, 535-548, 2005.
- 6212 Boss, A. P., Formation of gas and ice giant planets, in *EPSL Frontiers, Collection 2002-2003*, A. Halliday, ed., pp. 17-27, Elsevier, Amsterdam, 2004. [Reprinted from *Earth Planet. Sci. Lett.* 202, 513-523, 2002.] (No reprints available.)
- \_\_\_\_ Boss, A. P., Cosmogonical heresy, *Explorer*, in press.
- \_\_\_\_ Boss, A. P., Extrasolar planets: past, present, and future, in *A Decade of Extrasolar Planets around Normal Stars*, Cambridge University Press, in press.
- \_\_\_\_ Boss, A. P., Giant planet formation: theories meet observations, in *Planet Formation 2004: Observations, Experiments, and Theory*, H. Klahr and W. Brandner, eds., Cambridge University Press, Cambridge, in press.
- \_\_\_\_ Boss, A. P., Outlook: testing planet formation theories, *Space Sci. Rev.*, in press.
- \_\_\_\_ Boss, A. P., Solar system, in *McGraw-Hill Encyclopedia of Science and Technology*, 10th ed., McGraw-Hill, New York, in press.
- 6145 Boss, A. P., and R. H. Durisen, Chondrule-forming shock fronts in the solar nebula: a possible unified scenario for planet and chondrite formation, *Astrophys. J. (Lett.)* 621, L137-L140, 2005.
- \_\_\_\_ Boss, A. P., and R. H. Durisen, Sources of shock waves in the protoplanetary disk, in *Chondrites and the Protoplanetary Disk*, A. N. Krot, E. R. D. Scott, and B. Reipurth, eds., Astronomical Society of the Pacific, San Francisco, in press.
- \_\_\_\_ Boss, A. P., and J. N. Goswami, Presolar cloud collapse and the formation and early evolution of the solar nebula, in *Meteorites and the Early Solar System II*, D. Lauretta, L. A. Leshin, and H. Y. McSween, Jr., eds., University of Arizona Press, Tucson, in press.
- 6195 Boyet, M., and R. W. Carlson, <sup>142</sup>Nd evidence for early (> 4.53 Ga) global differentiation of the silicate Earth, *Science* 309, 576-581, 2005.
- 6167 Brown, L., Isotopic analysis, in *Encyclopedia of 20th-Century Technology*, C. A. Hempstead and W. E. Worthington, Jr., eds., Vol. 1, pp. 450-451, Routledge, New York, 2004. (No reprints available.)
- 6168 Brown, L., Radar, Defensive systems in World War II, in *Encyclopedia of 20th-Century Technology*, C. A. Hempstead and W. E. Worthington, Jr., eds., Vol. 2, pp. 623-625, Routledge, New York, 2004. (No reprints available.)
- 6169 Brown, L., Radar, Origins to 1939, in *Encyclopedia of 20th-Century Technology*, C. A. Hempstead and W. E. Worthington, Jr., eds., Vol. 2, pp. 632-633, Routledge, New York, 2004. (No reprints available.)
- 6170 Brown, L., Radioactive dating, in *Encyclopedia of 20th-Century Technology*, C. A. Hempstead and W. E. Worthington, Jr., eds., Vol. 2, pp. 650-652, Routledge, New York, 2004. (No reprints available.)
- \_\_\_\_ Busemann, H., F. Bühler, A. Grimberg, V. S. Heber, Yu. N. Agafonov, H. Baur, P. Bochsler, N. A. Eismont, R. Wieler, and G. N. Zastenker, Interstellar helium trapped with the COLLISA experiment on the Mir space station—improved isotope analysis by in-vacuo etching, *Astrophys. J.*, in press.
- \_\_\_\_ Butler, R. P., Extrasolar planets and the implications for life, in *Planets and Life: the Emerging Science of Astrobiology*, W. T. Sullivan and J. A. Baross, eds., Cambridge University Press, in press.
- 6173 Butler, R. P., G. W. Marcy, D. A. Fischer, S. S. Vogt, C. G. Tinney, H. R. A. Jones, A. J. Penny, and K. Apps, Statistical properties of extrasolar planets, in *Planetary Systems in the Universe: Observation, Formation, and Evolution*, A. Penny et al., eds., pp. 3-11, International Astronomical Union Symposium 202, Astronomical Society of the Pacific, San Francisco, 2004.
- 6140 Butler, R. P., S. S. Vogt, G. W. Marcy, D. A. Fischer, J. T. Wright, G. W. Henry, G. Laughlin, and J. J. Lissauer, A Neptune-mass planet orbiting the nearby M dwarf GJ436, *Astrophys. J.* 617, 580-588, 2004. (No reprints available.)
- 6196 Carlson, R. W., Application of the Pt-Re-Os isotopic systems to mantle geochemistry and geochronology, *Lithos* 82, 249-272, 2005.
- 6147 Carlson, R. W., D. G. Pearson, and D. E. James, Physical, chemical, and chronological characteristics of continental mantle, *Rev. Geophys.* 43, RG1001, 10.1029/2004RG000156, 2005.
- 6148 Chadwick, J., M. Perfit, I. Ridley, G. Kamenov, W. Chadwick, R. Embley, P. le Roux, and M. Smith, Magmatic effects of the Cobb hot spot on the Juan de Fuca Ridge, *J. Geophys. Res.* 110, B03101, 10.1029/2003JB002767, 2005. (No reprints available.)
- \_\_\_\_ Chambers, J. E., Meteoritic diversity and planet formation, in *Meteorites and the Early Solar System II*, D. S. Lauretta and H. Y. McSween, Jr., eds., University of Arizona Press, Tucson, in press.
- 6133 Chandar, R., B. Whitmore, and M. G. Lee, The globular cluster systems of five nearby spiral galaxies: new insights from *Hubble Space Telescope* imaging, *Astrophys. J.* 611, 220-244, 2004. (No reprints available.)
- 6188 Clampin, M., G. J. Melnick, R. G. Lyon, H. Ford, J. R. P. Angel, D. Y. Gezari, D. A. Golimowski, G. F. Hartig, M. Harwit, M. Holman, G. D. Illingworth, S. Kenyon, D. N. Lin, M. Marley, S. S. Olivier, L. Petro, D. D. Sasselov, J. L. Schneider, S. Seager, M. Shao, W. B. Sparks, V. Tollis, A. Weinberger, H. Smith, R. C. Carter, R. A. Woodruff, B. Hyatt, S. E. Kendrick, and D. Purmot, Extrasolar Planetary Imaging Coronagraph (EPIC), in *Optical, Infrared, and Millimeter Space Telescopes*, J. C. Mather, ed., pp. 1538-1544, SPIE Proceedings Vol. 5487, SPIE, Bellingham, Wash., 2004. (No reprints available.)
- 6171 Clayton, D. D., and L. R. Nittler, Presolar stardust grains, in *Origin and Evolution of the Elements*, A. McWilliam and M. Rauch, eds., pp. 297-316, Carnegie Observatories Astrophysics Series, Vol. 4, Cambridge University Press, Cambridge and New York, 2004. (No reprints available.)
- 6149 Cody, G. D., and C. M. O'D. Alexander, NMR studies of chemical structural variation of insoluble organic matter from different carbonaceous chondrite groups, *Geochim. Cosmochim. Acta* 69, 1085-1097, 2005.
- \_\_\_\_ Conticelli, S., R. W. Carlson, E. Widom, and G. Serri, Chemical and isotopic composition (Os, Pb, Nd and Sr) of Neogene to Quaternary calc-alkalic, shoshonitic, and ultrapotassic mafic rocks from the Italian peninsula: inferences on the nature of their mantle sources, *Geol. Soc. Am. Bull.*, in press.
- 6197 Cowie, P. A., J. R. Underhill, M. D. Behn, J. Lin, and C. E. Gill, Spatio-temporal evolution of strain accumulation derived from multi-scale observations of Late Jurassic rifting in the northern North Sea: a critical test of models for lithospheric extension, *Earth Planet. Sci. Lett.* 234, 401-419, 2005. (No reprints available.)
- \_\_\_\_ Davis, A. M., C. M. O'D. Alexander, H. Nagahara, and F. M. Richter, Evaporation and condensation during CAI and chondrule formation, in *Chondrites and the Protoplanetary Disk*, A. N. Krot, E. R. D. Scott, and B. Reipurth, eds., Astronomical Society of the Pacific, San Francisco, in press.
- 6198 de Moor, J. M., T. P. Fischer, D. R. Hilton, E. Hauri, L. A. Jaffe, and J. T. Camacho, Degassing at Anatahan volcano during the May 2003 eruption: implications from petrology, ash leachates, and SO<sub>2</sub> emissions, *J. Volcanol. Geotherm. Res.* 146, 117-138, 2005. (No reprints available.)
- 6150 Deleuil, M., J.-C. Bouret, C. Catala, A. Lecavelier des Etangs, A. Vidal-Madjar, A. Roberge, P. D. Feldman, C. Martin, and R. Ferlet, New insights in the FUV into the activity of the Herbig Ae star HD 163296, *Astron. Astrophys.* 429, 247-255, 2005. (No reprints available.)
- 6151 Deming, D., S. Seager, L. J. Richardson, and J. Harrington, Infrared radiation from an extrasolar planet, *Nature* 434, 740-743, 2005.
- 6152 Dyudina, U. A., P. D. Sackett, D. D. R. Bayliss, S. Seager, C. C. Porco, H. B. Throop, and L. Dones, Phase light curves for extrasolar Jupiters and Saturns, *Astrophys. J.* 618, 973-986, 2005. (No reprints available.)
- 6153 Fischer, D. A., G. Laughlin, P. Butler, G. Marcy, J. Johnson, G. Henry, J. Valenti, S. Vogt, M. Ammons, S. Robinson, G. Spear, J. Strader, P. Driscoll, A. Fuller, T. Johnson, E. Manrao, C. McCarthy, M. Muñoz, K. L. Tah, J. Wright, S. Ida, B. Sato, E. Toyota, and D. Minniti, The N2K Consortium. I. A hot Saturn planet orbiting HD 88133, *Astrophys. J.* 620, 481-486, 2005. (No reprints available.)
- 6203 Fischer, D. A., G. W. Marcy, R. P. Butler, and S. S. Vogt, Characteristics of extrasolar planets, in *Debris Disks and the Formation of Planets*, L. Caroff et al., eds., pp. 133-142, Conference Series, Vol. 324, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- 6216 Flesch, L. M., W. E. Holt, P. G. Silver, M. Stephenson, C.-Y. Wang, and W. W. Chan, Constraining the extent of crust-mantle coupling in Central Asia using GPS, geologic, and shear-wave splitting data, *Earth Planet. Sci. Lett.* 238, 248-268, 2005.
- \_\_\_\_ Fontaine, F. R., E. E. Hooft, P. G. Burkett, D. R. Toomey, S. C. Solomon, and P. G. Silver, Shear-wave splitting beneath the Galápagos archipelago, *Geophys. Res. Lett.*, in press.
- 6154 Gaudi, B. S., S. Seager, and G. Mallén-Ornelas, On the period distribution of close-in extrasolar giant planets, *Astrophys. J.* 623, 472-481, 2005. (No reprints available.)
- \_\_\_\_ Ghosh, A., W. E. Holt, L. M. Flesch, and A. J. Haines, The gravitational potential energy of the Tibetan Plateau and the forces driving the Indian plate, *Geology*, in press.
- 6208 Grady, C. A., B. E. Woodgate, C. W. Bowers, T. R. Gull, M. L. Sitko, W. J. Carpenter, D. K. Lynch, R. W. Russell, R. B. Perry, G. M. Williger, A. Roberge, J.-C. Bouret, and M. Sahu, Coronagraphic imaging of pre-main-sequence stars with the *Hubble Space Telescope* Space Telescope Imaging Spectrograph. I. The Herbig Ae stars, *Astrophys. J.* 630, 958-975, 2005. (No reprints available.)

- 6155 Haghhighipour, N., On the asymptotic character of electromagnetic waves in a Friedmann-Robertson-Walker universe, *Gen. Relativ. Gravitation* 37, 327-342, 2005. (No reprints available.)
- \_\_\_\_ Handler, M. R., V. C. Bennett, and R. W. Carlson, Nd, Sr and Os isotope systematics in young, fertile spinel peridotite xenoliths from northern Queensland, Australia: a unique view of depleted MORB mantle? *Geochim. Cosmochim. Acta*, in press.
- \_\_\_\_ Hardy, S. J., "John Adam Fleming," in *Encyclopedia of Geomagnetism and Paleomagnetism*, D. Gubbins and E. Herrero-Bervera, eds., Springer, in press.
- 6156 Hulbert, L. J., M. A. Hamilton, M. F. Horan, and R. F. J. Scoates, U-Pb zircon and Re-Os isotope geochronology of mineralized ultramafic intrusions and associated nickel ores from the Thompson nickel belt, Manitoba, Canada, *Econ. Geol.* 100, 29-41, 2005. (No reprints available.)
- \_\_\_\_ Hunter, D. A., V. C. Rubin, R. A. Swaters, L. S. Sparke, and S. E. Levine, The stellar velocity dispersion in the inner 1.3 disk scale-lengths of the irregular galaxy NGC 4449, *Astrophys. J.*, in press.
- \_\_\_\_ Huss, G. R., C. M. O'D. Alexander, H. Palme, P. A. Bland, and J. T. Wasson, Genetic relationships between chondrules, fine-grained rims, and interchondrule matrix, in *Chondrites and the Protoplanetary Disk*, A. N. Krot, E. R. D. Scott, and B. Reipurth, eds., Astronomical Society of the Pacific, San Francisco, in press.
- \_\_\_\_ Ionov, D. A., S. B. Shirey, D. Weis, and G. Brugmann, Os-Hf-Sr-Nd isotope and PGE systematics of spinel peridotite xenoliths from Tok, SE Siberian craton: effects of pervasive metasomatism in shallow refractory mantle, *Earth Planet. Sci. Lett.*, in press.
- \_\_\_\_ Janney, P. E., A. P. le Roux, and R. W. Carlson, Hafnium isotope and trace element constraints on the nature of mantle heterogeneity beneath the central Southwest Indian Ridge (13°E to 47°E), *J. Petrol.*, in press.
- 6134 Jeon, Y.-B., M. G. Lee, S.-L. Kim, and H. Lee, SX Phoenixis stars in the globular cluster NGC 5466, *Astronom. J.* 128, 287-299, 2004. (No reprints available.)
- \_\_\_\_ Johnston, K. J., B. Dorland, R. Gaume, A. Hajian, G. Hennessy, D. Monet, R. Olling, N. Zacharias, P. K. Seidelmann, S. Seager, S. Pravdo, K. Coste, R. Danner, C. Grillmair, and J. Stauffer, The Origins Billion Star Survey: galactic explorer, in *Astrometry in the Age of the Next Generation of Large Telescopes*, P. K. Seidelmann and A. K. B. Monet, eds., Astronomical Society of the Pacific, San Francisco, in press.
- 6179 Jones, H. R. A., R. P. Butler, C. G. Tinney, G. W. Marcy, C. McCarthy, A. J. Penny, and B. D. Carter, HD10647 and the distribution of exoplanet properties with semi-major axis, in *Extrasolar Planets: Today and Tomorrow*, J.-P. Beaulieu, A. Lecavelier des Etangs, and C. Terquem, eds., pp. 298-304, Conference Series, Vol. 321, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- \_\_\_\_ Jung, H., Y. Fei, P. Silver, and H. Green, A new system for detecting acoustic emission in multi-anvil experiments: applications to deep seismicity in the Earth, *Rev. Sci. Instrum.*, in press.
- 6157 Laughlin, G., R. P. Butler, D. A. Fischer, G. W. Marcy, S. S. Vogt, and A. S. Wolf, The GJ 876 planetary system: a progress report, *Astrophys. J.* 622, 1182-1190, 2005. (No reprints available.)
- 6199 Laughlin, G., G. W. Marcy, S. S. Vogt, D. A. Fischer, and R. P. Butler, On the eccentricity of HD 209458b, *Astrophys. J. (Lett.)* 629, L121-L124, 2005. (No reprints available.)
- 6158 Laughlin, G., A. Wolf, T. Vanmunster, P. Bodenheimer, D. Fischer, G. Marcy, P. Butler, and S. Vogt, A comparison of observationally determined radii with theoretical radius predictions for short-period transiting extrasolar planets, *Astrophys. J.* 621, 1072-1078, 2005. (No reprints available.)
- \_\_\_\_ Lauretta, D. S., H. Nagahara, and C. M. O'D. Alexander, The formation of ferromagnesian chondrules, in *Meteorites and the Early Solar System II*, D. S. Lauretta and H. Y. McSween, Jr., eds., University of Arizona Press, Tucson, in press.
- \_\_\_\_ López-Morales, M., and I. Ribas, GU Bootis: a new 0.6  $M_{\text{Solar}}$  detached eclipsing binary, *Astrophys. J.*, in press.
- \_\_\_\_ Lowrance, P. J., E. E. Becklin, G. Schneider, J. D. Kirkpatrick, A. J. Weinberger, B. Zuckerman, C. Dumas, J.-L. Beuzit, P. Plait, E. Malumuth, S. Heap, R. J. Terrile, and D. C. Hines, An infrared coronagraphic survey for substellar companions, *Astron. J.*, in press.
- 6177 Marcy, G. W., R. P. Butler, D. A. Fischer, and S. S. Vogt, A Doppler planet survey of 1330 FGKM stars, in *Extrasolar Planets: Today and Tomorrow*, J.-P. Beaulieu, A. Lecavelier des Etangs, and C. Terquem, eds., pp. 3-14, Conference Series, Vol. 321, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- 6200 Marcy, G., R. P. Butler, D. Fischer, S. Vogt, J. T. Wright, C. G. Tinney, and H. R. A. Jones, Observed properties of exoplanets: masses, orbits, and metallicities, *Prog. Theor. Phys. Suppl.* 158, 24-42, 2005. (No reprints available.)
- 6159 Marcy, G. W., R. P. Butler, S. S. Vogt, D. A. Fischer, G. W. Henry, G. Laughlin, J. T. Wright, and J. A. Johnson, Five new extrasolar planets, *Astrophys. J.* 619, 570-584, 2005. (No reprints available.)
- 6181 Marcy, G. W., D. A. Fischer, R. P. Butler, and S. S. Vogt, Planetary messages in the Doppler residuals, in *Planetary Systems in the Universe: Observation, Formation, and Evolution*, A. Penny et al., eds., pp. 20-28, International Astronomical Union Symposium 202, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- 6209 Martin-Zaidi, C., M. Deleuil, T. Simon, J.-C. Bouret, A. Roberge, P. D. Feldman, A. Lecavelier des Etangs, and A. Vidal-Madjar, FUSE observations of molecular hydrogen on the line of sight towards HD 141569A, *Astron. Astrophys.* 440, 921-928, 2005. (No reprints available.)
- 6141 McCarthy, C., R. P. Butler, C. G. Tinney, H. R. A. Jones, G. W. Marcy, B. Carter, A. J. Penny, and D. A. Fischer, Multiple companions to HD 154857 and HD 160691, *Astrophys. J.* 617, 575-579, 2004. (No reprints available.)
- \_\_\_\_ McCoy, T. J., W. D. Carlson, L. R. Nittler, R. M. Stroud, D. D. Bogard, and D. H. Garrison, Graves Nunatak 95209: a snapshot of metal segregation and core formation, *Geochim. Cosmochim. Acta*, in press.
- \_\_\_\_ McNutt, R. L., Jr., R. E. Gold, S. C. Solomon, J. C. Leary, and D. G. Grant, MESSENGER: a Discovery mission to Mercury, in *Proceedings of the 6th International Academy of Astronautics International Conference on Low-Cost Planetary Missions*, Japan Aerospace Exploration Agency, in press.
- \_\_\_\_ McNutt, R. L., Jr., S. C. Solomon, R. E. Gold, J. C. Leary, and the MESSENGER team, The MESSENGER mission to Mercury: development history and early mission status, *Adv. Space Res.*, in press.
- \_\_\_\_ Meech, K. J., . . . K. von Braun, et al., Deep Impact: observations from a worldwide Earth-based campaign, *Science*, in press.
- \_\_\_\_ Nair, S. K., S. S. Gao, K. H. Liu, and P. G. Silver, Southern African crustal evolution and composition: constraints from receiver function studies, *J. Geophys. Res.*, in press.
- 6160 Nittler, L. R., Constraints on heterogeneous galactic chemical evolution from meteoritic stardust, *Astrophys. J.* 618, 281-296, 2005.
- 6211 Nittler, L. R., Presolar stardust in meteorites: recent advances and scientific frontiers, in *EPSL Frontiers, Collection 2002-2003*, A. Halliday, ed., pp. 1-15, Elsevier, Amsterdam, 2004. [Reprinted from *Earth Planet. Sci. Lett.* 209, 259-273, 2003.] (No reprints available.)
- \_\_\_\_ Nittler, L. R., Calcium-aluminum-rich inclusions are not supernova condensates, in *Chondrites and the Protoplanetary Disk*, A. N. Krot, E. R. D. Scott, and B. Reipurth, eds., Astronomical Society of the Pacific, San Francisco, in press.
- \_\_\_\_ Nittler, L. R., and N. Dauphas, Meteorites and the chemical evolution of the Milky Way, in *Meteorites and the Early Solar System II*, D. S. Lauretta and H. Y. McSween, Jr., eds., University of Arizona Press, Tucson, in press.
- 6201 Nittler, L. R., R. Gallino, M. Lugaro, O. Straniero, I. Dominguez, and E. Zinner, Si and C isotopes in presolar silicon carbide grains from AGB stars, *Nucl. Phys. A* 758, 348C-351C, 2005.
- 6210 Nittler, L. R., and P. Hoppe, Are presolar silicon carbide grains from novae actually from supernovae? *Astrophys. J. (Lett.)* 631, L89-L92, 2005.
- 6215 Nittler, L. R., T. J. McCoy, P. E. Clark, M. E. Murphy, J. I. Trombka, and E. Jarosewich, Bulk element compositions of meteorites: a guide for interpreting remote-sensing geochemical measurements of planets and asteroids, *Antarct. Meteorite Res.* 17, 231-251, 2004.
- 6178 Richardson, L. J., D. Deming, and S. Seager, Strong limits on the infrared spectrum of HD 209458 b near 2.2  $\mu\text{m}$ , in *Extrasolar Planets: Today and Tomorrow*, J.-P. Beaulieu, A. Lecavelier des Etangs, and C. Terquem, eds., pp. 211-212, Conference Series, Vol. 321, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- \_\_\_\_ Rivera, E. J., J. J. Lissauer, R. P. Butler, G. W. Marcy, S. S. Vogt, D. A. Fischer, T. M. Brown, and G. Laughlin, A  $\sim 7.5$  Earth-mass planet orbiting the nearby star, GJ 876, *Astrophys. J.*, in press.
- 6204 Roberge, A., P. D. Feldman, A. Lecavelier des Etangs, A. Vidal-Madjar, R. Ferlet, M. Deleuil, and J.-C. Bouret, Molecular hydrogen in circumstellar disk systems: results from FUSE, in *Debris Disks and the Formation of Planets*, L. Caroff et al., eds., pp. 235-237, Conference Series, Vol. 324, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- 6161 Roberge, A., A. J. Weinberger, and E. M. Malumuth, Spatially resolved spectroscopy and coronagraphic imaging of the TW Hydrae circumstellar disk, *Astrophys. J.* 622, 1171-1181, 2005.
- 6183 Roberge, A., A. J. Weinberger, S. Redfield, and P. D. Feldman, Rapid dissipation of primordial gas from the AU Microscopii debris disk, *Astrophys. J. (Lett.)* 626, L105-L108, 2005. (No reprints available.)
- 6206 Rubin, V. C., A puzzling polar-ring galaxy, *Sky & Telescope* 109 (no. 5), 26-27, 2005. (No reprints available.)
- \_\_\_\_ Rubin, V. C., "Cecilia Payne-Gaposchkin," in *Out of the Shadows: Contributions of Twentieth-Century Women to Physics*, N. Byers and G. Williams, eds., Cambridge University Press, in press.
- 6142 Ryan, J. G., and P. R. Kyle, Lithium abundance and lithium isotope variations in mantle sources: insights from intraplate volcanic rocks from Ross Island and Marie Byrd Land (Antarctica) and other oceanic islands, *Chem. Geol.* 212, 125-142, 2004. (No reprints available.)

- \_\_\_\_ Sato, B., D. A. Fischer, G. W. Henry, G. Laughlin, R. P. Butler, G. W. Marcy, S. S. Vogt, P. Bodenheimer, S. Ida, E. Toyota, A. Wolf, J. A. Valenti, L. J. Boyd, J. A. Johnson, J. T. Wright, M. Ammons, S. Robinson, J. Strader, C. McCarthy, K. L. Tah, and D. Minniti, The N2K Consortium. II. Transiting hot Saturn around HD 149026 with a large dense core, *Astrophys. J.*, in press.
- 6205 Schneider, J., A. S. CoRoT, M. D. Silverstone, and A. Weinberger, HST imaging of circumstellar disks, in *Debris Disks and the Formation of Planets*, L. Caroff et al., eds., pp. 247-249, Conference Series, Vol. 324, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- 6207 Schönbachler, M., D.-C. Lee, M. Rehkämper, A. N. Halliday, B. Hattendorf, and D. Günther, Nb/Zr fractionation on the Moon and the search for extinct <sup>92</sup>Nb, *Geochim. Cosmochim. Acta* 69, 775-785, 2005.
- \_\_\_\_ Schönbachler, M., M. Rehkämper, M. A. Fehr, A. N. Halliday, B. Hattendorf, and D. Günther, Nucleosynthetic zirconium isotope anomalies in acid leachates of carbonaceous chondrites, *Geochim. Cosmochim. Acta*, in press.
- 6214 Seager, S., The search for extrasolar Earth-like planets, in *EPSC Frontiers, Collection 2002-2003*, A. Halliday, ed., pp. 293-304, Elsevier, Amsterdam, 2004. [Reprinted from *Earth Planet. Sci. Lett.* 208, 113-124, 2003.] (No reprints available.)
- 6184 Seager, S., and E. B. Ford, The vegetation red edge spectroscopic feature as a surface biomarker, in *Astrophysics of Life*, M. Livio, I. N. Reid, and W. B. Sparks, eds., pp. 67-75, Cambridge University Press, Cambridge, 2005.
- \_\_\_\_ Seager, S., L. J. Richardson, B. M. S. Hansen, K. Menou, J. Y.-K. Cho, and D. Deming, On the day side thermal emission of hot Jupiters, *Astrophys. J.*, in press.
- 6185 Seager, S., E. L. Turner, J. Schafer, and E. B. Ford, Vegetation's red edge: a possible spectroscopic biosignature of extraterrestrial plants, *Astrobiol.* 5, 372-390, 2005.
- 6138 Shan, G., R. L. Rudnick, R. W. Carlson, W. F. McDonough, and L. Yongsheng, Removal of lithospheric mantle in the North China Craton: Re-Os isotopic evidence for coupled crust-mantle growth [in Chinese], *Dixue Qianyuan (Earth Science Frontiers)* 10 (no. 3), 61-67, 2003. (No reprints available.)
- \_\_\_\_ Shaw, A. M., D. R. Hilton, T. P. Fischer, J. A. Walker, and G. A. M. de Leeuw, Helium isotope variations in mineral separates from Costa Rica and Nicaragua: assessing crustal contributions, time-scale variations, and diffusion-related mechanisms, *Chem. Geol.*, in press.
- 6213 Solomon, S. C., Mercury: the enigmatic innermost planet, in *EPSC Frontiers, Collection 2002-2003*, A. Halliday, ed., pp. 41-55, Elsevier, Amsterdam, 2004. [Reprinted from *Earth Planet. Sci. Lett.* 216, 441-455, 2003.] (No reprints available.)
- 6162 Solomon, S. C., O. Aharonson, J. M. Aurnou, W. B. Banerdt, M. H. Carr, A. J. Dombard, H. V. Frey, M. P. Golombek, S. A. Hauck, II, J. W. Head, III, B. M. Jakosky, C. L. Johnson, P. J. McGovern, G. A. Neumann, R. J. Phillips, D. E. Smith, and M. T. Zuber, New perspectives on ancient Mars, *Science* 307, 1214-1220, 2005.
- 6202 Song, I., B. Zuckerman, A. J. Weinberger, and E. E. Becklin, Extreme collisions between planetesimals as the origin of warm dust around a Sun-like star, *Nature* 436, 363-365, 2005. (No reprints available.)
- 6176 Sozzetti, A., D. W. Latham, G. Torres, R. P. Stefanik, A. P. Boss, B. W. Carney, and J. B. Laird, When do planets form? The search for extrasolar planets around metal-poor stars, in *Extrasolar Planets: Today and Tomorrow*, J.-P. Beaulieu, A. Lecavelier des Etangs, and C. Terquem, eds., pp. 107-108, Conference Series, Vol. 321, Astronomical Society of the Pacific, San Francisco, 2004. (No reprints available.)
- 6180 Sozzetti, A., D. W. Latham, G. Torres, R. P. Stefanik, A. P. Boss, B. W. Carney, and J. B. Laird, A Keck/HIRES Doppler search for planets orbiting metal-poor dwarfs, in *Proceedings of the Symposium "The Three-Dimensional Universe with Gaia"*, C. Turon, K. S. O'Flaherty, and M. A. C. Perryman, eds., pp. 309-312, Special Publication SP-576, European Space Agency, Noordwijk, Netherlands, 2005. (No reprints available.)
- \_\_\_\_ Sturkell, E., P. Einarsson, F. Sigmundsson, H. Geirsson, H. Ólafsson, R. Pedersen, E. De Zeeuw-van Dalfsen, A. T. Linde, I. S. Sacks, and R. Stefánsson, Volcano geodesy and magma dynamics in Iceland, *J. Volcanol. Geotherm. Res.*, in press.
- 6186 Taylor, S., C. M. O'D. Alexander, J. Delaney, P. Ma, G. F. Herzog, and C. Engrand, Isotopic fractionation of iron, potassium, and oxygen in stony cosmic spherules: implications for heating histories and sources, *Geochim. Cosmochim. Acta* 69, 2647-2662, 2005. (No reprints available.)
- 6163 Tinney, C. G., R. P. Butler, G. W. Marcy, H. R. A. Jones, A. J. Penny, C. McCarthy, B. D. Carter, and D. A. Fischer, Three low-mass planets from the Anglo-Australian Planet Search, *Astrophys. J.* 623, 1171-1179, 2005. (No reprints available.)
- 6182 Toporski, J., M. Fries, A. Steele, L. Nittler, and M. Kress, Sweeping the skies: Stardust and the origin of our solar system, *GIT Imaging & Microscopy 04/2004*, 38-40, 2004. (No reprints available.)
- \_\_\_\_ Vogt, S. S., R. P. Butler, G. W. Marcy, D. A. Fischer, G. W. Henry, G. Laughlin, J. T. Wright, and J. A. Johnson, Five new multicomponent planetary systems, *Astrophys. J.*, in press.
- \_\_\_\_ Vogt, S. S., G. W. Marcy, R. P. Butler, D. A. Fischer, G. W. Henry, G. Laughlin, J. T. Wright, and J. Johnson, Planetary systems with new multiple components, *Astrophys. J.*, in press.
- 6164 von Braun, K., B. L. Lee, S. Seager, H. K. C. Yee, G. Mallén-Ornelas, and M. D. Gladders, Searching for planetary transits in galactic open clusters: EXPLORE/OC, *Publ. Astron. Soc. Pacific* 117, 141-159, 2005.
- \_\_\_\_ Wadhwa, M., G. Srinivasan, and R. W. Carlson, Time scales of planetesimal differentiation in the early solar system, in *Meteorites and the Early Solar System II*, D. S. Lauretta and H. Y. McSween, Jr., eds., University of Arizona Press, Tucson, in press.
- 6190 Wang, Y., Y. Huang, C. M. O'D. Alexander, M. Fogel, and G. Cody, Molecular and compound-specific hydrogen isotope analyses of insoluble organic matter from different carbonaceous chondrite groups, *Geochim. Cosmochim. Acta* 69, 3711-3721, 2005. (No reprints available.)
- 6165 Warren, L. M., and P. M. Shearer, Using the effects of depth phases on P-wave spectra to determine earthquake depths, *Bull. Seismol. Soc. Am.* 95, 173-184, 2005.
- 6166 Weinberger, A. J., Planetary science: construction-site inspection, *Nature* 433, 114-115, 2005.
- \_\_\_\_ Westerlund, K. J., S. B. Shirey, S. H. Richardson, R. W. Carlson, J. J. Gurney, and J. W. Harris, A subduction-related origin for mid-Archean diamonds and harzburgites from the Panda kimberlite, Slave Craton: implications from Re-Os isotope systematics, *Contrib. Mineral. Petrol.*, in press.
- \_\_\_\_ Wieler, R., H. Busemann, and I. A. Franchi, Trapping and modification process of noble gases and nitrogen in meteorites and their parent bodies, in *Meteorites and the Early Solar System II*, D. S. Lauretta and H. Y. McSween, Jr., eds., University of Arizona Press, Tucson, in press.
- \_\_\_\_ Winn, J. N., R. W. Noyes, M. J. Holman, D. Charbonneau, Y. Ohta, A. Taruya, Y. Suto, N. Narita, E. L. Turner, J. A. Johnson, G. W. Marcy, R. P. Butler, and S. S. Vogt, Measurement of spin-orbit alignment in an extrasolar planetary system, *Astrophys. J.*, in press.
- \_\_\_\_ Wittenmyer, R. A., W. F. Welsh, J. A. Orosz, A. B. Schultz, W. Kinzel, M. Kochte, F. Bruhweiler, D. Benuum, G. W. Henry, G. W. Marcy, D. A. Fischer, R. P. Butler, and S. S. Vogt, System parameters of the transiting extrasolar planet HD 209458b, *Astrophys. J.*, in press.
- 6187 Zinner, E., L. R. Nittler, P. Hoppe, R. Gallino, O. Straniero, and C. M. O'D. Alexander, Oxygen, magnesium, and chromium isotopic ratios of presolar spinel grains, *Geochim. Cosmochim. Acta* 69, 4149-4165, 2005. (No reprints available.)

