

Abstracts submitted to the 42nd Lunar and Planetary Science Conference (LPSC 2011)
by HIGP personnel.



Ashley, J. W., DiCarlo, N., Enns, A. C., Hawke, B. R., Robinson, M. S., Sato, H., Speyerer, E. J., van der Bogert, C. H., Wagner, R. V., Young, K. E. and the LROC Science Team "Geologic Mapping of the King Crater Region with an Emphasis on Melt Pond Anatomy--Evidence for Subsurface Drainage on the Moon."

Bechtel, H. A. and 53 others including Huss, G. R. and Ogliore, R. C. "FTIR Analysis of Aerogel Keystones from the Stardust Interstellar Dust Collector: Assessment of Terrestrial Organic Contamination and X-Ray Microprobe Beam Damage."

Bonal, L., O'D. Alexander, C. M., Huss, G. R., and Nagashima, K. "Hydrogen Isotopic Composition of the Water in CR Chondrites."

Boyce, J. M., Mouginis-Mark, P. J., Tornabene, L., Hamilton, C. W., Allen, J., and Wilson, L. "Pitted Deposits in Fresh Martian Impact Craters."

Campbell, B. A., Hawke, B. R., and Carter, L. M. "Blocky Regolith and Rugged Subsurface Deposits on the Moon: Correlation of Dual-Wavelength Radar Data and High-Resolution Images."

Carter, L. M., Campbell, B. A., Hawke, B. R., and Bussey, D. B. J. "A Radar Survey of Lunar Dome Fields."

Coman, E. I., Blewett, D. T., Hawke, B. R., and Gillis-Davis, J. J. "Lunar Swirls: How Dark are 'Dark Lanes'?"

Connolly Jr., H. C., Huss, G. R., Shahar, A., Nagashima, K., Young, E. D., Ebel, D. S., Weisberg, M. K., Beckett, J. R., Paque, J. M., Ma, C., and Rossman, G. R. "Diffusion Within the CAI Bocce Ball 1: The Redistribution of $^{26}\text{Mg}^*$ Correlated with Variations in Al/Mg Within a Type B2 Inclusion from Allende."

Croat, T. K., Jadhav, M., Lebsack, E., and Bernatowicz, T. J. "A Unique Supernova Graphite: Contemporaneous Condensation of all Things Carbonaceous."

Desch, S. J. and Taylor, G. J. "A Model of the Moon's Volatile Depletion."

Gaddis, L. R., Klem, S., Gustafson, J. O., Hawke, B. R., and Giguere, T. A. "Alphonsus Dark-Halo Craters: Identification of Additional Volcanic Vents."

Gaddis, L., van der Bogert, C. H., Cheng, Y., Huertas, A., Skinner, J., Hawke, B. R., and Giguere, T. "Small Crater Densities Near Apollo 17: Clues to Properties of Lunar Pyroclastic Deposits."

Gustafson, J. O., Bell III, J. F., Gaddis, L. R., Hawke, B. R. Giguere, T. A., and the LROC Science Team "A Search for Potential Newly Identified Lunar Pyroclastic Deposits with LROC Data."

Hagerty, J. J., Lawrence, D. J., and Hawke, B. R. "Thorium Abundances of Basalt Ponds in South Pole-Aitken Basin: Insights into the Composition and Evolution of the Farside Lunar Mantle."

Hallis, L. J., Taylor, G. J., Stopar, J. D., Velbel, M. A., and Vicenzi, E. P. "Martian vs. Terrestrial Alteration Assemblages in MIL 03346 and Nakhla: Hydrogen Isotope and Compositional Comparisons."

Hawke, B. R., Giguere, T. A., Lawrence, S., Bray, V., Denevi, G. W., Garry, B., Gaddis, L., Kestay, L., Robinson, M., and the LROC Science Team "A Tale of Two Craters: Impact Melt at Two Very Small Craters on the Moon."

Hawke, B. R., Giguere, T. A., Lawrence, S., Glotch, T. D., Greenhagen, B. T., Hagerty, J. J., Braden, S. E., Gaddis, L. R., Tran, T., Jolliff, B. L., Lucey, P. G., Stopar, J. D., Peterson, C. A., Paige, D. A., Robinson, M. S., and the LROC Science Team "Hansteen Alpha: A Silicic Volcanic Construct on the Moon."

Huss, G. R., Nagashima, K., Jurewicz, A. J. G., Burnett, D. S., and Olinger, C. T. "Isotopic Composition of Solar Wind Nitrogen in a Genesis Bulk Solar Wind Collector."

Huss, G. R., Ogliore, R. C., Nagashima, K., Telus, M., and Jilly, C. E. "Dangers of Determining Isotope Ratios Using Means of Individual Ratios."

Jadhav, M., Zinner, E., Amari, S., and Maruoka, T. "More Ca and Ti Isotopic Ratios in High-Density, Presolar Graphite Grains from Orgueil."

Jolliff, B. L. and 12 others including Hawke, B. R. "Compton-Belkovich: Nonmare, Silicic Volcanism on the Moon's Farside."

Krot, A. N. and Yurimoto, H. "Disturbance of Magnesium Isotopes in Anorthite from an Allende CAI Inferred from Magnesium Isotope Mapping with Isotope Microscope."

Krot, A. N., Nagashima, K., and Bizzarro, M. "Recycling of CAIs in an ¹⁶O-Depleted Reservoir: Evidence from CAIs in Metal-Rich Carbonaceous Chondrites."

Lawrence, S. J., Denevi, B. W., Hawke, B. R., Giguere, T. A., Robinson, M. S., Stopar, J. D., Tran, T., Jolliff, B. L., Bussey, D. B. J., and Stelling, R. "Size Frequency Distributions of Blocks on Lunar Volcanic Landforms: Results from LROC."

Lucey, P. G. and Riner, M. A. "The Optical Effects of Small Iron Particles That Darken But Do Not Redden: Evidence of Intense Space Weathering on Mercury."

Lucey, P. G. and Crites, S. T. "Thermal Infrared Imaging Interferometer Performance for Planetary Applications."

McDermott, K., Greenwood, R. C., Franchi, I. A., Anand, M., and Scott, E. R. D. "Oxygen Isotopic and Petrological Constrints on the Origin and Relationship of IIE Iron Meteorites and H Chondrites."

Morgan, G. A., Campbell, B. A., Thompson, T. W., and Hawke, B. R. "70-cm Radar Studies of Blocky Crater Ejecta as a Guide to Megareolith Thickness Across the Nearside of the Moon."

Nagashima, K., Krot, A. N., Huss, G. R., and Yurimoto, H. "Oxygen Isotope Distributions in Type A CAIs from Kaba, CV Carbonaceous Chonrite."

Ogliore, R. C., Huss, G. R., and Nagashima, K. "The Problem of Bias in Mass Spectrometry Ratio Estimation."

Plescia, J. B., Cintala, M. J., Robinson, M. S., Barnouin, O., and Hawke, B. R. "Impact Melt in Small Lunar Highlands Craters."

Postberg, F. and 46 others including Huss, G. R. and Ogliore, R. C. "A New View on Interstellar Dust--High Fidelity Studies of Interstellar Dust Analogue Tracks in Stardust Flight Space Aerogel."

Riner, M. A. and Lucey, P. G. "The Abundance of Space Weathering-Derived Submicroscopic Metal on Mercury: Constraints from MESSENGER MDIS Multispectral Images."

Robinson, K. L. and Taylor, G. J. "Intrusive and Extrusive Lunar Felsites."

Robinson, M. S., Denevi, B. W., Sato, H., Hapke, B., and Hawke, B. R. "LROC WAC Ultraviolet Reflectance of the Moon."

Sarrazin, P., Taylor, G. J., Blake, D., Vaniman, D., and Bish, D. "XTRA" Extraterrestrial Regolith Analyzer."

Scott, E. R. D., Goldstein, J. I., and Yang, J. "Thermal, Shock, and Impact History of Group IVA and Other Iron Meteorites and Their Parent Asteroids."

Simionovici, A. and 56 others including Huss, G. R. and Ogliore, R. C. "High Fluence Synchrotron Radiation Microprobe Effects on Stardust Interstellar Dust Candidates."

Stroud, R. M. and 53 others including Huss, G. R. and Ogliore, R. C. "Identification of Impact Craters in Foils from the Stardust Interstellar Dust Collector."

Takigawa, A., Tachibana, S., Nagashima, K., Makide, K., Huss, G. R., Krot, A. N., Nagahara, H., and Ozawa, K. "Morphology of Presolar Corundum Grains from Unequilibrated Ordinary Chondrites."

Telus, M., Huss, G. R., Nagashima, K., Ogliore, R. C., Tachibana, S., and Jilly, C. E. "Possible Heterogeneity of ^{60}Fe in Chondrules from Primitive Ordinary Chondrites."

Tran, T., Robinson, M. S., Lawrence, S. J., Braden, S. E., Plescia, J., Hawke, B. R., Jolliff, B. L., Stopar, J. D., and the LROC Science Team "Morphometry of Lunar Volcanic Domes from LROC."

Trang, D., Lucey, P. G., and Gillis-Davis, J. J. "The Optical Constants of Olivine in the Near-Infrared as a Function of Iron Content."

Trang, D., Gillis-Davis, J. J., Hawke, B. R., and Bussey, D. B. J. "The Origin of Lunar Concentric Craters."

Waikita, S., Jogo, K., and Krot, A. N. "Thermal Evolution of CV-Like Carbonaceous Chondrite Asteroid."

Wasserburg, G. J., Hutcheon, I. D., Aleon, J., Ramon, E. C., Krot, A. N., Nagashima, K., and Brearley, A. J. "Extremely Na and Cl Rich Chondrule AL3509 From the Allende Meteorite."

Wasson, J. T. and Scott, E. R. D. "Group IIE Iron Meteorites: Metal Composition, Formation, Relationship to Ordinary Chondrites."

Westphal, A. J. and 60 others including Huss, G. R. and Ogliore, R. C. "Constraints on the Interstellar Dust Flux Based on Stardust@Home Search Results."

Westphal, A. J. and 60 others including Huss, G. R. and Ogliore, R. C. "Four Interstellar Dust Candidates From the Stardust Interstellar Dust Collector."

Wilson, L., Keil, K., and McCoy, T. "Explosive Volcanism on Asteroids Re-Visited: Sizes of Pyroclasts Lost or Retained."

Wopenka, B., Jadhav, M., and Zinner, E. "Raman Analysis of High-Density Presolar Graphite Grains from the Orgueil Carbonaceous Chondrite."

Zinner, E., Jadhav, M., Gyngard, F., and Nittler, L. R. "Bonanza, A Huge Presolar SiC Grain of Type X."