

Contributions from the Department of Terrestrial Magnetism

2009-2010

(Updated through September 30, 2010)

amended 12/2/11

6762 Adams, E. R., M. López-Morales, J. L. Elliot, S. Seager, and D. J. Osip, Lack of transit timing variations of OGLE-TR-111b: a re-analysis with six new epochs, *Astrophys. J.* 714, 13-24, 2010.

[Link](#)

6793 Alexander, C. M. O'D., S. D. Newsome, M. L. Fogel, L. R. Nittler, H. Busemann, and G. D. Cody, Deuterium enrichments in chondritic macromolecular material--Implications for the origin and evolution of organics, water and asteroids, *Geochim. Cosmochim. Acta* 74, 4417-4437, 2010.

[Link](#)

6815 Alexeev, I. I., E. S. Belenkaya, J. A. Slavin, H. Korth, B. J. Anderson, D. N. Baker, S. A. Boardsen, C. L. Johnson, M. E. Purucker, M. Sarantos, and S. C. Solomon, Mercury's magnetospheric magnetic field after the first two MESSENGER flybys, *Icarus* 209, 23-39, 2010.

[Link](#)

6791 Anderson, B. J., M. H. Acuña, H. Korth, J. A. Slavin, H. Uno, C. L. Johnson, M. E. Purucker, S. C. Solomon, J. M. Raines, T. H. Zurbuchen, G. Gloeckler, and R. L. McNutt, Jr., The magnetic field of Mercury, *Space Sci. Rev.* 152, 307-339, 2010.

6787 Anglada-Escudé, G., and J. Debes, Perspective acceleration and gravitational redshift. Measuring masses of individual white dwarfs using Gaia + SIM astrometry, in *Relativity in Fundamental Astronomy*, S. A. Klioner, P. K. Seidelman, and M. H. Soffel, eds., pp. 342-344, International Astronomical Union Symposium 261, Cambridge University Press, New York, 2010.

6742 Anglada-Escudé, G., M. López-Morales, and J. E. Chambers, How eccentric orbital solutions can hide planetary systems in 2:1 resonant orbits, *Astrophys. J.* 709, 168-178, 2010. [Link](#)

6758 Anglada-Escudé, G., E. L. Shkolnik, A. J. Weinberger, I. B. Thompson, D. J. Osip, and J. H. Debes, Strong constraints to the putative planet candidate around VB 10 using Doppler spectroscopy, *Astrophys. J. (Lett.)* 711, L24-L29, 2010. [Link](#)

6754 Arriagada, P., R. P. Butler, D. Minniti, M. López-Morales, S. A. Shectman, F. C. Adams, A. P. Boss, and J. E. Chambers, Five long-period extrasolar planets in eccentric orbits from the Magellan Planet Search Program, *Astrophys. J.* 711, 1229-1235, 2010. [Link](#)

6720 Aulbach, S., T. Stachel, R. A. Creaser, L. M. Heaman, S. B. Shirey, K. Muehlenbachs, D. Eichenberg, and J. W. Harris, Sulphide survival and diamond genesis during formation and evolution of Archaean subcontinental lithosphere: a comparison between the Slave and Kaapvaal cratons, *Lithos* 112, Suppl. 2, 747-757, 2009. [Link](#)

6712 Baker, D. N., D. Odstrcil, B. J. Anderson, C. N. Arge, M. Benna, G. Gloeckler, J. M. Raines, D. Schriver, J. A. Slavin, S. C. Solomon, R. M. Killen, and T. H. Zurbuchen, Space environment of Mercury at the time of the first MESSENGER flyby: solar wind and

interplanetary magnetic field modeling of upstream conditions,
J. Geophys. Res. 114,
A10101, 10.1029/2009JA014287, 2009.

[Link](#)

6750 Bakos, G. Á., G. Torres, A. Pál, J. Hartman, G. Kovács, R. W. Noyes, D. W. Latham, D. D. Sasselov, B. Sipőcz, G. A. Esquerdo, D. A. Fischer, J. A. Johnson, G. W. Marcy, R. P. Butler, H. Isaacson, A. Howard, S. S. Vogt, G. Kovács, J. Fernandez, A. Moór, R. P. Stefanik, J. Lázár, I. Papp, and P. Sári, HAT-P-11b: a super-Neptune planet transiting a bright K star in the *Kepler* field,
Astrophys. J. 710,
1724-1745, 2010.

[Link](#)

6733 Barsanti, M., P. Papale, D. Barbato, R. Moretti, E. Boschi, E. Hauri, and A. Longo, Heterogeneous large total CO₂ abundance in the shallow magmatic system of Kilauea volcano, Hawaii,
J. Geophys. Res. 114, B12201,
10.1029/2008JB006187, 2009.

[Link](#)

6759 Bedding, T. R., H. Kjeldsen, T. L. Campante, T. Appourchaux, A. Bonanno, W. J. Chaplin, R. A. Garcia, M. Martić, B. Mosser, R. P. Butler, H. Bruntt, L. L. Kiss, S. J. O'Toole, E. Kambe, H. Ando, H. Izumiura, B. Sato, M. Hartmann, A. Hatzes, C. Barban, G. Berthomieu, E. Michel, J. Provost, S. Turck-Chièze, J.-C. Lebrun, J. Schmitt, J.-L. Bertaux, S. Benatti, R. U. Claudi, R. Cosentino, S. Leccia, S. Frandsen, K. Brogaard, L. Glowienka, F. Grundahl, E. Stempels, T. Arentoft, M. Bazot, J. Christensen-Dalsgaard, T. H. Dall, C. Karoff, J. Lundgreen-Nielsen, F. Carrier, P. Eggenberger, D. Sosnowska, R. A. Wittenmyer, M. Endl, T. S. Metcalfe, S. Hekker, and S. Reffert, A multi-site campaign to measure solar-like oscillations in Procyon. II. Mode frequencies,
Astrophys. J. 713,
935-949, 2010.

[Link](#)

6814 Benna, M., B. J. Anderson, D. N. Baker, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, R. M. Killen, H. Korth, S. M. Krimigis, M. E. Purucker, R. L. McNutt, Jr., J. M. Raines, W. E. McClintock, M. Sarantos, J. A. Slavin, S. C. Solomon, and T. H. Zurbuchen, Modeling of the magnetosphere of Mercury at the time of the first MESSENGER flyby, *Icarus* 209, 3-10,

2010.

[L](#)[ink](#)

6812 Biller, B. A., M. C. Liu, Z. Wahhaj, E. L. Nielsen, L. M. Close, T. J. Dupuy, T. L. Hayward, A. Burrows, M. Chun, C. Ftaclas, F. Clarke, M. Hartung, J. Males, I. N. Reid, E. L. Shkolnik, A. Skemer, M. Tecza, N. Thatte, S. H. P. Alencar, P. Artymowicz, A. Boss, E. de Gouveia Dal Pino, J. Gregorio-Hetem, S. Ida, M. J. Kuchner, D. Lin, and D. Toomey, The Gemini NICI Planet-Finding Campaign: discovery of a close substellar companion to the young debris disk star PZ Tel, *Astrophys. J. (Lett.)* 720, L82-L87, 2010. [Link](#)

6763 Bitner, M. A., C. H. Chen, J. Muzerolle, A. J. Weinberger, M. Pecaut, E. E. Mamajek, and M. K. McLure, HD 101088, an accreting 14 AU binary in Lower Centaurus Crux with very little circumstellar dust, *Astrophys. J.* 714, 1542-1546, 2010. [Link](#)

6821 Blewett, D. T., B. W. Denevi, M. S. Robinson, C. M. Ernst, M. E. Purucker, and S. C. Solomon, The apparent lack of lunar-like swirls on Mercury: implications for the formation of lunar swirls and for the agent of space weathering, *Icarus* 209, 239-246, 2010.

[Link](#)

6780 Boardsen, S. A., T. Sundberg, J. A. Slavin, B. J. Anderson, H. Korth, S. C. Solomon, and L. G. Blomberg, Observations of Kelvin-Helmholtz waves along the dusk-side boundary of Mercury's magnetosphere during MESSENGER's third flyby, *Geophys. Res. Lett.* 37, L12101, 0.1029/2010GL043606, 2010.

[Link](#)

6752 Borucki, W. J., D. Koch, G. Basri, N. Batalha, T. Brown, D. Caldwell, J. Caldwell, J. Christensen-Dalsgaard, W. D. Cochran, E. DeVore, E. W. Dunham, A. K. Dupree, T. N. Gautier, III, J. C. Geary, R. Gilliland, A. Gould, S. B. Howell, J. M. Jenkins, Y. Kondo, D. W. Latham, G. W. Marcy, S. Meibom, H. Kjeldsen, J. J. Lissauer, D. G. Monet, D. Morrison, D. Sasselov, J. Tarter, A. Boss, D. Brownlee, T. Owen, D. Buzasi, D. Charbonneau, L. Doyle, J. Fortney, E. B. Ford, M. J. Holman, S. Seager, J. H. Steffen, W. F. Welsh, J. Rowe, H. Anderson, L. Buchhave, D. Ciardi, L. Walkowicz, W. Sherry, E. Horch, H. Isaacson, M. E. Everett, D. Fischer, G. Torres, J. A. Johnson, M. Endl, P. MacQueen, S. T. Bryson, J. Dotson, M. Haas, J. Kolodziejczak, J. Van Cleve, H. Chandrasekaran, J. D. Twicken, E. V. Quintana, B. D. Clarke, C. Allen, J. Li, H.

Wu, P. Tenenbaum, E. Verner, F. Bruhweiler, J. Barnes, and A. Prsa, Kepler planet-detection mission: introduction and first results, *Science* 327, 977-980, 2010. [Link](#)

6835 Boss, A., *L'Universo affollato: Alla ricerca di pianeti abitati [The Crowded Universe: the Search for Living Planets]* (in Italian), Le Scienze, Rome, 190 pp., 2010.

6784 Boss, A. P., Metallicity and planet formation: models, in *Chemical Abundances in the Universe*, K. Cunha, M. Spite, and B. Barbuy, eds., pp. 391-398, International Astronomical Union Symposium 265, Cambridge University Press, New York, 2010.

6795 Boss, A. P., and S. A. Keiser, Who pulled the trigger: a supernova or an asymptotic giant branch star?, *Astrophys. J. (Lett.)* 717, L1-L5, 2010. [Link](#)

6738 Boss, A. P., S. A. Keiser, S. I. Ipatov, E. A. Myhill, and H. A. T. Vanhala, Triggering collapse of the presolar dense cloud core and injecting short-lived radioisotopes with a shock wave. I. Varied shock speeds, *Astrophys. J.* 708, 1268-1280, 2010. [Link](#)

6714 Boss, A. P., A. J. Weinberger, G. Anglada-Escudé, I. B. Thompson, G. Burley, C. Birk, S. H. Pravdo, S. B. Shaklan, G. D. Gatewood, S. R. Majewski, and R. J. Patterson, The Carnegie Astrometric Planet Search program, *Publ. Astron. Soc. Pacific* 121, 1218-1231, 2009. [Link](#)

6756 Boyet, M., R. W. Carlson, and M. Horan, Old Sm-Nd ages for cumulate eucrites and redetermination of the solar system initial $^{146}\text{Sm}/^{144}\text{Sm}$ ratio, *Earth Planet. Sci. Lett.* 291, 172-181, 2010. [Link](#)

6790 Bruntt, H., T. R. Bedding, P. O. Quirion, G. Lo Curto, F. Carrier, B. Smalley, T. H. Dall, T. Arentoft, M. Bazot, and R. P. Butler, Accurate fundamental parameters for 23 bright solar-type stars, *Mon. Not. Roy. Astron. Soc.* **405**, 1907-1923, 2010. [Link](#)

6717 Busemann, H., A. N. Nguyen, G. D. Cody, P. Hoppe, A. L. D. Kilcoyne, R. M. Stroud, T. J. Zega, and L. R. Nittler, Ultra-primitive interplanetary dust particles from the comet 26P/Grigg-Skjellerup dust stream collection, *Earth Planet. Sci. Lett.* **288**, 44-57, 2009. [Link](#)

6715 Chambers, J. E., An analytical model for the evolution of a viscous, irradiated disk, *Astrophys. J.* **705**, 1206-1214, 2009. [Link](#)

6799 Chambers, J. E., Planetesimal formation by turbulent concentration, *Icarus* **208**, 505-517, 2010. [Link](#)

6827 Chambers, J., More giants in focus, *Nature* **467**, 405-406, 2010. [Link](#)

6832 Chambers, J. E., N-body integrators for planets in binary star systems, in *Planets in Binary Star Systems*, Haghighipour, ed., pp. 239-263, Springer, Dordrecht, 2010. [Link](#)

6724 Chambers, J. E., D. P. O'Brien, and A. M. Davis, Accretion of planetesimals and the formation of rocky planets, in *Protoplanetary Dust: Astrophysical and Cosmochemical Perspectives*, D. Apai and D. S. Lauretta, eds., pp. 299-335, Cambridge University Press, New York, 2010. [Link](#)

6789 Chanamé, J., J. Bruursema, R. Chandar, J. Anderson, R. van der Marel, and H. Ford, *HS T* hunt for intermediate-mass black holes in star clusters, in [Link](#)

Star Clusters,

R. de Grijs and J. R. D. Lépine, eds., pp. 231-237, International Astronomical Union Symposium 266, Cambridge University Press, New York, 2010.

6834 Chardot, L., B. Voight, R. Foroozan, S. Sacks, A. Linde, R. Stewart, D. Hidayat, A. Clarke, D. Elsworth, N. Fournier, J.-C. Komorowski, G. Mattioli, R. S. J. Sparks, and C. Widiwijayanti, Explosion dynamics from strainmeter and microbarometer observations, Soufrière Hills Volcano, Montserrat: 2008-2009, *Geophys. Res. Lett.* 37, L00E24, 10.1029/2010GL044661, 2010.

[Link](#)

6836 Coughlin, J. L., G. S. Stringfellow, A. C. Becker, M. Lopez-Morales, F. Mezzalana, and T. Krajci, New observations and a possible detection of parameter variations in the transits of Gliese 436b, *Astrophys. J. (Lett.)* 689, L149-L152, 2008. [Link](#)

6833 Crane, J. D., S. A. Shectman, R. P. Butler, I. B. Thompson, C. Birk, P. Jones, and G. S. Burley, The Carnegie Planet Finder Spectrograph: integration and commissioning, in *Ground-based and Airborne Instrumentation for Astronomy III*, I. S. McLean, S. K. Ramsay, and H. Takami, eds., p. Paper 773553, SPIE Proceedings Vol. 7737, SPIE, Bellingham, Wash., 2010.

6735 Dasgupta, R., M. G. Jackson, and C.-T. A. Lee, Major element chemistry of ocean island basalts -- conditions of mantle melting and heterogeneity of mantle source, *Earth Planet. Sci. Lett.* 289, 377-392, 2010.

[Link](#)

6794 De Gregorio, B. T., R. M. Stroud, L. R. Nittler, C. M. O'D. Alexander, A. L. D. Kilcoyne, and T. J. Zega, Isotopic anomalies in organic nanoglobules from Comet 81P/Wild 2: comparison to Murchison nanoglobules and isotopic anomalies induced in terrestrial organics by electron irradiation, *Geochim. Cosmochim. Acta* 74, 4454-4470, 2010.

[Link](#)

6809 de Moor, J. M., T. P. Fischer, Z. D. Sharp, E. H. Hauri, D. R. Hilton, and V. Atudorei, Sulfur isotope fractionation during the May 2003 eruption of Anatahan volcano, Mariana Islands: implications for sulfur sources and plume processes, *Geochim. Cosmochim. Acta* 74, 5382-5397, 2010.

[Link](#)

6726 Dick, H. J. B., C. J. Lissenberg, and J. M. Warren, Mantle melting, melt transport, and delivery beneath a slow-spreading ridge: the paleo-MAR from 23° 15'N to 23° 45'N, *J. Petrol.* 51, 425-467, 2010.

[Link](#)

6824 Eagar, K. C., M. J. Fouch, and D. E. James, Receiver function imaging of upper mantle complexity beneath the Pacific Northwest, United States, *Earth Planet. Sci. Lett.* 297, 141-153, 2010.

[Link](#)

6776 Elliot, J. L., M. J. Person, C. A. Zuluaga, A. S. Bosh, E. R. Adams, T. C. Brothers, A. A. S. Gulbis, S. E. Levine, M. Lockhart, A. M. Zangari, B. A. Babcock, K. DuPré, J. M. Pasachoff, S. P. Souza, W. Rosing, N. Secrest, L. Bright, E. W. Dunham, S. S. Sheppard, M. Kakkala, T. Tilleman, B. Berger, J. W. Briggs, G. Jacobson, P. Valleli, B. Volz, S. Rapoport, R. Hart, M. Brucker, R. Michel, A. Mattingly, L. Zambrano-Marin, A. W. Meyer, J. Wolf, E. V. Ryan, W. H. Ryan, K. Morzinski, B. Grigsby, J. Brimacombe, D. Ragozzine, H. G. Montano, and A. Gilmore, Size and albedo of Kuiper belt object 55636 from a stellar occultation, *Nature* 465, 897-900, 2010.

[Link](#)

6819 Ernst, C. M., S. L. Murchie, O. S. Barnouin, M. S. Robinson, B. W. Denevi, D. T. Blewett, J. W. Head, N. R. Izenberg, S. C. Solomon, and J. H. Roberts, Exposure of spectrally distinct material by impact craters on Mercury: implications for global stratigraphy, *Icarus* 209, 210-223, 2010.

[Link](#)

6796 Fares, R., J.-F. Donati, C. Moutou, M. M. Jardine, J.-M. Grießmeier, P. Zarka, E. L. Shkolnik, D. Bohlender, C. Catala, and A. C. Cameron, Searching for star-planet interactions

within the magnetosphere of HD189733, *Mon. Not. Roy. Astron. Soc.* **406**, 409-419, 2010. [Link](#)

6746 Feldman, W. C., D. J. Lawrence, J. O. Goldsten, R. E. Gold, D. N. Baker, D. K. Haggerty, G. C. Ho, S. Krucker, R. P. Lin, R. A. Mewaldt, R. J. Murphy, L. R. Nittler, E. A. Rhodes, J. A. Slavin, S. C. Solomon, R. D. Starr, F. Vilas, and A. Vourlidas, Evidence for extended acceleration of solar flare ions from 1-8 MeV solar neutrons detected with the MESSENGER Neutron Spectrometer, *J. Geophys. Res.* **115**, A01102, 10.1029/2009JA014535, 2010. [Link](#)

6813 Fossati, L., S. Bagnulo, A. Elmasli, C. A. Haswell, S. Holmes, O. Kochukhov, E. L. Shkolnik, D. V. Shulyak, D. Bohlender, B. Albayrak, C. Froning, and L. Hebb, A detailed spectropolarimetric analysis of the planet-hosting star WASP-12, *Astrophys. J.* **720**, 872-886, 2010. [Link](#)

6810 Gallego, A., R. M. Russo, D. Comte, V. I. Mocanu, R. E. Murdie, and J. C. Vandecar, Seismic noise tomography in the Chile Ridge subduction region, *Geophys. J. Int.* **182**, 1478-1492, 2010. [Link](#)

6792 Gómez-Pérez, N., M. Heimpel, and J. Wicht, Effects of a radially varying electrical conductivity on 3D numerical dynamos, *Phys. Earth Planet. Inter.* **181**, 42-53, 2010. [Link](#)

6816 Gómez-Pérez, N., and J. Wicht, Behavior of planetary dynamos under the influence of external magnetic fields: application to Mercury and Ganymede, *Icarus* **209**, 53-62, 2010. [Link](#)

6767 Gore, J., D. E. James, T. G. Zengeni, and O. Gwavava, Crustal structure of the Zimbabwe Craton and the Limpopo Belt of southern Africa: new constraints from seismic data and implications for its evolution, *S. Afr. J. Geol.* **112**, 213-228, 2009. [Link](#)

6781 Gurney, J. J., H. H. Helmstaedt, S. H. Richardson, and S. B. Shirey, Diamonds through time, *Econ. Geol.* 105, 689-712, 2010. [Link](#)

6782 Gyngard, F., E. Zinner, L. R. Nittler, A. Morgand, F. J. Stadermann, and K. M. Hynes, Automated nanoSIMS measurements of spinel stardust from the Murray meteorite, *Astrophys. J.* 717, 107-120, 2010.

[Link](#)

6766 Haghighipour, N., S. S. Vogt, R. P. Butler, E. J. Rivera, G. Laughlin, S. Meschiari, and G. W. Henry, The Lick-Carnegie Exoplanet Survey: a Saturn-mass planet in the habitable zone of the nearby M4V star HIP 57050, *Astrophys. J.* 715, 271-276, 2010.

[Link](#)

6716 Hartman, J. D., G. Á. Bakos, G. Torres, G. Kovács, R. W. Noyes, A. Pál, D. W. Latham, B. Sipőcz, D. A. Fischer, J. A. Johnson, G. W. Marcy, R. P. Butler, A. W. Howard, G. A. Esquerdo, D. D. Sasselov, G. Kovács, R. P. Stefanik, J. M. Fernandez, J. Lázár, I. Papp, and P. Sári, HAT-P-12b: a low-density sub-Saturn mass planet transiting a metal-poor K dwarf, *Astrophys. J.* 706, 785-796, 2009.

[Link](#)

6753 Hautmann, S., J. Gottsmann, A. G. Camacho, N. Fournier, I. S. Sacks, and R. S. J. Sparks, Mass variations in response to magmatic stress changes at Soufrière Hills Volcano, Montserrat (W.I.): insights from 4-D gravity data, *Earth Planet. Sci. Lett.* 290, 83-89, 2010.

[Link](#)

6826 Hautmann, S., J. Gottsmann, R. S. J. Sparks, G. S. Mattioli, I. S. Sacks, and M. H. Strutt, Effect of mechanical heterogeneity in arc crust on volcano deformation with application to Soufrière Hills Volcano, Montserrat, West Indies, *J. Geophys. Res.* 115, B09203, 10.1029/2009JB006909, 2010.

[Link](#)

6760 Hernán-Obispo, H., M. C. Gálvez-Ortiz, G. Anglada-Escudé, S. R. Kane, J. R. Barnes, E. de Castro, and M. Cornide, Evidence of a massive planet candidate orbiting the young active K5V star BD+20 1790, *Astron. Astrophys.* 512, A45, 2010. [Link](#)

6771 Honeycutt, R. K., and S. Kafka, FBS 0107-082: a symbiotic binary in a rare prolonged outburst?, *Astron. J.* 139, 2706-2713, 2010. [Link](#)

6741 Horan, M. F., C. M. O'D. Alexander, and R. J. Walker, Highly siderophile element evidence for early solar system processes in components from ordinary chondrites, *Geochim. Cosmochim. Acta* 73, 6984-6997, 2009. [Link](#)

6725 Horner, J., B. W. Jones, and J. Chambers, Jupiter--friend or foe? III: the Oort cloud comets, *Int. J. Astrobiol.* 9, 1-10, 2010. [Link](#)

6805 Jackson, M. G., R. W. Carlson, M. D. Kurz, P. D. Kempton, D. Francis, and J. Blusztajn, Evidence for the survival of the oldest terrestrial mantle reservoir, *Nature* 466, 853-856, 2010. [Link](#)

6734 Jackson, M. G., M. D. Kurz, and S. R. Hart, Helium and neon isotopes in phenocrysts from Samoan lavas: evidence for heterogeneity in the terrestrial high $^3\text{He}/^4\text{He}$ mantle, *Earth Planet. Sci. Lett.* 287, 519-528, 2009. [Link](#)

6811 Janney, P. E., S. B. Shirey, R. W. Carlson, D. G. Pearson, D. R. Bell, A. P. Le Roex, A. Ishikawa, P. H. Nixon, and F. R. Boyd, Age, composition and thermal characteristics of South African off-craton mantle lithosphere: evidence for a multi-stage history, *J. Petrol.* 51,

1849-1890, 2010.

[Link](#)

6775 Jenkins, J. S., H. R. A. Jones, B. Biller, S. J. O'Toole, D. J. Pinfield, L. Close, C. G. Tinney, R. P. Butler, R. Wittenmyer, B. Carter, and A. C. Day-Jones, NACO-SDI imaging of known companion host stars from the AAPS and Keck planet search surveys, *Astron. Astrophys.* 515, A17, 2010.

[Link](#)

6761 Jones, H. R. A., R. P. Butler, C. G. Tinney, S. O'Toole, R. Wittenmyer, G. W. Henry, S. Meschiari, S. Vogt, E. Rivera, G. Laughlin, B. D. Carter, J. Bailey, and J. S. Jenkins, A long-period planet orbiting a nearby Sun-like star, *Mon. Not. Roy. Astron. Soc.* 403, 1703-1713, 2010.

[Link](#)

6798 Kelley, K. A., T. Plank, S. Newman, E. M. Stolper, T. L. Grove, S. Parman, and E. H. Hauri, Mantle melting as a function of water content beneath the Mariana arc, *J. Petrol.* 51, 1711-1738, 2010.

[Link](#)

6719 Klein-BenDavid, O., A. M. Logvinova, M. Schrauder, Z. V. Spetius, Y. Weiss, E. H. Hauri, F. V. Kaminsky, N. V. Sobolev, and O. Navon, High-Mg carbonatitic microinclusions in some Yakutian diamonds--a new type of diamond-forming fluid, *Lithos* 112, Suppl. 2, 648-659, 2009. [Link](#)

6764 Koch, D. G., W. J. Borucki, G. Basri, N. M. Batalha, T. M. Brown, D. Caldwell, J. Christensen-Dalsgaard, W. D. Cochran, E. DeVore, E. W. Dunham, T. N. Gautier, J. C. Geary, R. L. Gilliland, A. Gould, J. Jenkins, Y. Kondo, D. W. Latham, J. J. Lissauer, G. Marcy, D. Monet, D. Sasselov, A. Boss, D. Brownlee, J. Caldwell, A. K. Dupree, S. B. Howell, H. Kjeldsen, S. Meibom, D. Morrison, T. Owen, H. Reitsema, J. Tarter, S. T. Bryson, J. L. Dotson, P. Gazis, M. R. Haas, J. Kolodziejczak, J. F. Rowe, J. E. Van Cleve, C. Allen, H. Chandrasekaran, B. D. Clarke, J. Li, E. V. Quintana, P. Tenenbaum, J. D. Twicken, and H. Wu, *Kepler Mission design, realized photometric performance, and early science*, *Astrophys. J. (Lett.)* 713,

L79-L86, 2010.

[Link](#)

6732 Koleszar, A. M., A. E. Saal, E. H. Hauri, A. N. Nagle, Y. Liang, and M. D. Kurz, The volatile contents of the Galapagos plume; evidence for H₂O and F open system behavior in melt inclusions, *Earth Planet. Sci. Lett.* **287**, 442-452, 2009.

[Link](#)

6728 Kovács, I., H. St.C. O'Neill, J. Hermann, and E. H. Hauri, Site-specific infrared O-H absorption coefficients for water substitution into olivine, *Am. Mineral.* **95**, 292-299, 2010.

[Link](#)

6736 Kurz, M. D., J. M. Warren, and J. Curtice, Mantle deformation and noble gases: helium and neon in oceanic mylonites, *Chem. Geol.* **266**, 10-18, 2009.

[Link](#)

6708 Laske, G., J. A. Collins, C. J. Wolfe, S. C. Solomon, R. S. Detrick, J. A. Orcutt, D. Bercovici, and E. H. Hauri, Probing the Hawaiian hotspot with new broadband ocean bottom instruments, *Eos, Trans. Am. Geophys. Union* **90**, 362-363, 2009.

6711 Latham, D. W., G. Á. Bakos, G. Torres, R. P. Stefanik, R. W. Noyes, G. Kovács, A. Pál, G. W. Marcy, D. A. Fischer, R. P. Butler, B. Sipőcz, D. D. Sasselov, G. A. Esquerdo, S. S. Vogt, J. D. Hartman, G. Kovács, J. Lázár, I. Papp, and P. Sári, Discovery of a transiting planet and eight eclipsing binaries in HATNet field G205, *Astrophys. J.* **704**, 1107-1119, 2009. [Link](#)

6818 Lawrence, D. J., W. C. Feldman, J. O. Goldsten, T. J. McCoy, D. T. Blewett, W. V. Boynton, L. G. Evans, L. R. Nittler, E. A. Rhodes, and S. C. Solomon, Identification and measurement of neutron-absorbing elements on Mercury's surface, *Icarus* **209**, 195-209, 2010. [Link](#)

[k](#)

6731 Linde, A. T., S. Sacks, D. Hidayat, B. Voight, A. Clarke, D. Elsworth, G. Mattioli, P. Malin, E. Shalev, S. Sparks, and C. Widiwijayanti, Vulcanian explosion at Soufrière Hills Volcano, Montserrat on March 2004 as revealed by strain data, *Geophys. Res. Lett.* 37, L00E07, 10.1029/2009GL041988, 2010.

[Link](#)

6808 Liu, M. C., L. R. Nittler, C. M. O'D. Alexander, and T. Lee, Lithium-beryllium-boron isotopic compositions in meteoritic hibonite: implications for origin of ^{10}Be and early solar system irradiation, *Astrophys. J. (Lett.)* 719, L99-L103, 2010.

[Link](#)

6837 Liu, M. C., Z. Wahhaj, B. A. Biller, E. L. Nielsen, M. Chun, L. M. Close, C. Ftaclas, M. Hartung, T. L. Hayward, F. Clarke, I. N. Reid, E. L. Shkolnik, M. Tecza, N. Thatte, S. Alencar, P. Artymowicz, A. Boss, A. Burrows, E. de Gouveia Dal Pino, J. Gregorio-Hetem, S. Ida, M. J. Kuchner, D. Lin, and D. Toomey, The Gemini NICI Planet-Finding Campaign, in *Adaptive Optics Systems II*, B. L. Ellerbroek et al., eds., p. Paper 77361K, SPIE Proceedings Vol. 7736, SPIE, Bellingham, Wash., 2010.

6718 Long, M. D., H. Gao, A. Klaus, L. S. Wagner, M. J. Fouch, D. E. James, and E. Humphreys, Shear wave splitting and the pattern of mantle flow beneath eastern Oregon, *Earth Planet. Sci. Lett.* 288, 359-369, 2009.

[Link](#)

6709 Long, M. D., and P. G. Silver, Shear wave splitting and mantle anisotropy: measurements, interpretations, and new directions, *Surv. Geophys.* 30, 407-461, 2009.

[Link](#)

6713 Long, M. D., and P. G. Silver, Mantle flow in subduction systems: the subslab flow field

and implications for mantle dynamics,
J. Geophys. Res. 114,
B10312, 10.1029/2008JB006200, 2009.

[Link](#)

6779 López-Morales, M., Exoplanet caught speeding, *Nature* 465, 1017-1018, 2010. [Link](#)

6778 López-Morales, M., J. L. Coughlin, D. K. Sing, A. Burrows, D. Apai, J. C. Rogers, D. S. Spiegel, and E. R. Adams, Day-side z' -band emission and eccentricity of WASP-12b, *Astrophys. J. (Lett.)* 716, L36-L40, 2010.

[Link](#)

6828 Matsuyama, I., Dispersal of protoplanetary disks by wind stripping, in *Physics and Astrophysics of Planetary Systems*, T. Montmerle, D. Ehrenreich, and A.-M. Lagrange, eds., pp. 171-175, European Astronomical Society Publications Series, Vol. 41, EDP Sciences, Les Ulis, France, 2010.

6831 Mayer, L., A. Boss, and A. F. Nelson, Gravitational instability in binary protoplanetary disks, in *Planets in Binary Star Systems*, N. Haghighipour, ed., pp. 195-238, Springer, Dordrecht, 2010.

6772 McArthur, B. E., G. F. Benedict, R. Barnes, E. Martioli, S. Korzennik, E. Nelan, and R. P. Butler, New observational constraints on the μ Andromedae system with data from the *Hubble Space Telescope* and Hobby-Eberly Telescope, *Astrophys. J.* 715, 1203-1220, 2010.

[Link](#)

6729 McCubbin, F. M., A. Smirnov, H. Nekvasil, J. Wang, E. Hauri, and D. H. Lindsley, Hydrous magmatism on Mars: a source of water for the surface and subsurface during the Amazonian, *Earth Planet. Sci. Lett.* 292, 132-138, 2010. [Link](#)

6783 McCubbin, F. M., A. Steele, E. H. Hauri, H. Nekvasil, S. Yamashita, and R. J. Hemley, Nominally hydrous magmatism on the Moon, *Proc. Natl. Acad. Sci. USA* 107, 11223-11228, 2010.

6748 Mitchell, E. C., T. P. Fischer, D. R. Hilton, E. H. Hauri, A. M. Shaw, J. M. de Moor, Z. D. Sharp, and K. Kazahaya, Nitrogen sources and recycling at subduction zones: insights from the Izu-Bonin-Mariana arc, *Geochem. Geophys. Geosyst.* 11, Q02X11, 10.1029/2009GC002783, 2010.

[Link](#)

6801 Moskovitz, N. A., M. Willman, T. H. Burbine, R. P. Binzel, and S. J. Bus, A spectroscopic comparison of HED meteorites and V-type asteroids in the inner Main Belt, *Icarus* 208, 773-788, 2010.

[Link](#)

6806 Nguyen, A. N., L. R. Nittler, F. J. Stadermann, R. M. Stroud, and C. M. O'D. Alexander, Coordinated analyses of presolar grains in the Allan Hills 77307 and Queen Elizabeth Range 99177 meteorites, *Astrophys. J.* 719, 166-189, 2010. [Link](#)

6765 Nittler, L. R., Cometary dust in the laboratory, *Science* 328, 698-699, 2010. [Link](#)

6820 Oberst, J., F. Preusker, R. J. Phillips, T. R. Watters, J. W. Head, M. T. Zuber, and S. C. Solomon, The morphology of Mercury's Caloris basin as seen in MESSENGER stereo topographic models, *Icarus* 209, 230-238, 2010. [Link](#)

6825 O'Leary, J. A., G. A. Gaetani, and E. H. Hauri, The effect of tetrahedral Al³⁺ on the partitioning of water between clinopyroxene and silicate melt, *Earth Planet. Sci. Lett.* 297, 111-120, 2010.

[Link](#)

6743 Pál, A. , G.Á. Bakos, G. Torres, R. W. Noyes, D. A. Fischer, J. A. Johnson, G. W. Henry, R. P. Butler, G. W. Marcy, A. W. Howard, B. Sipőcz, D. W. Latham, and G. A. Esquerdo, Refined stellar, orbital and planetary parameters of the eccentric HAT-P-2 planetary system, *Mon. Not. Roy. Astron. Soc.* 401, 2665-2674, 2010.

[Link](#)

6830 Prato, L., and A. J. Weinberger, Disks around young binary stars, in *Planets in Binary Star Systems*, N. Haghipour, ed., pp. 1-18, Springer, Dordrecht, 2010.

6803 Prockter, L. M., C. M. Ernst, B. W. Denevi, C. R. Chapman, J. W. Head, III, C. I. Fassett, W. J. Merline, S. C. Solomon, T. R. Watters, R. G. Strom, G. Cremonese, S. Marchi, and M. Massironi, Evidence for young volcanism on Mercury from the third MESSENGER flyby, *Science* 329, 668-671, 2010.

[Link](#)

6727 Qin, L., C. M. O'D. Alexander, R. W. Carlson, M. F. Horan, and T. Yokoyama, Contributors to chromium isotope variation of meteorites, *Geochim. Cosmochim. Acta* 74, 1122-1145, 2010.

[Link](#)

6737 Ray, M. C., D. R. Hilton, J. Muñoz, T. P. Fischer, and A. M. Shaw, The effects of volatile recycling, degassing and crustal contamination on the helium and carbon geochemistry of hydrothermal fluids from the Southern Volcanic Zone of Chile, *Chem. Geol.* 266, 38-49, 2009.

[Link](#)

6751 Ribeiro, T., S. Kafka, R. Baptista, and C. Tappert, Activity on the M star of QS Vir, *Astron. J.* 139, 1106-1116, 2010.

[Link](#)

6721 Richardson, S. H., P. F. Pöml, S. B. Shirey, and J. W. Harris, Age and origin of peridotitic diamonds from Venetia, Limpopo Belt, Kaapvaal-Zimbabwe craton, *Lithos* 112, Suppl. 2, 785-792, 2009.

[Link](#)

6740 Rivera, E. J., R. P. Butler, S. S. Vogt, G. Laughlin, G. W. Henry, and S. Meschiari, A super-Earth orbiting the nearby Sun-like star HD 1461, *Astrophys. J.* 708, 1492-1499, 2010.

[Link](#)

6807 Rivera, E. J., G. Laughlin, R. P. Butler, S. S. Vogt, N. Haghighipour, and S. Meschiari, Lick-Carnegie Exoplanet Survey: a Uranus-mass fourth planet for GJ 876 in an extrasolar Laplace configuration, *Astrophys. J.* 719, 890-899, 2010.

[Link](#)

6788 Rogers, J. C., D Apai, M. López-Morales, D. K. Sing, and A. Burrows, Ks-band detection of thermal emission and color constraints to CoRoT-1b: a low-albedo planet with inefficient atmospheric energy redistribution and a temperature inversion, *Astrophys. J.* 707, 1707-1716, 2009. [Erratum published in *Astrophys. J.* 723, 1825-1826, 2010.]

[Link](#)

6829 Rubin, V. C., "Charlotte Moore Sitterly", *J. Astron. Hist. Heritage* 13, 145-148, 2010.

6797 Russo, R.M., A. Gallego, D. Comte, V.I. Mocanu, R.E. Murdie, and J.C. VanDecar, Source-side shear wave splitting and upper mantle flow in the Chile Ridge subduction region, *Geology* 38, 707-710, 2010.

[Link](#)

6723 Savov, I. P., W. P. Leeman, C.-T. A. Lee, and S. B. Shirey, Boron isotopic variations in NW USA rhyolites: Yellowstone, Snake River Plain, eastern Oregon, *J. Volcanol.*

Geotherm. Res. 188,
162-172, 2009.

[Link](#)

6777 Schmerr, N., E. Garnero, and A. McNamara, Deep mantle plumes and convective upwelling beneath the Pacific Ocean, *Earth Planet. Sci. Lett.* 294, 143-151, 2010. [Link](#)

6768 Schönbächler, M., R. W. Carlson, M. F. Horan, T. D. Mock, and E. H. Hauri, Heterogeneous accretion and the moderately volatile element budget of Earth, *Science* 328, 884-887, 2010.

[Link](#)

6770 Sedransk, N., L. J. Young, K. L. Kelner, R. A. Moffitt, A. Thakar, J. Raddick, E. J. Ungvarsky, R. W. Carlson, R. Apweiler, L. H. Cox, D. Nolan, K. Soper, and C. Spiegelman, Make research data public?--Not always so simple: a dialogue for statisticians and science editors, *Stat. Sci.* 25, 41-50, 2010.

6757 Sheppard, S. S., The colors of extreme outer solar system objects, *Astron. J.* 139, 1394-1405, 2010.

[Link](#)

6823 Sheppard, S. S., and C. A. Trujillo, Detection of a trailing (L5) Neptune Trojan, *Science* 329, 1304, 2010.

[Link](#)

6774 Shkolnik, E. L., L. Hebb, M. C. Liu, I. N. Reid, and A. C. Cameron, Thirty new low-mass spectroscopic binaries, *Astrophys. J.* 716, 1522-1530, 2010. [Link](#)

6744 Skemer, P., J. M. Warren, P. B. Kelemen, and G. Hirth, Microstructural and rheological evolution of a mantle shear zone, *J. Petrol.* 51, 43-53, 2010. [Link](#)

6802 Slavin, J. A., B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., L. R. Nittler, J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, R. D. Starr, P. M. Trávníček, and T. H. Zurbuchen, MESSENGER observations of extreme loading and unloading of Mercury's magnetic tail, *Science* 329, 665-668, 2010.

[Link](#)

6747 Slavin, J. A., R. P. Lepping, C.-C. Wu, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. M. Killen, H. Korth, S. M. Krimigis, W. E. McClintock, R. L. McNutt, Jr., M. Sarantos, D. Schriver, S. C. Solomon, P. Trávníček, and T. H. Zurbuchen, MESSENGER observations of large flux transfer events at Mercury, *Geophys. Res. Lett.* 37, L02105, 10.1029/2009GL041485, 2010.

[Link](#)

6769 Smit, K. V., S. B. Shirey, S. H. Richardson, A. P. le Roex, and J. J. Gurney, Re-Os isotopic composition of peridotitic sulphide inclusions in diamonds from Ellendale, Australia: age constraints on Kimberley cratonic lithosphere, *Geochim. Cosmochim. Acta* 74, 3292-3306, 2010.

[Link](#)

6722 Smith, C. B., D. G. Pearson, G. P. Bulanova, A. D. Beard, R. W. Carlson, N. Wittig, K. Sims, L. Chimuka, and E. Muchemwa, Extremely depleted lithospheric mantle and diamonds beneath the southern Zimbabwe Craton, *Lithos* 112, Suppl. 2, 1120-1132, 2009. [Link](#)

6817 Smith, D. E., M. T. Zuber, R. J. Phillips, S. C. Solomon, G. A. Neumann, F. G. Lemoine, S. J. Peale, J.-L. Margot, M. H. Torrence, M. J. Talpe, J. W. Head III, S. A. Hauck II, C. L. Johnson, M. E. Perry, O. S. Barnouin, R. L. McNutt, Jr., and J. Oberst, The equatorial shape and gravity field of Mercury from MESSENGER flybys 1 and 2, *Icarus* 209, 88-100, 2010. [Link](#)

6785 Sozzetti, A., D. W. Latham, G. Torres, B. W. Carney, J. B. Laird, R. P. Stefanik, A. P. Boss, and S. Korzennik, On the frequency of gas giant planets in the metal-poor regime, in *Chemical Abundances in the Universe*,

K. Cunha, M. Spite, and B. Barbuy, eds., pp. 416-419, International Astronomical Union Symposium 265, Cambridge University Press, New York, 2010.

6710 Taira, T., P. G. Silver, F. Niu, and R. M. Nadeau, Remote triggering of fault-strength changes on the San Andreas fault at Parkfield, *Nature* 461, 636-639, 2009. [Erratum published in *Nature* 462, 674, 2009.]
[Link](#)

6786 Traub, W. A., C. Beichman, A. F. Boden, A. P. Boss, S. Casertano, J. Catanzarite, D. Fischer, E. B. Ford, A. Gould, S. Halverson, A. Howard, S. Ida, N. J. Kasdin, G. P. Laughlin, H. F. Levison, D. Lin, V. Makarov, J. Marr, M. Muterspaugh, S. N. Raymond, D. Savransky, M. Shao, A. Sozzetti, and C. Zhai, Detectability of Earth-like planets in multi-planet systems: preliminary report, in *Extrasolar Planets in Multi-Body Systems: Theory and Observations*, K. Goździewski, A. Niedzielski, and J. Schneider, eds., pp. 191-199, European Astronomical Society Publications Series, Vol. 42, EDP Sciences, Les Ulis, France, 2010.

6804 Vervack, R. J., Jr., W. E. McClintock, R. M. Killen, A. L. Sprague, B. J. Anderson, M. H. Burger, E. T. Bradley, N. Mouawad, S. C. Solomon, and N. R. Izenberg, Mercury's complex exosphere: results from MESSENGER's third flyby, *Science* 329, 672-675, 2010. [Link](#)

6739 Vogt, S. S., R. A. Wittenmyer, R. P. Butler, S. O'Toole, G. W. Henry, E. J. Rivera, S. Meschiari, G. Laughlin, C. G. Tinney, H. R. A. Jones, J. Bailey, B. D. Carter, and K. Batygin, A super-Earth and two Neptunes orbiting the nearby Sun-like star 61 Virginis, *Astrophys. J.* 708, 1366-1375, 2010.
[Link](#)

6773 Voight, B., D. Hidayat, S. Sacks, A. Linde, L. Chardot, A. Clarke, D. Elsworth, R. Foroozan, P. Malin, G. Mattioli, N. McWhorter, E. Shalev, R. S. J. Sparks, C. Widiwijayanti, and S. R. Young, Unique strainmeter observations of Vulcanian explosions, Soufrière Hills Volcano, Montserrat, July 2003, *Geophys. Res. Lett.* 37, L00E18, 10.1029/2010GL042551, 2010.
[Link](#)

6749 Wang, C.-Y., H. Lou, P. G. Silver, L. Zhu, and L. Chang, Crustal structure variation along 30°N in the eastern Tibetan Plateau and its tectonic implications, *Earth Planet. Sci. Lett.* 289, 367-376, 2010. [Link](#)

6745 Warren, J. M., and N. Shimizu, Cryptic variations in abyssal peridotite compositions: evidence for shallow-level melt infiltration in the oceanic lithosphere, *J. Petrol.* 51, 395-423, 2010. [Link](#)

6800 Willman, M., R. Jedicke, N. Moskovitz, D. Nesvorný, D. Vokrouhlický, and T. Mothé-Diniz, Using the youngest asteroid clusters to constrain the space weathering and gardening rate on S-complex asteroids, *Icarus* 208, 758-772, 2010. [Corrigendum published in *Icarus* 214, 784-785, 2011.] [Link](#)

6730 Wolfe, C. J., S. C. Solomon, G. Laske, J. A. Collins, R. S. Detrick, J. A. Orcutt, D. Bercovici, and E. H. Hauri, Mantle shear-wave velocity structure beneath the Hawaiian hot spot, *Science* 326, 1388-1390, 2009. [Link](#)

6755 Yokoyama, T., C. M. O'D. Alexander, and R. J. Walker, Osmium isotope anomalies in chondrites: results for acid residues and related leachates, *Earth Planet. Sci. Lett.* 291, 48-59, 2010. [Link](#)

6822 Zuber, M. T., L. G. J. Montési, G. T. Farmer, S. A. Hauck II, J. A. Ritzer, R. J. Phillips, S. C. Solomon, D. E. Smith, M. J. Talpe, J. W. Head III, G. A. Neumann, T. R. Watters, and C. L. Johnson, Accommodation of lithospheric shortening on Mercury from altimetric profiles of ridges and lobate scarps measured during MESSENGER flybys 1 and 2, *Icarus* 209, 247-255, 2010. [Link](#)