

SSERVI Total Publications:

- Davis, S., Marshall, J., Richard, D., Adler, D., Adler, B. 2014. Scattering properties of lunar dust analogs. *Planetary and Space Science*, 90: 28-36. 10.1016/j.pss.2013.11.005
- Stubbs, T. J., Farrell, W. M., Halekas, J. S., Burchill, J. K., Collier, M. R., Zimmerman, M. I., Vondrak, R. R., Delory, G. T., Pfaff, R. F. 2014. Dependence of lunar surface charging on solar wind plasma conditions and solar radiation. *Planetary and Space Science*, 90: 10-27. 10.1016/j.pss.2013.07.008
- Farrell, W. M., Hurley, D. M., Zimmerman, M. I. 2015. Solar wind implantation into lunar regolith: H retention in a surface with defects. *Icarus*, 255: 116-126. 10.1016/j.icarus.2014.09.014
- Delbo, M., Libourel, G., Wilkerson, J., Murdoch, N., Michel, P., Ramesh, K.T., Ganino, C., Verati, C., & Marchi, S., 2014. Thermal Fatigue as the Origin of Regolith on small Asteroid. *Nature*, 508: 233-236. 10.1038/nature13153
- Minton, D.A., Levison, H.F. 2014. Planetesimal-driven migration of terrestrial planet embryos. *Icarus*, 232: 118-132. 10.1016/j.icarus.2014.01.001
- Rivera-Valentin, E.G., Barr, A.C. 2014. Estimating the size of Late Vener impactors from impact-induced mixing on Mercury. *The Astrophysical Journal Letters*, 782(1):L8 (6pp). 10.1088/2041-8205/782/1/L8
- Rivera-Valentin, E.G., Barr, A.C. 2014. Impact-induced compositional variations on Mercury. *Earth and Planetary Science Letters*, 391:234-242. 10.1016/j.epsl.2014.02.003
- Greenwood, R.C., Barrat, J-A, Yamaguchi, A., Franchi, I.A., Scott, E.R.D., Bottke, W.F., Gibson, J.M. 2014. The oxygen isotope composition of diogenites: Evidence for early global melting on a single, compositionally diverse, HED parent body. *Earth and Planetary Science Letters*, 390:165-174. 10.1016/j.epsl.2013.12.011
- Sanchez, J.A., Reddy, V., Kelley, M.S., Cloutis, E.A., Bottke, W.F., Nesvorný, D., Lucas, M.P., Hardersen, P.S., Gaffey, M.J., Abell, P.A., Corre, L.L. 2014. Olivine-dominated asteroids: Mineralogy and origin. *Icarus*, 228: 288-300. 10.1016/j.icarus.2013.10.006
- Sweep and Prune Contact Detection Algorithm with Virtual Hierarchical Space Partitioning. *Computer Physics Communications*, 00 (2014) 1-11. CPC 00 (2014) 1-11
- Nye, B., Kulchitsky, A.V., & Johnson, J.B. 2014. Intersecting dilated convex polyhedra method for modeling complex particles in discrete element method. *International Journal for Numerical and Analytical Methods in Geomechanics*, 38(9): 978-990. 10.1002/nag.2299
- Miller, R.S., Lawrence, D.J., Hurley, D.M. 2014. Identification of surface hydrogen enhancements within the Moon's Shackleton crater. *Icarus*, 233: 229-232. 10.1016/j.icarus.2014.02.007
- Collette, A., Sternovsky, Z., Horanyi, M." 2014. Production of Neutral Gas by Micrometeoroid Impacts. *Icarus*, 227: 89-93. 10.1016/j.icarus.2013.09.009
- Wang, X., Malaspina, D.M., Ergun, R.E., Horányi, M. 2014. Photoelectron-mediated spacecraft potential fluctuations. *Journal for Geophysical Research - Space Physics*, 119(2): 1094-1101. 10.1002/2013JA019502
- Wang, X., Malaspina, D.M., Hsu, H.-W., Ergun, R.E., Horányi, M. 2014. Effect of magnetic field on photoelectron-mediated spacecraft potential fluctuations. *Journal for Geophysical Research - Space Physics*, 119(9): 7319-7326. 10.1002/2014JA019923
- Zakharov, A., Horanyi, M., Lee, P., Witasse, O., Cipriani, F. 2014. Dust at the Martian moons and in the circummartian space. *Planetary and Space Science*, 102: 171-175. 10.1016/j.pss.2013.12.011
- Spudis, P.D., Martin, D.J.P., Kramer, G. 2014. Geology and composition of the Orientale Basin impact melt sheet. *Journal of Geophysical Research - Planets*, 119(1): 19-29. 10.1002/2013JE004521
- Sharp, M., Gerasimenko, I., Loudin, L.C., Liu, J., James, O.B., Puchtel, I.S., Walker, R.J. 2014. Characterization of the dominant impactor signature for Apollo 17 impact melt rocks. *Geochimica et Cosmochimica Acta*, 131: 62-80. 10.1016/j.gca.2014.01.014
- Kohout, T., Čuda, J., Filip, J., Britt, D., Bradley, T., Tuček, J., Skála, R., Kletetschka, G., Kašlík, J., Malina, O., Šišková, K., Zbořil, R. 2014. Space weathering simulations through controlled growth of iron nanoparticles on olivine. *Icarus*, 237: 75-83. 10.1016/j.icarus.2014.04.004
- Jacobson, S.A., Morbidelli, A., Raymond, S.N., O'Brien, D.P., Walsh, K.J., & Rubie, D.C. 2014. Highly siderophile elements in Earth's mantle as a clock for the Moon-forming impact. *Nature*, 508: 84-87. 10.1038/nature13172
- Deca, J., Divin, A., Lapenta, G., Lembège, B., Markidis, S., & Horányi, M. 2014. Electromagnetic Particle-in-Cell Simulations of the Solar Wind Interaction with Lunar Magnetic Anomalies. *Physical Review Letters*, 112(15):1102 Erratum 113(08): 9902. 10.1103/PhysRevLett.112.151102
- Poppe, A.R., Fatemi, S., Halekas, J.S., Holmström, M., Delory, G.T. 2014. ARTEMIS observations of extreme diamagnetic fields in the lunar wake. *Geophysical Research Letters*, 41(11): 3766-3773. 10.1002/2014GL060280
- Kretke, K.A., Levison, H.F. 2014. Challenges in Forming the Solar System's Giant Planet Cores via Pebble Accretion. *The Astronomical Journal*, 148(6): 109. 10.1088/0004-6256/148/6/109
- Jordan, A.P., Stubbs, T.J., Wilson, J.K., Schwadron, N.A., Spence, H.E., Joyce, C.J. 2014. Deep dielectric charging of regolith within the Moon's permanently shadowed regions. *Journal of Geophysical Research E: Planets*, 119(8): 1806-1821. 10.1002/2014JE004648
- Halekas, J.S., Poppe, A.R., McFadden, J.P. 2014. The effects of solar wind velocity distributions on the refilling of the lunar wake: ARTEMIS observations and comparisons to one-dimensional theory. *Journal of Geophysical Research - Space Physics*, 119(7): 5133-5149. 10.1002/2014JA020083
- Poppe, A.R., Sarantos, M., Halekas, J.S., Delory, G.T., Saito, Y., Nishino, M. 2014. Anisotropic solar wind sputtering of the lunar surface induced by crustal magnetic anomalies. *Geophysical Research Letters*, 41(14): 4865-4872. 10.1002/2014GL060523
- Collier, M.R., Snowden, S.L., Sarantos, M., Benna, M., Carter, J.A., Cravens, T.E., Farrell, W.M., Fatemi, S., Kent Hills, H., Hodges, R.R., Holmstrom, M., Kuntz, K.D., Scott

- Porter, F., Read, A., Robertson, I.P., Sembay, S.F., Sibeck, D.G., Stubbs, T.J., Travnicek, P., Walsh, B.M. 2014. On Lunar Exospheric Column Densities and Solar Wind Access Beyond the Terminator from ROSAT Soft X-ray Observations of Solar Wind Charge Exchange. *Journal of Geophysical Research – Planets*, 119(7): 1459-1478. 10.1002/2014JE004628
- Hijazi, H., Bannister, M.E., Meyer III, H.M., Rouleau, C.M., Barghouty, A.F., Rickman, D.L., Meyer, F.W. 2014. Anorthite Sputtering by H⁺ and Arq⁺ (q=1-9) at Solar Wind Velocities. *Journal of Geophysical Research – Space Physics*, 119(10): 8006-8016. 10.1002/2014JA020140
- Poston, M.J., Gieves, G.A., Aleksandrov, A.B., Hibbitts, C.A., Dyar, M.D., Orlando, T.M. 2015. Temperature programmed desorption studies of water interactions with Apollo lunar samples 12001 and 72501. *Icarus*, 255: 24-29. 10.1016/j.icarus.2014.09.049
- Robinson, T.D., Ennico, K., Meadows, V.S., Sparks, W., Bussey, D.B.J., Schwieterman, E.W., Breiner, J. 2014. Detection of Ocean Glint and Ozone Absorption Using LCROSS Earth Observations. *The Astrophysical Journal*, 787(2): 171. 10.1088/0004-637X/787/2/171
- Fagan, A.L., Joy, K.H., Bogard, D.D., Kring, D.A. 2014. Ages of globally distributed lunar paleoregoliths and soils from 3.9 Ga to the present. *Earth, Moon, and Planets*, 112(1): 59-71. 10.1007/s11038-014-9437-7
- Hurwitz, D.M., Kring, D.A. 2014. Differentiation of the South Pole-Aitken basin impact melt sheet: Implications for lunar exploration. *Journal of Geophysical Research – Planets*, 119(6): 1110-1133. 10.1002/2013JE004530
- Öhman, T., Kramer, G.Y., Kring, D.A. 2014. Characterization of Melt and Ejecta Deposits of Kepler Crater from Remote Sensing Data. *Journal of Geophysical Research – Planets*, 119(6): 1238-1258. 10.1002/2013JE004501
- Joy, K.H., Crawford, I.A., Huss, G.R., Nagashima, K., & Taylor, G.J. 2014. An unusual clast in lunar meteorite MacAlpine Hills 88105: A unique lunar sample or projectile debris? *Meteoritics and Planetary Science*, 49(4): 677-695. 10.1111/maps.12270
- Glotch, T.D., Bandfield, J.L., Lucey, P.G., Hayne, P.O., Greenhagen, B.T., Arnold, J.A., Ghent, R.R., & Paige, D.A. 2015. Formation of lunar swirls by magnetic field standoff of the solar wind. *Nature Communications*, 6, Article number: 6189. 10.1038/ncomms7189
- Lemelin, M., Blair, D.M., Roberts, C.E., Runyon, K.D., Nowka, D., Kring, D.A. 2014. High-priority lunar landing sites for in situ and sample return studies of polar volatiles. *Planetary and Space Science*, 101: 149-161. 10.1016/j.pss.2014.07.002
- Jackson, T.L., Farrell, W.M., Zimmerman, M.I. 2015. Rover Wheel Charging on the Lunar Surface. *Advances in Space Research*, 55(6): 1710-1720. 10.1016/j.asr.2014.12.027
- Schunová, E., Jedicke, R., Walsh, K.J., Granvik, M., Wainscoat, R.J., Haghhighipour, N. 2014. Properties and evolution of NEO families created by tidal disruption at Earth. *Icarus*, 238: 156-169. 10.1016/j.icarus.2014.05.006
- Poppe, A.R., Curry, S.M. 2014. Martian planetary heavy ion sputtering of Phobos. *Geophysical Research Letters*, 41(18): 6335-6341. 10.1002/2014GL061100
- Glenar, D.A., Stubbs, T.J., Hahn, J.M., Wang, Y. 2014. Search for a High Altitude Lunar Dust Exosphere using Clementine Navigational Star Tracker Measurements. *Journal of Geophysical Research – Planets*, 119(12): 2548-2567. 10.1002/2014JE004702
- Marchi, S., Bottke, W.F., Elkins-Tanton, L.T., Bierhaus, M., Wuennemann, K., Morbidelli, A., & Kring, D.A. 2014. Widespread mixing and burial of Earth's Hadean crust by asteroid impacts. *Nature*, 511: 578-582. 10.1038/nature13539
- Walsh, K.J., Levison, H.F. 2015. Formation and evolution of Pluto's small satellites. *The Astronomical Journal*, 150(1). 10.1088/0004-6256/150/1/11
- Jordan, A.P., Stubbs, T.J., Wilson, J.K., Schwadron, N.A., Spence, H.E. 2015. Dielectric breakdown weathering of the Moon's polar regolith. *Journal of Geophysical Research – Planets*, 120(2): 210-225. 10.1002/2014JE004710
- Plescia, J.B., Spudis, P.D. 2014. Impact Melt Flows at Lowell Crater. *Planetary and Space Science*, 103: 219-227. 10.1016/j.pss.2014.08.003
- Mendis, D.A., Horányi, M. 2014. The Global Morphology of the Solar Wind Interaction with Comet Churyumov-Gerasimenko. *The Astrophysical Journal*, 794:14 (7pp). 10.1088/0004-637X/794/1/14
- Lawrence, D.J., Peplowski, P.N., Plescia, J.B., Greenhagen, B.T., Maurice, S., Prettyman, T.H. 2015. Bulk Hydrogen Abundances in the Lunar Highlands: Measurements from Orbital Neutron Data. *Icarus*, 255: 127-134. 10.1016/j.icarus.2015.01.005
- Water chemisorption interactions with Apollo lunar samples 12001 and 72501 by ultrahigh vacuum temperature programmed desorption experiments. *Icarus*, 13537
- Cahill, J.T.S., Thomson, B.J., Patterson, G.W., Bussey, D.B.J., Neish, C.D., Lopez, N.R., Turner, F.S., Aldridge, T., McAdam, M., Meyer, H.M., Raney, R.K., Carter, L.M., Spudis, P.D., Hiesinger, H., Pasckert, J.H. 2014. The Miniature Radio Frequency Instrument's (Mini-RF) global observations of Earth's Moon. *Icarus*, 243: 173-190. 10.1016/j.icarus.2014.07.018
- Taylor, G.J., Wieczorek, M.A. 2014. Lunar bulk chemical composition: a post-Gravity Recovery and Interior Laboratory reassessment. *Philosophical Transactions. Series A, Mathematical, physical, and engineering sciences*, 372(2024): 20130242. 10.1098/rsta.2013.0242
- Crawford, I.A., Joy, K.H. 2014. Lunar exploration: opening a window into the history and evolution of the inner Solar System. *Philosophical Transactions. Series A, Mathematical, physical, and engineering sciences*, 372(2024): 20130315. 10.1098/rsta.2013.0315
- Anand, M., Tartèse, R., Barnes, J.J. 2014. Understanding the origin and evolution of water in the Moon through lunar sample studies. *Philosophical Transactions. Series A, Mathematical, physical, and engineering sciences*, 372(2024): 20130254. 10.1098/rsta.2013.0254
- Walker, R.J. 2014. Siderophile element constraints on the origin of the Moon. *Philosophical Transactions. Series A, Mathematical, physical, and engineering sciences*, 372(2024): 20130258. 10.1098/rsta.2013.0258
- Russell, S.S., Joy, K.H., Jeffries, T.E., Consolmagno, G.J., Kearsley, A. 2014. Heterogeneity in lunar anorthosite meteorites: implications for the lunar magma ocean model.

- Philosophical Transactions. Series A, Mathematical, physical, and engineering sciences, 372(2024): 20130241. 10.1098/rsta.2013.0241
- Joy, K.H., Nemchin, A., Grange, M., Lapen, T.J., Peslier, A.H., Ross, D.K., Zolensky, M.E., Kring, D.A. 2014. Petrography, geochronology and source terrain characteristics of lunar meteorites Dhofar 925, 961 and Sayh al Uhaymir 449. *Geochimica et Cosmochimica Acta*, 144: 299-325. 10.1016/j.gca.2014.08.013
- Neal, C.R., Donohue, P., Fagan, A.L., O'Sullivan, K., Oshrin, J., Roberts, S. 2015. Distinguishing between basalts produced by endogenic volcanism and impact processes: A non-destructive method using quantitative petrography of lunar basalt samples. *Geochimica et Cosmochimica Acta*, 148: 62-80. 10.1016/j.gca.2014.08.020
- Kring, D.A., Boslough, M. 2014. Chelyabinsk: Portrait of an asteroid airburst. *Physics Today*, 67(9): 32-37. 10.1063/PT.3.2515
- Schwadron, N.A., Smith, S., Spence, H.E. 2013. The CRaTER Special Issue of Space Weather: Building the observational foundation to deduce biological effects of space radiation. *Space Weather*, 11(2): 47-48. 10.1002/swe.20026
- Jordan, A.P., Stubbs, T.J., Joyce, C.J., Schwadron, N.A., Spence, H.E., Wilson, J.K. 2013. The formation of molecular hydrogen from water ice in the lunar regolith by energetic charged particles. *Journal of Geophysical Research - Planets*, 118(6): 1257-1264. 10.1002/jgre.20095
- Wang, X., Hsu, H.-W., Horányi, M. 2015. Identification of when a Langmuir probe is in the sheath of a spacecraft: The effects of secondary electron emission from the probe. *Journal of Geophysical Research - Space Physics*, 120(4): 2428-2437. 10.1002/2014JA020624
- Halekas, J.S., Poppe, A.R., McFadden, J.P., Angelopoulos, V., Glassmeier, K.-H., Brain, D.A. 2014. Evidence for Small-Scale Collisionless Shocks at the Moon from ARTEMIS. *Geophysical Research Letters*, 41(21): 7436-7443. 10.1002/2014GL061973
- Bottke, W.F., Vokrouhlicky, D., Marchi, S., Swindle, T., Scott, E.R.D., Weirich, J.R., Levison, H. 2015. Dating the Moon-forming impact event with meteorites. *Science*, 348(6232): 321-323. 10.1126/science.aaa0602
- Levison, H.F., Kretke, K.A., Duncan, M.J. 2015. Growing the gas-giant planets by the gradual accumulation of pebbles. *Nature*, 524: 322-324. 10.1038/nature14675
- Levison, H.F., Kretke, K.A., Walsh, K., Bottke, W. 2015. Growing the terrestrial planets from the gradual accumulation of submeter-sized objects. *Proceedings of the National Academy of Sciences (PNAS)*, 112(46): 14180-14185. 10.1073/pnas.1513364112
- Carey, C., Boucher, T., Mahadevan, S., Bartholomew, P., Dyar, M.D. 2015. Machine learning tools for mineral recognition and classification from Raman spectroscopy. *Journal of Raman Spectroscopy*, 46(10): 894-903. 10.1002/jrs.4757
- Howes, C.T., Wang, X., Deca, J., Horányi, M. 2015. Laboratory investigation of lunar surface electric potentials in magnetic anomaly regions *Geophysical Research Letters* 42(11): 4280-4287 10.1002/2015GL063943
- Schwadron, N.A., Blake, J.B., Case, A.W., Joyce, C.J., Kasper, J., Mazur, J., Petro, N., Quinn, M., Porter, J.A., Smith, C.W., Smith, S., Spence, H.E., Townsend, L.W., Turner, R., Wilson, J.K., Zeitlin, C. 2014. Does the worsening galactic cosmic radiation environment observed by CRaTER preclude future manned deep-space exploration? *Space Weather*, 12(11): 622-632. 10.1002/2014SW001084
- Izawa, M. R. M.; Applin, D. M.; Norman, L.; Cloutis, E. A. 2014. Reflectance spectroscopy (350-2500 nm) of solid-state polycyclic aromatic hydrocarbons (PAHs). *Icarus*, 237: 159-181. 10.1016/j.icarus.2014.04.033
- Jaret, S.J., Woerner, W.R., Phillips, B.L., Ehm, L., Nekvasil, H., Wright, S.P., Glotch, T.D. 2015. Maskelynite formation via solid-state transformation: Evidence of infrared and X-ray anisotropy. *Journal of Geophysical Research - Planets*, 120(3): 570-587. 10.1002/2014JE004764
- Marchi, S., Bottke, W.F., O'Brien, D.P., Schenk, P., Mottola, S., De Sanctis, M.C., Kring, D.A., Williams, D.A., Raymond, C.A., Russell, C.T. 2014. Small crater populations on Vesta. *Planetary and Space Science*, 103: 96-103. 10.1016/j.pss.2013.05.005
- Sharp, M., Righter, K., Walker, R.J. 2015. Estimation of trace element concentrations of the lunar magma ocean using mineral- and metal-silicate melt partition coefficients. *Meteoritics and Planetary Science*, 50(4): 733-758. 10.1111/maps.12396
- Merle, R.E., Nemchin, A.A., Grange, M.L., Whitehouse, M.J., and Pidgeon, R.T. 2014. High resolution U-Pb ages of Ca-phosphates in Apollo 14 breccias: implications for the age of the Imbrium impact. *Meteoritics and Planetary Science*, 49(12): 2241-2251. 10.1111/maps.12395
- Kim, K.J., Lee, J.-H., Seo, H., Ju, G., Lee, S.-R., Choi, G.-H., Sim, E.-S., Lee, T.S. 2014. An introduction to the lunar and planetary science activities in Korea. *Advances in Space Research*, 54(10): 2000-2006 10.1016/j.asr.2013.05.009
- Hogan, J.D., El Mir, C., Plescia, J.B., Ramesh, K.T. 2015. Dynamic brittle fragmentation: Probing the byproducts of hypervelocity impact in space. *Procedia Engineering*, 103: 205-212. 10.1016/j.proeng.2015.04.028
- Poppe, A.R., Zimmerman, M.I., Halekas, J.S., Farrell, W.M. 2015. The electrostatic plasma environment of a small airless body under non-aligned plasma flow and UV conditions. *Planetary and Space Science*, 119: 111-120. 10.1016/j.pss.2015.06.001
- Potts, N.J., Gullikson, A.L., Curran, N.M., Dhaliwal, J.K., Leader, M.K., Rege, R.N., Klaus, K.K., Kring, D.A. 2015. Robotic traverse and sample return strategies for a lunar farside mission to the Schrödinger basin. *Advances in Space Research*, 55(4): 1241-1254. 10.1016/j.asr.2014.11.028
- Heldmann, J.L., Colaprete, A., Elphic, R.C., Mattes, G., Ennico, K., Fritzlér, E., Marinova, M.M., McMurray, R., Morse, S., Roush, T.L., Stoker, C.R. 2015. Real-time science operations to support a lunar polar volatiles rover mission. *Advances in Space Research*, 55(10): 2427-2437. 10.1016/j.asr.2014.07.037
- Espy Kehoe, A.J., Kehoe, T.J.J., Colwell, J.E., Dermott, S.F. 2015. Signatures of Recent Asteroid Disruptions in the Formation and Evolution of Solar System Dust Bands. *The Astrophysical Journal*, 811(1). 10.1088/0004-637X/811/1/66

- Alibay, F., Desaraju, V.R., Duda, J.E., Hoffman, J.A. 2014. Fractionated robotic architectures for planetary surface mobility systems. *Acta Astronautica*, 95: 15-29. 10.1016/j.actaastro.2013.10.014
- Basilevsky, A.T., Kreslavsky, M.A., Karachevtseva, I.P., Gusakova, E.N. 2014. Morphometry of small impact craters in the Lunokhod-1 and Lunokhod-2 study areas. *Planetary and Space Science*, 92: 77-87. 10.1016/j.pss.2013.12.016
- Basilevsky, A.T., Lorenz, C.A., Shingareva, T.V., Head, J.W., Ramsley, K.R., Zubarev, A.E. 2014. The surface geology and geomorphology of Phobos. *Planetary and Space Science*, 102: 95-118. 10.1016/j.pss.2014.04.013
- Bauch, K.E., Hiesinger, H., Helbert, J., Robinson, M.S., Scholten, F. 2014. Estimation of lunar surface temperatures and thermophysical properties: test of a thermal model in preparation of the MERTIS experiment onboard BepiColombo. *Planetary and Space Science*, 101: 27-36. 10.1016/j.pss.2014.06.004
- Chanou, A., Osinski, G.R., Grieve, R.A.F. 2014. A methodology for the semi-automatic digital image analysis of fragmental impactites. *Meteoritics and Planetary Science*, 49(4): 621-635. 10.1111/maps.12267
- Cheek, L.C., Pieters, C.M. 2014. Reflectance spectroscopy of plagioclase-dominated mineral mixtures: Implications for characterizing lunar anorthosites remotely. *American Mineralogist*, 99(10):1871-1892 10.2138/am-2014-4785
- Cloutis, E.A., Binzel, R.P., Gaffey, M.J. 2014. Establishing Asteroid-Meteorite Links. *Elements*, 10(1): 25-30 10.2113/gselements.10.1.25
- DeMeo, F.E., Binzel, R.P., Carry, B., Polishook, D., Moskovitz, N.A. 2014. Unexpected D-type interlopers in the inner main belt. *Icarus*, 229: 392-399. 10.1016/j.icarus.2013.11.026
- DeMeo, F.E., Binzel, R.P., Lockhart, M. 2014. Mars encounters cause fresh surfaces on some near-Earth asteroids. *Icarus*, 227: 112-122. 10.1016/j.icarus.2013.09.014
- Demidov, N.E., Basilevsky, A.T. 2014. Height-to-diameter ratios of moon rocks from analysis of Lunokhod-1 and -2 and Apollo 11-17 panoramas and LROC NAC images. *Solar System Research*, 48(5): 324-329. 10.1134/S0038094614050013
- Donaldson Hanna, K.L., Cheek, L.C., Pieters, C.M., Mustard, J.F., Greenhagen, B.T., Thomas, I.R., Bowles, N.E. 2014. Global assessment of pure crystalline plagioclase across the Moon and implications for the evolution of the primary crust. *Journal of Geophysical Research – Planets*, 119(7): 1516-1545. 10.1002/2013JE004476
- Elkins-Tanton, L.T., Bercovici, D. 2014. Contraction or expansion of the Moon's crust during magma ocean freezing? *Philosophical Transactions of the Royal Society A*, 372(2024): 20130240. 10.1098/rsta.2013.0240
- Ermakov, A.I., Zuber, M.T., Smith, D.E., Raymond, C.A., Balmino, G., Fu, R.R., Ivanov, B.A. 2014. Constraints on Vesta's interior structure using gravity and shape models from the Dawn mission. *Icarus*, 240: 146-160. 10.1016/j.icarus.2014.05.015
- Evans, A.J., Zuber, M.T., Weiss, B.P., Tikoo, S.M. 2014. A wet, heterogeneous lunar interior: Lower mantle and core dynamo evolution. *Journal of Geophysical Research – Planets*, 119(5): 1061-1077. 10.1002/2013JE004494
- Freed, A.M., Johnson, B.C., Blair, D.M., Melosh, H.J., Neumann, G.A., Phillips, R.J., Solomon, S.C., Wieczorek, M.A., Zuber, M.T. 2014. The formation of lunar mascon basins from impact to contemporary form. *Journal of Geophysical Research – Planets*, 119(11): 2378-2397. 10.1002/2014JE004657
- Fu, R.R., Elkins-Tanton, L.T. 2014. The fate of magmas in planetesimals and the retention of primitive chondritic crusts. *Earth and Planetary Science Letters*, 390: 128-137. 10.1016/j.epsl.2013.12.047
- Fu, R.R., Hager, B.H., Ermakov, A.I., Zuber, M.T. 2014. Efficient early global relaxation of asteroid Vesta. *Icarus*, 240: 133-145. 10.1016/j.icarus.2014.01.023
- Fu, R.R., Lima, E.A., Weiss, B.P. 2014. No nebular magnetization in the Allende CV carbonaceous chondrite. *Earth and Planetary Science Letters*, 404: 54-66. 10.1016/j.epsl.2014.07.014
- Gaetani, G.A., O'Leary, J.A., Koga, K.T., Hauri, E.H., Rose-Koga, E.F., Monteleone, B.D. 2014. Hydration of mantle olivine under variable water and oxygen fugacity conditions. *Contributions to Mineralogy and Petrology*, 167: 965. 10.1007/s00410-014-0965-y
- Garrick-Bethell, I., Perera, V., Nimmo, F., Zuber, M.T. 2014. The tidal-rotational shape of the Moon and evidence for polar wander. *Nature*, 512: 181-184. 10.1038/nature13639
- Dygert, N., Liang, Y., Sun, C., Hess, P. 2014. An experimental study of trace element partitioning between augite and Fe-rich basalts. *Geochimica et Cosmochimica Acta*, 132: 170-186. 10.1016/j.gca.2014.01.042
- Gattacceca, J., Suavet, C., Rochette, P., Weiss, B.P., Winkhofer, M., Uehara, M., Friedrich, J.M. 2014. Metal phases in ordinary chondrites: Magnetic hysteresis properties and implications for thermal history. *Meteoritics and Planetary Science*, 49(4): 652-676. 10.1111/maps.12268
- Goodrich, C.A., Ash, R.D., Van Orman, J.A., Domanik, K., McDonough, W.F. 2013. Metallic phases and siderophile elements in main group ureilites: Implications for ureilite petrogenesis. *Geochimica et Cosmochimica Acta*, 112: 340-373. 10.1016/j.gca.2012.06.022
- Goodrich, C.A., Harlow, G.E., Van Orman, J.A., Sutton, S.R., Jercinovic, M.J., Mikouchi, T. 2014. Petrology of chromite in ureilites: Deconvolution of primary oxidation states and secondary reduction processes. *Geochimica et Cosmochimica Acta*, 135: 126-169. 10.1016/j.gca.2014.02.028
- Goudge, T.A., Head, J.W., Kerber, L., Blewett, D.T., Denevi, B.W., Domingue, D.L., Gillis-Davis, J.J., Gwinner, K., Helbert, J., Holsclaw, G.M., Izenberg, N.R., Klima, R.L., McClintock, W.E., Murchie, S.L., Neumann, G.A., Smith, D.E., Strom, R.G., Xiao, Z., Zuber, M.T., Solomon, S.C. 2014. Global inventory and characterization of pyroclastic deposits on Mercury: New insights into pyroclastic activity from MESSENGER orbital data. *Journal of Geophysical Research – Planets*, 119(3): 635-658. 10.1002/2013JE004480
- Horgan, B.H.N., Cloutis, E.A., Mann, P., Bell III, J.F. 2014. Near-infrared spectra of ferrous mineral mixtures and methods for their identification in planetary surface spectra. *Icarus*, 234: 132-154. 10.1016/j.icarus.2014.02.031

- Isaacson, P.J., Klima, R.L., Sunshine, J.M., Cheek, L.C., Pieters, C.M., Hiroi, T., Dyar, M.D., Lane, M., Bishop, J. 2014. Visible to near-infrared optical properties of pure synthetic olivine across the olivine solid solution. *American Mineralogist*, 99(2-3): 467-478. 10.2138/am.2014.4580
- Izawa, M.R.M., Applin, D.M., Norman, L., Cloutis, E.A. 2014. Reflectance spectroscopy (350-2500 nm) of solid-state polycyclic aromatic hydrocarbons (PAHs). *Icarus*, 237: 159-181. 10.1016/j.icarus.2014.04.033
- Izawa, M.R.M., Cloutis, E.A., Applin, D.M., Craig, M.A., Mann, P., Cuddy, M. 2014. Laboratory spectroscopic detection of hydration in pristine lunar regolith. *Earth and Planetary Science Letters*, 390:157-164. 10.1016/j.epsl.2014.01.007
- Jackson, C.R.M., Cheek, L.C., Williams, K.B., Donaldson Hanna, K., Pieters, C.M., Parman, S.W., Cooper, R.F., Dyar, M.D., Nelms, M., Salvatore, M.R. 2014. Visible-infrared spectral properties of iron-bearing aluminated spinel under lunar-like redox conditions. *American Mineralogist*, 99(10): 1821-1833. 10.2138/am-2014-4793
- Kaydash, V., Shkuratov, Y., Videen, G. 2014. Dark halos and rays of young lunar craters: A new insight into interpretation. *Icarus*, 231: 22-33. 10.1016/j.icarus.2013.11.025
- Kaydash, V.G., Shkuratov, Y.G. 2014. Structural disturbances of the lunar surface near the Lunokhod-1 spacecraft landing site. *Solar System Research*, 48(3): 167-175. 10.1134/S0038094614030034
- Korokhin, V.V., Velikodsky, Y.I., Shalygin, E.V., Shkuratov, Y.G., Kaydash, V.G., Videen, G. 2014. Retrieving lunar topography from multispectral LROC images. *Planetary and Space Science*, 92: 65-76. 10.1016/j.pss.2014.01.008
- Lloyd, A.S., Ruprecht, P., Hauri, E.H., Rose, W., Gonnermann, H.M., Plank, T. 2014. NanoSIMS results from olivine-hosted melt embayments: Magma ascent rate during explosive basaltic eruptions. *Journal of Volcanology and Geothermal Research*, 283: 1-18. 10.1016/j.jvolgeores.2014.06.002
- Marsset, M., Vernazza, P., Gourgeot, F., Dumas, C., Birlan, M., Lamy, P., Binzel, R.P. 2014. Similar origin for low- and high-albedo Jovian Trojans and Hilda asteroids? *Astronomy and Astrophysics*, 568(L7). 10.1051/0004-6361/201424105
- Moroz, L.V., Starukhina, L.V., Snata Rout, S., Sasaki, S., Helbert, J., Baither, D., Bischoff, A., Hiesinger, H. 2014. Space weathering of silicate regoliths with various FeO contents: New insights from laser irradiation experiments and theoretical spectral simulations. *Icarus*, 235: 187-206. 10.1016/j.icarus.2014.03.021
- Mueller, T., Watson, E.B., Trail, D., Wiedenbeck, M., Van Orman, J., Hauri, E.H. 2014. Diffusive fractionation of carbon isotopes in gamma-Fe: Experiment, models and implications for early solar system processes. *Geochimica et Cosmochimica Acta*, 127: 57-66. 10.1016/j.gca.2013.11.014
- Nagaoka, H., Takeda, H., Karouji, Y., Ohtake, M., Yamaguchi, A., Yoneda, S., Hasebe, N. 2014. Implications for the origins of pure anorthosites found in the feldspathic lunar meteorites, Dhofar 489 group. *Earth, Planets and Space*, 66: 115. 10.1186/1880-5981-66-115
- Neeley, J.R., Clark, B.E., Ockert-Bell, M.E., Shepard, M.K., Conklin, J., Cloutis, E.A., Fornasier, S., Bus, S.J. 2014. The composition of M-type asteroids II: Synthesis of spectroscopic and radar observations. *Icarus*, 238: 37-50. 10.1016/j.icarus.2014.05.008
- Neish, C.D., Madden, J., Carter, L.M., Hawke, B.R., Giguere, T., Bray, V.J., Osinski, G.R., Cahill, J.T.S. 2014. Global distribution of lunar impact melt flows. *Icarus*, 239: 105-117. 10.1016/j.icarus.2014.05.049
- Ohtake, M., Uemoto, K., Yokota, Y., Morota, T., Yamamoto, S., Nakamura, R., Haruyama, J., Iwata, T., Matsunaga, T., Ishihara, Y. 2014. Geologic structure generated by large-impact basin formation observed at the South Pole-Aitken basin on the Moon. *Geophysical Research Letters*, 41(8): 2738-2745. 10.1002/2014GL059478
- Pieters, C.M., Donaldson Hanna, K., Cheek, L., Dhingra, D., Prissel, T., Jackson, C., Moriarty, D., Parman, S., Taylor, L.A. 2014. The distribution of Mg-spinel across the Moon and constraints on crustal origin. *American Mineralogist*, 99(10): 1893-1910. 10.2138/am-2014-4776
- Pieters, C.M., Murchie, S., Thomas, N., Britt, D. 2014. Composition of surface material on the moons of Mars. *Planetary and Space Science*, 102: 144-151. 10.1016/j.pss.2014.02.008
- Polishook, D., Moskovitz, N., Binzel, R.P., DeMeo, F.E., Vokrouhlický, D., Žižka, J., Oszkiewicz, D. 2014. Observations of "fresh" and weathered surfaces on asteroid pairs and their implications on the rotational-fission mechanism. *Icarus*, 233: 9-26. 10.1016/j.icarus.2014.01.014
- Prissel, T.C., Parman, S.W., Jackson, C.R.M., Rutherford, M.J., Hess, P.C., Head, J.W., Cheek, L., Dhingra, D., Pieters, C.M. 2014. Pink Moon: The petrogenesis of pink spinel anorthosites and implications concerning Mg-suite magmatism. *Earth and Planetary Science Letters*, 403: 144-156. 10.1016/j.epsl.2014.06.027
- Rivera-Valentin, E.G., Barr, A.C. 2014. Estimating the size of late veneer impactors from impact-induced mixing on Mercury. *The Astrophysical Journal Letters*, 782(1): L8. 10.1088/2041-8205/782/1/L8
- Sanchez, J.A., Reddy, V., Kelley, M.S., Cloutis, E.A., Bottke, W.F., Nesvorný, D., Lucas, M.P., Hardersen, P.S., Gaffey, M.J., Abell, P.A., Le Corre, L. 2014. Olivine-dominated asteroids: Mineralogy and origin. *Icarus*, 228: 288-300. 10.1016/J.Icarus.2013.10.006
- Stickle, A.M., Schultz, P.H. 2014. Discrete shear failure planes resulting from oblique hypervelocity impacts. *Journal of Geophysical Research – Planets*, 119(8): 1839-1859. 10.1002/2013JE04597
- Suavet, C., Weiss, B.P., Grove, T.L. 2014. Controlled-atmosphere thermal demagnetization and paleointensity analyses of extraterrestrial rocks. *Geochemistry, Geophysics, Geosystems*, 15(7): 2733-2743. 10.1002/2013GC005215
- Tikoo, S.M., Weiss, B.P., Cassata, W.S., Shuster, D.L., Gattacceca, J., Lima, E.A., Suavet, C., Nimmo, F., Fuller, M.D. 2014. Decline of the lunar core dynamo. *Earth and Planetary Science Letters*, 404: 89-97. 10.1016/j.epsl.2014.07.010
- Tonui, E., Zolensky, M., Hiroi, T., Nakamura, T., Lipschutz, M.E., Wang, M.-S., Okudaira, K. 2014. Petrographic, chemical and spectroscopic evidence for thermal metamorphism in carbonaceous chondrites I: CI and CM chondrites. *Geochimica et Cosmochimica Acta*, 126: 284-306. 10.1016/j.gca.2013.10.053

- Tye, A.R., Fassett, C.I., Head, J.W., Mazarico, E., Basilevsky, A.T., Neumann, G.A., Smith, D.E., Zuber, M.T. 2015. The age of lunar south circumpolar craters Haworth, Shoemaker, Faustini, and Shackleton: Implications for regional geology, surface processes, and volatile sequestration. *Icarus*, 255: 70-77. 10.1016/j.icarus.2015.03.016
- Van Orman, J.A., Cherniak, D.J., Kita, N.T. 2014. Magnesium diffusion in plagioclase: Dependence on composition, and implications for thermal resetting of the Al-26-Mg-26 early solar system chronometer. *Earth and Planetary Science Letters*, 385: 79-88. 10.1016/j.epsl.2013.10.026
- Vaughan, W.M., Head, J.W. 2014. Impact melt differentiation in the South Pole-Aitken basin: Some observations and speculations. *Planetary and Space Science*, 91: 101-106. 10.1016/j.pss.2013.11.010
- Vernazza, P., Zanda, B., Binzel, R.P., Hiroi, T., DeMeo, F.E., Birlan, M., Hewins, R., Ricci, L., Barge, P., Lockhart, M. 2014. Multiple and Fast: The Accretion of Ordinary Chondrite Parent Bodies. *The Astrophysical Journal*, 791(2): 120. 10.1088/0004-637X/791/2/120
- Viscio, M.A., Gargioli, E., Hoffman, J.A., Maggiore, P., Messidoro, A., Viola, N. 2014. A methodology for innovative technologies roadmaps assessment to support strategic decisions for future space exploration. *Acta Astronautica*, 94(2): 813-833. 10.1016/j.actaastro.2013.10.004
- Weiss, B.P., Tikoo, S.M. 2014. The lunar dynamo. *Science*, 346(6214): 1246753. 10.1126/science.1246753
- Wilson, L., Head, J.W. 2015. Groove formation on Phobos: Testing the Stickney ejecta emplacement model for a subset of the groove population. *Planetary and Space Science*, 105: 26-42. 10.1016/j.pss.2014.11.001
- Yokota, Y., Gwinner, K., Oberst, J., Haruyama, J., Matsunaga, T., Morota, T., Noda, H., Araki, H., Ohtake, M., Yamamoto, S., Gläser, P., Ishihara, Y., Honda, C., Hirata, N., Demura, H. 2014. Variation of the lunar highland surface roughness at baseline 0.15-100 km and the relationship to relative age. *Geophysical Research Letters*, 41(5): 1444-1451. 10.1002/2013gl059091
- Fu, R.R., Weiss, B.P., Lima, E.A., Harrison, R.J., Bai, X.-N., Desch, S.J., Ebel, D.S., Suavet, C., Wang, H., Glenn, D., Le Sage, D., Kasama, T., Walsworth, R.L., Kuan, A.T. 2014. Solar nebula magnetic fields recorded by the Semarkona meteorite. *Science*, 346(6213): 1089-1092. 10.1126/science.1258022
- Cournede, C., Gattacceca, J., Gounelle, M., Rochette, P., Weiss, B.P., Zanda, B. 2015. An early solar system magnetic field recorded in CM chondrites. *Earth and Planetary Science Letters*, 410: 62-74. 10.1016/j.epsl.2014.11.019
- Horányi, M., Sternovsky, Z., Lankton, M., Dumont, C., Gagnard, S., Gathright, D., Grün, E., Hansen, D., James, D., Kempf, S., Lamprecht, B., Srama, R., Szalay, J.R., Wright, G., 2014. The Lunar Dust Experiment (LDEX) onboard the Lunar Atmosphere and Dust Environment Explorer (LADEE) Mission. *Space Science Reviews*, 185(1): 93 -113. 10.1007/s11214-014-0118-7
- Joyce, C.J., Schwadron, N.A., Wilson, J.K., Spence, H.E., Kasper, J.C., Golightly, M., Blake, J.B., Townsend, L.W., Case, A.W., Semones, E., Smith, S., Zeitlin, C.J. 2014. Radiation modeling in the Earth and Mars atmospheres using LRO/CRaTER with the EMMREM Module. *Space Weather*, 12(2): 112-119. 10.1002/2013SW000997
- Fatemi, S., Holmström, M., Futaana, Y., Lue, C., Collier, M.R., Barabash, S., Stenberg, G. 2014. Effects of protons reflected by lunar crustal magnetic fields on the global lunar plasma environment. *Journal of Geophysical Research - Space Physics*, 119(8): 6095-6105. 10.1002/2014JA019900
- Kohout, T., Havrila, K., Tóth, J., Husárik, M., Gritsevich, M., Britt, D., Borovička, J., Spurný, P., Igaz, A., Svoreň, J., Kornoš, L., Vereš, P., Koza, J., Zigo, P., Gajdoš, S., Világi, J., Čapek, D., Křišandová, Z., Tomko, D., Šilha, J., Schunová, E., Bodnárová, M., Búzová, D., Krejčová, T. 2014. Density, porosity and magnetic susceptibility of the Košice shower and homogeneity of its parent meteoroid. *Planetary and Space Science*, 93-94: 96-100. 10.1016/j.pss.2014.02.003
- Emery, J.P., Fernández, Y.R., Kelley, M.S.P., Warden (née Crane), K.T., Hergenrother, C., Lauretta, D.S., Drake, M.J., Campins, H., Ziffer, J. 2014. Thermal infrared observations and thermophysical characterization of OSIRIS-REx target asteroid (101955) Bennu. *Icarus*, 234: 17-35. 10.1016/j.icarus.2014.02.005
- Campins, H., Comfort, C.M. 2014. Solar system: Evaporating asteroid. *Nature*, 505(7484): 487-488. 10.1038/505487a
- Turrini, D., Combe, J.-P., McCord, T.B., Ockay, N., Vincent, J.-B., Prettyman, T.H., McSween, H.Y., Consolmagno, G.J., De Sanctis, M.C., Le Corre, L., Longobardo, A., Palomba, E., Russell, C.T. 2014. The contamination of the surface of Vesta by impacts and the delivery of the dark material. *Icarus*, 240: 86-102. 10.1016/j.icarus.2014.02.021
- Russell, S.S., Joy, K.H., Jeffries, T.E., Consolmagno, G.J., Kearsley, A. 2014. Heterogeneity in lunar anorthosite meteorites: implications for the lunar magma ocean model. *Philosophical Transactions. Series A, Mathematical, physical, and engineering sciences*, 372(2024): 20130241. 10.1098/rsta.2013.0241
- Kramer, E.A., Fernandez, Y.R., Lisse, C.M., Kelley, M.S.P., Woodney, L.M. 2014. A dynamical analysis of the dust tail of Comet C/1995 O1 (Hale-Bopp) at high heliocentric distances. *Icarus*, 236: 136-145. 10.1016/j.icarus.2014.03.033
- Tardivel, S., Scheeres, D.J., Michel, P., Van wal, S., Sánchez, P. 2014. Contact Motion on Surface of Asteroid. *Journal of Spacecraft and Rockets*, 51(6): 1857-1871. 10.2514/1.A32939
- Herman, J.F.C., Zimmer, A.K., Reijneveld, J.P.J., Dunlop, K.L., Takahashi, Y., Tardivel, S., Scheeres, D.J. 2014. Human exploration of near earth asteroids: Mission analysis for chemical and electric propulsion. *Acta Astronautica*, 104(1): 313-323. 10.1016/j.actaastro.2014.07.034
- Lee, D., Sanyal, A.K., Butcher, E.A., Scheeres, D.J. 2014. Almost global asymptotic tracking control for spacecraft body-fixed hovering over an asteroid. *Aerospace Science and Technology*, 38: 105-115. 10.1016/j.ast.2014.07.013
- Lee, K., Park, C., Park, S.-Y., Scheeres, D.J. 2014. Optimal tracking and formation keeping near a general Keplerian orbit under nonlinear perturbations. *Advances in Space Research*, 54(6): 1019-1028. 10.1016/j.asr.2014.06.010
- Lubey, D.P., Scheeres, D.J. 2014. Identifying and Estimating Mismodeled Dynamics via Optimal Control Policies and Distance Metrics. *Journal of Guidance, Control, and Dynamics*, 37(5): 1512-1523. 10.2514/1.G000369

- Nazari, M., Wauson, R., Critz, T., Butcher, E.A., Scheeres, D.J. 2014. Observer-based body-frame hovering control over a tumbling asteroid. *Acta Astronautica*, 102: 124-139. 10.1016/j.actaastro.2014.05.016
- Scheeres, D.J. 2014. Solar System: Sandcastles in space. *Nature*, 512: 139-140. 10.1038/512139a
- Hirabayashi, M., Scheeres, D.J., Sánchez, P., Gabriel, T. 2014. Constraints on the physical properties of main belt Comet P/2013 R3 from its breakup event. *The Astrophysical Journal Letters*, 789(1): L12. 10.1088/2041-8205/789/1/L12
- Ko, H.C., Scheeres, D.J. 2014. Essential Thrust-Fourier-Coefficient Set of Averaged Gauss Equations for Orbital Mechanics. *Journal of Guidance, Control, and Dynamics*, 37(4): 1236-1249. 10.2514/1.62407
- Takahashi, Y., Scheeres, D.J. 2014. Small body surface gravity fields via spherical harmonic expansions. *Celestial Mechanics and Dynamical Astronomy*, 119(2): 169-206. 10.1007/s10569-014-9552-9
- Sánchez, P., Scheeres, D.J. 2014. The strength of regolith and rubble pile asteroids. *Meteoritics and Planetary Science*, 49(5): 788-811. 10.1111/maps.12293
- Rosengren, A.J., Scheeres, D.J. 2014. Laplace plane modifications arising from solar radiation pressure. *The Astrophysical Journal*, 786. (1): 45. 10.1088/0004-637X/786/1/45
- Takahashi, Y., Scheeres, D.J. 2014. Morphology driven density distribution estimation for small bodies. *Icarus*, 233:179-193. 10.1016/j.icarus.2014.02.004
- Jacobson, S.A., Marzari, F., Rossi, A., Scheeres, D.J., Davis, D.R. 2014. Effect of rotational disruption on the size-frequency distribution of the Main Belt asteroid population. *Monthly Notices of the Royal Astronomical Society*, 439(1): L95-L99. 10.1093/mnras/slu006
- Hirabayashi, M., Scheeres, D.J. 2013. Analysis of asteroid (216) Kleopatra using dynamical and structure constraints. *The Astrophysical Journal*, 780(2): 160. 10.1088/0004-637X/780/2/160
- Jacobson, S.A., Scheeres, D.J., McMahon, J. 2013. Formation of the wide asynchronous binary asteroid population. *The Astrophysical Journal*, 780(1): 60. 10.1088/0004-637X/780/1/60
- Domingue, D.L., Chapman, C.R., Killen, R.M., Zurbuchen, T.H., Gilbert, J.A., Sarantos, M., Benna, M., Slavin, J.A., Schriver, D., Trávníček, P.M., Orlando, T.M., Sprague, A.L., Blewett, D.T., Gillis-Davis, J.J., Feldman, W.C., Lawrence, D.J., Ho, G.C., Ebel, D.S., Nittler, L.R., Vilas, F., Pieters, C.M., Solomon, S.C., Johnson, C.L., Winslow, R.M., Helbert, J., Peplowski, P.N., Weider, S. Z., Mouawad, N., Izenberg, N.R., McClintock, W.E. 2014. Mercury's Weather-Beaten Surface: Understanding Mercury in the Context of Lunar and Asteroidal Space Weathering Studies. *Space Science Reviews*, 181(1): 121-214. 10.1007/s11214-014-0039-5
- Fraeman, A.A., Murchie, S.L., Arvidson, R.E., Clark, R.N., Morris, R.V., Rivkin, A.S., Vilas, F. 2014. Spectral absorptions on Phobos and Deimos in the visible/near infrared wavelengths and their compositional constraints. *Icarus*, 229: 196-205. 10.1016/j.icarus.2013.11.021
- Lane, J.E., Metzger, P.T. 2015. Estimation of Apollo lunar dust transport using optical extinction measurements. *Acta Geophysica*, 63(2): 568-599. 10.1515/acgeo-2015-0005
- Cole, D.M., Hopkins, M.A., Taylor, L.A. 2015. Contact behavior of lunar materials and their simulants: Experimental observations and model developments. *Earth and Space*, pp52-59. 10.1061/9780784479179.007
- Campbell-Brown, M., Brown, P.G. 2015. A 13-year radar study of the η -Aquariid meteor shower. *Monthly Notices of the Royal Astronomical Society*, 446(4): 3669-3675. 10.1093/mnras/stu2327
- Bruzzone, J.S., Brown, P., Weryk, R.J., Campbell-Brown, M.D. 2015. A decadal survey of the Daytime Arietid meteor shower using the Canadian Meteor Orbit Radar. *Monthly Notices of the Royal Astronomical Society*, 446(2): 1625-1640. 10.1093/mnras/stu2200
- Silber, E.A., Brown, P.G., Krzeminski, Z. 2015. Optical observations of meteors generating infrasound—II: Weak shock theory and validation. *Journal of Geophysical Research - Planets*, 120(3): 413-428. 10.1002/2014JE004680
- Silber, E.A., Brown, P.G. 2014. Optical observations of meteors generating infrasound—I: Acoustic signal identification and phenomenology. *Journal of Atmospheric and Solar-Terrestrial Physics*, 119: 116-128. 10.1016/j.jastp.2014.07.005
- Jenniskens, P., Rubin, A.E., Yin, Q.-Z., Sears, D.W.G., Sandford, S.A., Zolensky, M.E., Krot, A.N., Blair, L., Kane, D., Utas, J., Verish, R., Friedrich, J.M., Wimpenny, J., Eppich, G.R., Ziegler, K., Verosub, K.L., Rowland, D.J., Albers, J., Gural, P.S., Grigsby, B., Fries, M.D., Matson, R., Johnston, M., Silber, E., Brown, E., Brown, P., Yamakawa, A., Nirady, M., Verchovsky, S., Emel'Yanenko, V., Naroenkov, S., Clark, D.L., Girten, B., Worden, P.S., and the Novato Meteorite Consortium. 2014. Fall, recovery, and characterization of the Novato L6 chondrite breccia. *Meteoritics and Planetary Science*, 49(8): 1388-1425. 10.1111/maps.12323
- Stober, G., Matthias, V., Brown, P., Chau, J.L. 2014. Neutral density variation from specular meteor echo observations spanning one solar cycle. *Geophysical Research Letters*, 41(19): 6919-6925. 10.1002/2014GL061273
- Pokorný, P., Vokrouhlický, D., Nesvorný, D., Campbell-Brown, M., Brown, P. 2014. Dynamical Model for the Toroidal Sporadic Meteors. *The Astrophysical Journal*, 789(1): 25. 10.1088/0004-637X/789/1/25
- Bolin, B., Jedicke, R., Granvik, M., Brown, P., Howell, E., Nolan, M.C., Jenniskens, P., Chyba, M., Patterson, G., Wainscoat, R. 2014. Detecting Earth's Temporarily-Captured Natural Satellites - Minimoons. *Icarus*, 241: 280-297. 10.1016/j.icarus.2014.05.026
- Ye, Q., Wiegert, P.A., Brown, P.G., Campbell-Brown, M.D., Weryk, R.J. 2014. The unexpected 2012 Draconid Meteor Storm. *Monthly Notices of the Royal Astronomical Society*, 437(4): 3812-3823. 10.1093/mnras/stt2178
- Jordan, A.P., Stubbs, T.J., Wilson, J.K., Schwadron, N.A., Spence, H.E. 2015. Dielectric breakdown weathering of the Moon's polar regolith. *Journal of Geophysical Research - Planets*, 120(2): 210-225. 10.1002/2014JE004710
- Hirabayashi, M., Scheeres, D.J. 2014. Stress and Failure Analysis of Rapidly Rotating Asteroid (29075) 1950 DA. *The Astrophysical Journal Letters*, 798(1): L8. 10.1088/2041-8205/798/1/L8

- Wang, X., Hsu, H.-W., Horányi, M. 2015. Identification of when a Langmuir probe is in the sheath of a spacecraft: The effects of secondary electron emission from the probe. *Journal of Geophysical Research - Space Physics*, 120(4): 2428-2437. 10.1002/2014JA020624
- Lawrence, D.J., Miller, R.S., Ozimek, M.T., Peplowski, P.N., Scott, C.J. 2015. High-resolution Mapping of Lunar Polar Hydrogen with a Low-Resource Orbital Mission. *Acta Astronautica*, 115: 452-462. 10.1016/j.actaastro.2015.06.010
- Fieber-Beyer, S.K., Gaffey, M.J., Bottke, W.F., Hardersen, P.S. 2015. Potentially hazardous Asteroid 2007 LE: Compositional link to the black chondrite Rose City and Asteroid (6) Hebe. *Icarus*, 250: 430-437. 10.1016/j.icarus.2014.12.021
- Reddy, V., Sanchez, J.A., Bottke, W.F., Cloutis, E.A., Izawa, M.R.M., O'Brien, D.P., Mann, P., Cuddy, M., Le Corre, L., Gaffey, M.J., Fujihara, G. 2014. Chelyabinsk meteorite explains unusual spectral properties of Baptistina Asteroid Family. *Icarus*, 237: 116-130. 10.1016/j.icarus.2014.04.027
- Rivkin, A.S., Asphaug, E., Bottke, W.F. 2014. The case of the missing Ceres family. *Icarus*, 243: 429-439. 10.1016/j.icarus.2014.08.007
- Hauri, E.H., Saal, A.E., Rutherford, M.J., Van Orman, J.A. 2015. Water in the Moon's interiors: Truth and consequences. *Earth and Planetary Science Letters*, 409: 252-264. 10.1016/j.epsl.2014.10.053
- Jozwiak, L.M., Head, J.W., Wilson, L. 2015. Lunar floor-fractured craters as magmatic intrusions: Geometry, modes of emplacement, associated tectonic and volcanic features, and implications for gravity anomalies. *Icarus*, 248: 424-447. 10.1016/j.icarus.2014.10.052
- Miljkovic, K., Wieczorek, M.A., Collins, G.S., Solomon, S.C., Smith, D.E., Zuber, M.T. 2015. Excavation of the lunar mantle by basin-forming events on the Moon. *Earth and Planetary Science Letters*, 409: 243-251. 10.1016/j.epsl.2014.10.041
- Stickle, A.M., Schultz, P.H., Crawford, D.A. 2015. Subsurface failure in spherical bodies: A formation scenario for linear troughs on Vesta's surface. *Icarus*, 247: 18-34. 10.1016/j.icarus.2014.10.002
- Whitten, J.L., Head, J.W. 2015. Lunar cryptomaria: Physical characteristics, distribution, and implications for ancient volcanism. *Icarus*, 247: 150-171. 10.1016/j.icarus.2014.09.031
- Wisdom, J., Tian, Z.L. 2015. Early evolution of the Earth-Moon system with a fast-spinning Earth. *Icarus*, 256: 138-146. 10.1016/j.icarus.2015.02.025
- Fatemi, S., Lue, C., Holmström, M., Poppe, A.R., Wieser, M., Barabash, S., Delory, G.T. 2015. Solar wind plasma interaction with Gerasimovich lunar magnetic anomaly. *Journal of Geophysical Research - Space Physics*, 120(6): 4719-4735. 10.1002/2015JA021027
- Potter, R.W.K., Kring, D.A., Collins, G.S. 2015. Scaling of basin-sized impacts and the influence of target temperature. *The Geological Society of America, Special Papers*, 518: SPE518-06. 10.1130/2015.2518(06)
- Hurwitz, D., Kring, D.A. 2015. Potential sample sites for South Pole-Aitken basin impact melt within the Schrödinger basin. *Earth and Planetary Science Letters*, 427: 31-36. 10.1016/j.epsl.2015.06.055
- Lipatov, A., Farrell, W.M., Cooper, J.F., Sittler, E.C., Hartle, R.E. 2015. 3-D hybrid kinetic modeling of the interaction between the solar wind and lunar-like exospheric pickup ions in the case of oblique/quasi-parallel/parallel upstream magnetic field. *Planetary and Space Science*
- Farrell, W.M., Hurley, D.M., Zimmerman, M.I. 2015. Spillage of lunar polar crater volatiles onto adjacent terrains: The case for dynamic processes. *Geophysical Research Letters*, 42(9): 3160-3165. 10.1002/2015GL063200
- Zhang, Q., Walsh, K.J., Melis, C., Hughes, G.B., Lubin, P.M. 2015. Orbital simulations for directed energy deflection of near-earth asteroids. *Procedia Engineering*, 103: 671-678. 10.1016/j.proeng.2015.04.087
- Zhang, Q., Walsh, K.J., Melis, C., Hughes, G.B., Lubin, P.M. 2015. Orbital simulations of laser-propelled spacecraft. *Proceedings of SPIE*, 9616. 10.1117/12.2187748
- Deca, J. Divin, A., Lembège, B., Horányi, M., Markidis, S., Lapenta, G. 2015. General Mechanism and Dynamics of the Solar Wind Interaction with Lunar Magnetic Anomalies from 3-D Particle-in-Cell Simulations. *Journal of Geophysical Research - Space Physics*, 120(8): 6443-6463. 10.1002/2015JA021070
- Detecting a permanent dust cloud engulfing the Moon. *Nature*
- Fagan, A.L., Neal, C.R. 2016. A new lunar high-Ti basalt type defined from clasts in Apollo 16 breccia 60639. *Geochimica et Cosmochimica Acta*, 173: 352-372. 10.1016/j.gca.2015.08.007
- Kring, D.A. 2015. How robotic probes helped humans explore the Moon – And may again. *Eos* 96. 10.1029/2015EO024575
- Kring, D.A. 2015. Human and robotic missions: To the Moon again and beyond. *Eos* 96. 10.1029/2015EO024609
- Collette, A., Meyer, G., Malaspina, D., Sternovsky, Z. 2015. Laboratory Investigation of Antenna Signals from Dust Impacts on Spacecraft. *Journal of Geophysical Research - Space Physics*, 120(7): 5298-5305. 10.1002/2015JA021198
- The Known Asteroids: A Review *Space Science Reviews*
- Cohen, B.A., Lim, D., Young, K., Brunner, A., Elphic, R., Horne, A., Kerrigan, M.C., Osinski, G.R., Skok, J.R., Squyres, S.S., Saint-Jacques, D., and J.L. Heldmann. 2015. Pre-mission requirements to enable successful sample collection by a remote field / EVA team. *J. Human Perf. in Extreme Environments*. 12: A7. dx.doi.org/10.7771/2327-2937.1071.
- Sears, D.W.G., Hughes, S.S., Kobs-Nawotniak, S.E., Borg, C., Kim, K.J., Sears, H., Skok, J.R., Elphic, R.C., Lim, D.S.S., Heldmann, J.L., Haberle, C., Guy, H., Kobayashi, L., Garry, B., Neish, C. A Study of the King's Bowl Phreatic Explosion Crater as an Analog to Pits on Solar System Exploration Target Bodies. *Earth and Planetary Science Letters*
- Sears, D.W.G., Tornabene, L.L., Osinski, G.R., Hughes, S.S., Heldmann, J.L. The "ponds" on asteroid (433) Eros: Possible new insights from experiment, Vesta, Mars, and terrestrial analogs. *Planet and Space Science*
- Sears, D.W.G., Sears, H., Carter, M. Thermal and Radiation History of Recently Recovered Antarctic CO chondrites and

Notes on the Determination of Petrographic Types of CO Chondrites. *Geochimica et Cosmochimica Acta*

Joy, K.H., Visscher, C., Zolensky, M.E., Mikouchi, T., Hagiya, K., Ohsumi, K., Kring, D.A. 2015. Identification of magnetite in lunar regolith breccia 60016: Evidence for oxidised conditions at the lunar surface. *Meteoritics and Planetary Science*, 50(7): 1157-1172. 10.1111/maps.12462

Liu, J., Sharp, M., Ash, R.D., Kring, D.A., Walker, R.J. 2015. Diverse impactors in Apollo 15 and 16 impact melt rocks: Evidence from osmium isotopes and highly siderophile elements. *Geochimica et Cosmochimica Acta*, 155: 122-153. 10.1016/j.gca.2015.02.004

Dhingra, D., Pieters, C.M., Head, J.W. 2015. Multiple origins for olivine at Copernicus crater. *Earth and Planetary Science Letters*, 420: 95-101. 10.1016/j.epsl.2015.03.039

McKay, D.S., Cooper, B.L., Taylor, L.A., James, J.T., Thomas-Keprta, K., Pieters, C.M., Wentworth, S.J., Wallace, W.T., Lee, T.S. 2015. Physicochemical properties of respirable-size lunar dust. *Acta Astronautica*, 107: 163-176. 10.1016/j.actaastro.2014.10.032

Pyroxene composition derived from absorption band centers. *Meteoritics & Planetary Science*

Scheinberg, A., Fu, R.R., Elkins-Tanton, L.T., Weiss, B.P. 2015. Asteroid differentiation: Melting and large-scale structure. *Asteroids IV*

Schreiner, S.S., Setterfield, T.P., Roberson, D.R., Putbrese, B., Kotowick, K., Vanegas, M.D., Curry, M., Geiger, L.M., Barmore, D., Foley, J.J., LaTour, P.A., Hoffman, J.A., Head, J.W. 2015. An overnight habitat for expanding lunar surface exploration. *Acta Astronautica*, 112: 158-170. 10.1016/j.actaastro.2015.03.012

Scott, D.R., Head, J.W. 2015. 50 years of Russian-US-international lunar exploration: A roadmap for the future. in *Solar System Study: Some Milestones, Proceedings, Academician Mikhail Marov 80th Anniversary Session*, edited by A. V. Zakharov, IKI, RAN, Moscow, Russia pp. 71-88

Whitten, J., Head, J.W. 2015. Lunar cryptomaria: Mineralogy and composition of ancient volcanic deposits. *Planetary and Space Science*, 106: 67-81. 10.1016/j.pss.2014.11.027

Hirabayashi, M., Paul Sánchez, D., Scheeres, D.J. 2015. Internal Structure of Asteroids Having Surface Shedding due to Rotational Instability. *The Astrophysical Journal*, 808(1): 63. 10.1088/0004-637X/808/1/63

Nesvorný, D. 2015. The Evidence for Slow Migration of Neptune from the Inclination Distribution of Kuiper Belt Objects. *The Astronomical Journal*, 150(3): 73. 10.1088/0004-6256/150/3/73

Cloutis, E.A., Sanchez, J.A., Reddy, V., Gaffey, M.J., Binzel, R.P., Burbine, T.H., Hardersen, P.S., Hiroi, T., Lucey, P.G., Sunshine, J.M., Tait, K.T. 2015. Olivine-metal mixtures: Spectral reflectance properties and application to asteroid reflectance spectra. *Icarus*, 252: 39-82. 10.1016/j.icarus.2014.10.003

Zimmerman, M. I., Farrell, W.M., Poppe, A.R. Kinetic Simulations of Micro-Magnetosphere Formation on the Moon. *Journal of Geophysical Research*
Poppe, A.R., Fatemi, S., Garrick-Bethell, I., Hemingway, D., Holmström, M. 2015. Solar wind interaction with the Reiner

Gamma crustal magnetic anomaly: Connecting source magnetization to surface weathering. *Icarus*, In Press, Corrected Proof. 10.1016/j.icarus.2015.11.005

Fatemi, S., Fuqua, H.A., Poppe, A.R., Delory, G.T., Halekas, J.S., Farrell, W.M., Holmström, M. 2015. On the confinement of lunar induced magnetic fields. *Geophysical Research Letters*, 42(17): 6931-6938. 10.1002/2015GL065576

Tye, A.R., Fassett, C.I., Head, J.W., Mazarico, E., Basilevsky, A.T., Neumann, G.A., Smith, D.e., Zuber, M.T. 2015. The age of lunar south circumpolar craters Haworth, Shoemaker, Faustini, and Shackleton: Implications for regional geology, surface processes, and volatile sequestration. *Icarus*, 255: 70-77. 10.1016/j.icarus.2015.03.016

Hirabayashi, M., Paul Sánchez, D., Scheeres, D.J. 2015. Internal Structure of Asteroids Having Surface Shedding due to Rotational Instability. *The Astrophysical Journal*, 808(1): 63. 10.1088/0004-637X/808/1/63

Elphic, R.C., Heldmann, J.L., Marinova, M.M., Colaprete, A., Fritzlér, E.L., McMurray, R.E., Morse, S., Roush, T.L., Stoker, C.R., Deans, M.C., Smith, T.F. 2015. Simulated real-time lunar volatiles prospecting with a rover-borne neutron spectrometer. *Advances in Space Research*, 55(10): 2438-2450. 10.1016/j.asr.2015.01.035

Roush, T.L., Colaprete, A., Elphic, R., Ennico-Smith, K., Heldmann, J., Stoker, C., Marinova, M., McMurray, R., Fritzlér, E., Morse, S. 2015. In Situ Resource Utilization (ISRU) field expedition 2012: Near-Infrared Volatile Spectrometer System (NIRVSS) science measurements compared to site knowledge. *Advances in Space Research*, 55(10): 2451-2456. 10.1016/j.asr.2014.08.033

G. R. Osinski and D. A. Kring (eds.) 2015. Large Meteorite Impacts and Planetary Evolution V, Special Paper. Geological Society of America, Boulder, CO

Shearer, C.K., Burger, P.V., Bell, A.S., Guan, Y., Neal, C.R. 2015. Exploring the Moon's surface for remnants of the lunar mantle 1. Dunitic xenoliths in mare basalts. A crustal or mantle origin? *Meteoritics and Planetary Science*, 50(8): 1449-1467. 10.1111/maps.12480

Landsman, Z.A., Campins, H., Pinilla-Alonso, N., Hanuš, J., Lorenzi, V. 2015. A new investigation of hydration in the M-type asteroids. *Icarus*, 252: 186-198. 10.1016/j.icarus.2015.01.021

Flynn, G.J., Durda, D.D., Patmore, E.B., Clayton, A.N., Jack, S.J., Lipman, M.D., Strait, M.M. 2015. Hypervelocity cratering and disruption of porous pumice targets: Implications for crater production, catastrophic disruption, and momentum transfer on porous asteroids. *Planetary and Space Science*, 107: 64-76. 10.1016/j.pss.2014.10.007

Durda, D.D., Campo Bagatin, A., Alemán, R.A., Flynn, G.J., Strait, M.M., Clayton, A.N., Patmore, E.B. 2015. The shapes of fragments from catastrophic disruption events: Effects of target shape and impact speed. *Planetary and Space Science*, 107: 77-83. 10.1016/j.pss.2014.10.006

Scheeres, D.J. 2015. Landslides and Mass shedding on spinning spheroidal asteroids. *Icarus*, 247: 1-17. 10.1016/j.icarus.2014.09.017

Vilas, F., Hendrix, A. R., Jensen, E. A. 2015. The UV/Blue Effects of Space Weathering Manifested in S-Complex Asteroids II: Probing for Less-Weathered Objects in the Solar

- System. Planetary and Space Science. 10.1016/j.pss.2015.06.023
- Horányi, M., Szalay, J.R., Kempf, S., Schmidt, J., Grün, E., Srama, R., Sternovsky, Z. 2015. A permanent, asymmetric dust cloud around the Moon. *Nature*, 522: 324-326. 10.1038/nature14479
- Szalay, J.R., Horányi, M. 2015. The search for electrostatically lofted grains above the Moon with the Lunar Dust Experiment. *Geophysical Research Letters*, 42(13): 5141-5146. 10.1002/2015GL064324
- Baker, D. M. H. and Head, J. W. 2015. Constraints on the Depths of Origin of Peak Rings on the Moon from Moon Mineralogy Mapper Data. *Icarus*, 258: 164-180. 10.1016/j.icarus.2015.06.013
- Basilevsky, A.T., Abdrakhimov, A.M., Head, J.W., Pieters, C.M., Wu, Y., Xiao, L. 2015. Geologic characteristics of the Luna 17/Lunokhod 1 and Chang'E-3/Yutu landing sites, Northwest Mare Imbrium of the Moon. *Planetary and Space Science*, 117: 385-400. 10.1016/j.pss.2015.08.006
- Baker, D.M.H., Head, J.W., Collins, G.S., Potter, R.W.K. The Formation of Peak-Ring Basins: Working Hypothesis and Path Forward in Using Observations to Constrain Models of Impact-Basin Formation. *Icarus LRO Special Issue*
- Jawin, E.R., Besse, S., Gaddis, L.R., Sunshine, J.M., Head, J.W., Mazrouei, S. 2015. Examining spectral variations in localized lunar dark mantle deposits. *Journal of Geophysical Research – Planets*, 120(7): 13110-13311. 10.1002/2014JE004759
- Halekas, J. S., Benna, M., Mahaffy, P.R., Elphic, R.C., Poppe, A.R., and Delory, G.T. Detection of lunar exospheric ions by the LADEE Neutral Mass Spectrometer. *Geophysical Research Letters*.
- Jordan, A. P., Stubbs, T.J., Wilson, J.K., Schwadron, N.A., and Spence, H.E. Implications of the rate of dielectric breakdown weathering of lunar regolith in permanently shadowed regions. *Icarus*
- Schwadron, N. A., Wilson, J.K., Looper, M.D., Jordan, A., Spence, H.E., Blake, J.B., Case, A.W., Iwata, Y., Kasper, J., Farrell, W.M., Lawrence, D.J., Livadotis, G., Mazur, J., Petro, N., Pieters, C., Smith, S., Townsend, L.W., Zeitlin, C. Possible albedo proton signature of hydrated lunar surface later. *Icarus*
- Wilson, J. K., Schwadron, N., Spence, H.E., Blake, J.B., Case, A.W., Jordan, A.P., Kasper, J., Looper, M.D., Petro, N.E., Robinson, M.S., Smith, S.S., Stubbs, T.J., Townsend, L.W., Zeitlin, C. Localized features in the albedo proton map of the Moon. *Icarus*
- Walker, R.J., Birmingham, K., Liu, J., Puchtel, I.S., Touboul, M., and Worsham, E.A. 2015. In search of late-stage planetary building blocks. *Chemical Geology*, 411: 125-142. 10.1016/j.chemgeo.2015.06.028
- Basilevsky, A. T., Head III, J.W., Horz, F., Ramsley, K. 2015. Survival times of meter-sized rock boulders on the surface of airless bodies. *Planetary and Space Science*, 117: 312-328. 10.1016/j.pss.2015.07.003
- Dhingra, D., Head III, J.W., and Pieters, C.M. Geological mapping of impact melt deposits at lunar complex craters Jackson and Tycho: Morphologic and topographic diversity and relation to the cratering process. *Icarus*
- Ivanov, M. A., and Head III, J.W. The lunar Gruithuisen silicic extrusive domes: Topographic configuration. *Icarus*
- Ivanov, M. A., Bazilevskiy, A.T., Abdrakhimov, A.M., Karachevtseva, I.P., Kohanov, A., Head III, J.W. 2015. Boguslawsky Crater on the Moon: Geology and Assessment of the Boulder Distribution on its Floor. *Astronomicheskii Vestnik*. 49: 403-419. doi: 10.7868/S0320930X15060031
- Jozwiak, L. M., Head III, J.W., Neumann, G.A., and Wilson, L. Observational constraints on the identification of shallow lunar magmatism: Insights from floor-fractured craters. *Icarus*
- Kreslavsky, M. A., and Head III, J.W. 2016. The steepest slopes on the Moon from Lunar Orbiter Laser Altimeter (LOLA) data: Spatial distribution and correlation with geologic features. *Icarus*. 273: 329-336. doi: 10.1016/j.icarus.2016.02.036
- Kumar, P.S., Sruthi, U., Krishna, N., Lakshmi, K.J.P., Menon, R., Amitabh, Krishna, B.G., Kring, D.A., Head, J.W., Goswami, J.N., and Kumar, A.S.K. Are young lunar lobate scarps responsible for shallow moonquakes triggering boulder falls? Insights from the Schrodinger basin. *Moon The Journal of Geophysical Research*
- Moriarty III, D. P., and Pieters, C.M. 2015. The Nature and Origin of Mafic Mound in the South Pole-Aitken Basin. *Geophysical Research Letters*, 42(19): 7907-7915. 10.1002/2015GL065718
- Potter, R. W. K. 2015. Investigating the onset of multi-ring impact basin formation. *Icarus*, 261: 91-99. 10.1016/j.icarus.2015.08.009
- Ramsley, K. R., and Head, J.W. The Stickney Crater ejecta secondary impact crater spike on Phobos: Implications for the age of Stickney and the surface of Phobos. *Planetary and Space Science*
- Wilson, L., and J. W. Head III Generation, ascent and eruption of magma on the Moon: New insights into source depths, magma supply, intrusions and effusive/explosive eruptions (part 1: theory). *Icarus*. doi: 10.1016/j.icarus.2015.12.039
- Caldwell, B.S. 2015. Spaceflight-relevant stem education and outreach: Social goals and priorities. *Acta Astronautica*, 112: 174-181. 10.1016/j.actaastro.2015.03.017
- Keil, K., Zucolotto, M.E., Krot, A.N., Doyle, P.M., Telus, M., Krot, T.V., Greenwood, R.C., Franchi, I.A., Wasson, J.T., Welten, K.C., Caffee, M.W., Sears, D.W.G., Riebe, M., Wieler, R., dos Santos, E., Scorzelli, R.B., Gattacceca, J., Lagroix, F., Laubenstein, M., Mendes, J.C., Schmitt-Kopplin, P., Harir, M., and Moutinho, A.L.R. 2015. The Vicência meteorite fall: A new unshocked (S1) weakly metamorphosed (3.2) LL chondrite. *Meteoritics & Planetary Science*, 50(6): 1089-1111. 10.1111/maps.12456
- Neish, C.D., Hughes, S.S., Hamilton, C.W., Garry, W.B., Kobs, S., Skok, J.R., Elphic, R.C., Carter, L.M., Bandfield, J.L., Heldmann, J.L., and D. Lim. Transitional lava flows as potential analogues for lunar impact melts. *Journal of Geophysical Research*
- Norman, M.D., Taylor, L.A., Shih, C.-Y., and Nyquist, L.E. 2016. Crystal accumulation in a 4.2 Ga lunar impact melt. *Geochimica et Cosmochimica Acta*, 172: 410-429. 10.1016/j.gca.2015.09.021

- McCubbin, F.M., Vander Kaaden, K.E., Tartèse, R., Klima, R.L., Liu, Y., Mortimer, J., Barnes, J.J., Shearer, C.K., Treiman, A.H., Lawrence, D.J., Elardo, S.M., Hurley, D.M., Boyce, J.M., Anand, M. 2015. Magmatic volatiles (H, C, N, F, S, Cl) in the lunar mantle, crust, and regolith: Abundances, distributions, processes, and reservoirs. *American Mineralogist*, 100(8-9): 1668-1707. 10.2138/am-2015-4934CCBYNCND
- Peplowski, P.N., Bazell, D., Evans, L.G., Goldsten, J.O., Lawrence, D.J., Nittler, L.R. 2015. Hydrogen and major element concentrations on 433 Eros: Evidence for an L- or LL-chondrite-like surface composition. *Meteoritics and Planetary Science*, 50(3): 353-367. 10.1111/maps.12434
- Teodoro, L.F.A., Lawrence, D.J., Eke, V.R., Elphic, R.E., Feldman, W.C., Maurice, S., Siegler, M.A., Paige, D.A. 2015. The Local-time Variations of Lunar Prospector Epithermal Neutron Data. *Earth and Planetary Science Letters*
- Wilson, J. T., Eke, V.R., Massey, R.J., Elphic, R.C., Jolliff, B.L., Lawrence, D.J., Llewellyn, E.W., McElwaine, J.N., Teodoro, L.F.A. 2015. Evidence for explosive silicic volcanism on the Moon from the extended distribution of thorium near the Compton-Belkovich Volcanic Complex. *Journal of Geophysical Research – Planets*, 120(1): 92-108. 10.1002/2014JE004719
- Grava, C., Chaufray, J.-Y., Retherford, K.D., Gladstone, G.R., Greathouse, T.K., Hurley, D.M., Hodges, R.R., Bayless, A.J., Cook, J.C., and Stern, S.A. 2015. Lunar Exospheric Argon Modeling. *Icarus*, 255: 135-147. 10.1016/j.icarus.2014.09.029
- Hurley, D. M., Sarantos, M., Grava, C., Williams, J.-P., Retherford, K.D., Siegler, M., Greenhagen, B., and Paige, D. 2015. An analytic function of lunar surface temperature for exospheric modeling. *Icarus*, 255: 159-163. 10.1016/j.icarus.2014.08.043
- Gillis-Davis, J.J., Gasda, P.J., Bradley, J.P., Ishii, H.A., Bussey, D.B.J. *Laser Space Weathering of Allende Reveals Change In Visible Continuum.*
- Poston, M.J., Grieves, G.a., Aleksandrov, A.B., Hibbitts, C.A., Dyar, M.D., Orlando, T.M. Water chemisorption interactions with Apollo lunar samples 12001 and 72501 by ultrahigh vacuum temperature programmed desorption experiments. Grieves et al. Solar wind origin and the evolution of hydroxyl on the Moon. *Geophysical Research Letters*.
- Hayne, P. O., and Aharonson, O. 2015. Thermal stability of ice on Ceres with rough topography. *Journal of Geophysical Research – Planets*, 120(9): 1567-1584. 10.1002/2015JE004887
- Kulchitsky, A.V., Johnson, J.B., Reeves, D., Wilkinson, A. 2016. Resistance forces during boulder extraction from an asteroid. *Acta Astronautica*. 127: 424-437. doi:10.1016/j.actaastro.2016.06.027
- Gillis-Davis, J.J., Gasda, P.J., Bradley, J.P., Ishii, H.A., Bussey, D.B.J. *Laser Irradiation of Allende, To Form a Space Weathering Model of Carbonaceous Chondrites.* *Nature Geoscience*
- Burbine, T. H., DeMeo, F. E., Rivkin, A. S., and Reddy, V. Evidence for Differentiation among Asteroid Families. In *Planetesimals: Early Differentiation and Consequences for Planets*, Cambridge University Press
- Kaur, J., Schoonen, M., Rickman, D. Reactive oxygen species (ROS) generation by lunar simulants. *Acta Astronautica*
- Hardgrove, C. J., Roger, A.D., Glotch, T.D., and Arnold, J.A. 2016. Thermal emission spectroscopy of microcrystalline sedimentary phases: Effects of natural surface roughness on spectral feature shape. *Journal of Geophysical Research*. 121: 542-555
- Donaldson Hanna, K.L., Greenhagen, B.T., Patterson III, W.M., Pieters, C.M., Mustard, J.F., Bowles, N.E., Paige, D.A., Glotch, T.D., and Thompson, C. Effects of varying environmental conditions on emissivity spectra of bulk lunar soils: Application to Diviner thermal infrared observations of the Moon. *Icarus*
- Speicher, E.A., Dyar, M.D., Gunter, M.E., Lanzirotti, A., Tucker, J.M., Peel, S.E., Brown, E.B., Delaney, J.S. Synchrotron micro-XANES analysis of Fe³⁺ in oriented amphiboles. *American Mineralogist*
- Dyar, M.D., McCanta, M., Breves, E., Carey, C.J., and Lanzirotti, A. Accurate predictions of iron redox state in silicate glasses: A multivariate approach using x-ray absorption spectroscopy. *American Mineralogist*. 101: 744-748. 10.2138/am-2016-5555CCBYNCND
- Li, Y. W., Bugiel, S., Trieloff, M., Hillier, J. K., Postberg, F., Price, M. C., Shu, A., Fiege, K., Fielding, L. A., Armes, S. P., Wu, Y. Y., Grün, E., Srama, R. 2014. Morphology of craters generated by hypervelocity impacts of micron-sized polypyrrole-coated olivine particles. *Meteoritics and Planetary Science*, 49(8): 1375-1387. 10.1111/maps.12338
- Sachse, M., Schmidt, J., Kempf, S., and Spahn, F. 2015. Correlation between speed and size for ejecta from hypervelocity impacts. *Journal of Geophysical Research – Planets*, online version of record published before inclusion in an issue. 10.1002/2015JE004844
- Wood, S.R., Malaspina, D.M., Andersson, L., and Horanyi, M. 2015. Hypervelocity Dust Impacts on the Wind Spacecraft: Correlations between Ulysses and Wind Interstellar Dust Detections. *Journal of Geophysical Research - Space Physics*, 120(9): 7121-7129. 10.1002/2015JA021463
- Wang, X., Pilewskie, J., Hsu, H.-W., and Horanyi, M. Plasma potential in the sheaths above an electron-emitting surface. *Geophysical Research Letters*
- Thomas, E., Horanyi, M., James, D., Munsat, T., Shu, A., Simolka, J., Sternovsky, Z. Measurement of the Ionization Coefficient of Simulated Iron Micrometeoroids. *Geophysical Research Letters*
- Szalay, J.R., Horanyi, M. Detecting Meteoroid Streams with an In-Situ Dust Detector above an Airless Body. *Icarus*
- Li, Y., Strack, H., Bugiel, S., Wu, Y., Srama, R. 2015. Instrument study of the Lunar Dust eXplorer (LDX) for a lunar lander mission II: Laboratory model calibration. *Advances in Space Research*, 56(8): 1777-1783. 10.1016/j.asr.2015.07.026
- Li, Y., Srama, R., Henkel, H., Sternovsky, Z., Kempf, S., Wu, Y., Grün, E. 2014. Instrument study of the Lunar Dust eXplorer (LDX) for a Lunar Lander Mission. *Advances in*

- Space Research, 54(10): 2094-2100. 10.1016/j.asr.2013.12.006
- Andersson, L., Weber, T.D., Malaspina, D., Crary, F., Ergun, R.E., Delory, G.T., Fowler, C.M., Morooka, M.W., McEnulty, T., Eriksson, A.I., Andrews, D.J., Horanyi, M., Collette, A., Yelle, R., Jakosky, B.M. 2015. Dust Observations at Orbital Altitudes Surrounding of Mars. *Science*, 350(6261). 10.1126/science.aad0398
- O'Brien, L., Grün, E., Sternovsky, Z. 2015. Optimization of the Nano-Dust Analyzer (NDA) for Operation Under Solar UV Illumination. *Planetary and Space Science*, 119: 173-180. 10.1016/j.pss.2015.09.014
- Piquette, M., Horanyi, M. The effect of surface topography on dust dynamics in the lunar plasma environment: Ballistic vs. electrostatic driven transport. *Geophysical Research Letters*
- Piquette, M., Stern, A., Horanyi, M. Sublimation of water ice in the nighttime lunar regolith. *AIAA*
- Malaspina, D. M., O'Brien, L.E., Thayer, F., Sternovsky, Z., and Collette, A. 2015. Revisiting STEREO interplanetary and interstellar dust flux and mass estimates. *Journal of Geophysical Research - Space Physics*, 120(8): 6085-6100. 10.1002/2015JA021352
- Bottke, W. F., Vokrouhlický, D., Marchi, S., Swindle, T., Scott, E. R. D., Weirich, J. R., Levison, H. F. 2015. Dating the Moon-Forming Impact Event with Asteroidal Meteorites. *Science*, 348(6232): 321-323. 10.1126/science.aaa0602
- Bottke, W. F., Vokrouhlický, D., Walsh, K. J., Delbo, M., Michel, P., Lauretta, D. S., Campins, H., Connolly Jr., H. C., Scheeres, D. J., Chelsey, S. R. 2015. In search of the source of asteroid (101955) Bennu: Applications of the stochastic YORP model. *Icarus*, 247: 191-217. 10.1016/j.icarus.2014.09.046
- Canup, R. M. 2013. Planetary Science: Lunar conspiracies. *Nature*, 504(7478): 27-29
- Canup, R. M. 2014. Thermal fatigue as the origin of regolith on small asteroids. *Nature*, 508: 233-236. 10.1038/nature13153
- Delbo, M., Libourel, G., Wilkerson, J., Murdoch, N., Michel, P., Ramesh, K. T., Ganino, C., Verati, C. and Marchi, S. 2014. Thermal fatigue as the origin of regolith on small asteroids. *Nature*, 508: 233-236. 10.1038/nature13153
- De Sanctis, M. C., Frigeri, A., Ammannito, E., Tosi, F., Marchi, S., Zambon, F., Raymond, C. A. and Russell, C. T. 2015. Mineralogy of Marcia, the youngest large crater of Vesta: Character and distribution of pyroxenes and hydrated material. *Icarus*, 248: 392-406. 10.1016/j.icarus.2014.10.051
- Golubov, O., Scheeres, D. J. and Krugly, Y. N. 2014. A 3-dimensional model of tangential YORP. *The Astrophysical Journal Letters*, 794(1): L22. 10.1088/2041-8205/794/1/L22
- Hirabayashi, M. and Scheeres, D. J. 2014. Stress and Failure Analysis of Rapidly Rotating Asteroid (29075) 1950 DA. *The Astrophysical Journal Letters*, 798(1): L8. 10.1088/2041-8205/798/1/L8
- Hopkins, M. D., Mojzsis, S. J., Bottke, W. F., Abramov, O. 2015. Micrometer-scale U-Pb age domains in eucrite zircons, impact re-setting, and the thermal history of the HED parent body. *Icarus*, 245: 367-378. 10.1016/j.icarus.2014.08.025
- Marchi, S., Bottke, W. F., Elkins-Tanton, L. T., Bierhaus, M., Wuennemann, K., Morbidelli, A. and Kring, D. A. 2014. Widespread mixing and burial of Earth's Hadean crust by asteroid impacts. *Nature*, 511: 578-582. 10.1038/nature13539
- Melosh, H. J. 2014. New approaches to the Moon's isotopic crisis. *Philosophical Transactions of the Royal Society A*. 372(2024): 20130168. 10.1098/rsta.2013.0168
- Morbidelli, A., Walsh, K. J., O'Brien, D.P., Minton, D. A., Bottke, W. F. 2015. The Dynamical Evolution of the Asteroid Belt. *Asteroid IV*.
- Nesvorný, D., Vokrouhlický, D., Deienno, R. and Walsh, K. J. 2014. Excitation of the Orbital Inclination of Iapetus during Planetary Encounters. *The Astronomical Journal*, 148(3): 52-60. 10.1088/0004-6256/148/3/52
- O'Brien, D. P., Marchi, S., Morbidelli, A., Bottke, W. F., Schenk, P. M., Russell, C. T. and Raymond, C. A. 2014. Constraining the Cratering Chronology of Vesta. *Planetary and Space Science*, 103: 131-142. 10.1016/j.pss.2014.05.013
- Salmon, J. and Canup, R. M. 2014. Accretion of the Moon from non-canonical discs. *Philosophical Transactions of the Royal Society A*, 372: 20130256. 10.1098/rsta.2013.0256
- Scott, E., Keil, K., Goldstein, J. I., Bottke, W. F., Moskovitz, N., Asphaug, E. Early Impact History and Dynamical Origin of Differentiated Meteorites and Asteroids. *Asteroids IV*. In Press
- Sierks, H., Barbieri, C., Lamy, P.L., Rodrigo, R., Koschny, D., Rickman, H., Keller, H.U., Aqarwal, J., A'Hearn, M.F., Angrilli, F., Auger, A.T., Barucci, M.A., Bertaux, J.L., Bertini, I., Besse, S., Bodewits, D., Capanna, C., Cremonese, G., Da Deppo, V., Davidsson, B., Debei, S., De Cecco, M., Ferri, F., Fornasier, S., Fulle, M., Gaskell, R., Giacomini, L., Groussin, O., Gutierrez-Marques, P., Gutiérrez, P.J., Güttler, C., Hoekzema, N., Hviid, S.F., Ip, W.H., Jorda, L., Knollenberg, J., Kovacs, G., Kramm, J.R., Kürt, E., Küppers, M., La Forgia, F., Lara, L.M., Lazzarin, M., Leyrat, C., Lopez Moreno, J.J., Magrin, S., Marchi, S., Marzari, F., Massironi, M., Michalik, H., Moissl, R., Mottola, S., Naletto, G., Oklay, N., Pajola, M., Pertile, M., Preusker, F., Sabau, L., Scholten, F., Snodgrass, C., Thomas, N., Tubiana, C., Vincent, J.B., Wenzel, K.P., Zaccariotto, M., Pätzold, M. 2015. On the nucleus structure and activity of comet 67P/Churyumov - Gerasimenko. *Science*, 347(6220). 10.1126/science.aal1044
- Stephan, K., Jaumann, R., De Sanctis, M. C., Tosi, F., Ammannito, E., Krohn, K., Zambon, F., Marchi, S., Ruesch, O., Matz, K.-D., Preusker, F., Roatsch, T., Raymond, C.A., Russell, C.T. 2014. Small fresh impact craters on asteroid 4 Vesta: A compositional and geological fingerprint. *Journal of Geophysical Research-Planets*, 119(4): 771-797. 10.1002/2013JE004388
- Thomas, N., Sierks, H., Barbieri, C., Lamy, P.L., Rodrigo, R., Rickman, H., Koschny, D., Keller, H.W., Agarwal, J., A'Hearn, M.F., Angrilli, F., Auger, A.-T., Barucci, M.A., Bertaux, J.-L., Bertini, I., Besse, S., Bodewits, D., Cremonese, G., Da Deppo, V., Davidsson, B., De Cecco, M., Debei, S., El-Maarry, M.R., Ferri, F., Fornasier, S., Fulle, M., Giacomini, L., Groussin, O., Gutierrez, P.J., Güttler, C., Hviid, S.F., Ip, W.-H., Jorda, L., Knollenberg, J., Kramm, J.-R., Kürt, E., Küppers, M., La Forgia, F., Lara, L.M., Lazzarin, M., Moreno, J.J.L., Magrin, S., Marchi, S., Marzari, F., Massironi, M., Michalik, H., Moissl, R., Mottola, S., Naletto, G., Oklay, N., Pajola, M., Pommerol, A.,

- Preusker, F., Sabau, L., Scholten, F., Snodgrass, C., Tubiana, C., Vincent, J.-B., Wenzel, K.-P. 2015. The morphological diversity of comet 67P/Churyumov - Gerasimenko. *Science*, 347(6220). 10.1126/science.aaa0440
- Vincent, J.-B., Schenk, P., Nathues, A., Sierks, H., Hoffmann, M., Gaskell, R. W., Marchi S., O'Brien, D.P., Sykes, M., Russell, C.T., Fulchignoni, M., Kellerg, H.U., Raymond, C., Palmer, E., Preusker, F. 2014. Crater depth-to-diameter distribution and surface properties of (4) Vesta. *Planetary and Space Science*, 103: 57-65. 10.1016/j.pss.2013.09.003
- Vokrouhlický, D., Bottke, W. F., Chesley, S. R., Scheeres, D. J., Statler, T. S. 2015. The Yarkovsky and YORP Effects. *Space Science Series Book: Asteroids IV*. <http://arxiv.org/pdf/1502.01249v1.pdf>
- Ward, W.R. 2014. On the evolution of the protolunar disc. *Philosophical Transactions of the Royal Society A*, 372: 20130250. 10.1098/rsta.2013.0250
- Williams, D. A., Jaumann, R., McSween, H. Y., Marchi, S., Schmedemann, N., Raymond, C. A. and Russell, C. T. 2014. The chronostratigraphy of protoplanet Vesta. *Icarus*, 244: 158-165. 10.1016/j.icarus.2014.06.027
- Williams, D.A., Denevi, B.W., Mittlefehldt, D.W., Mest, S.C., Schenk, P.M., Yingst, R.A., Buczkowski, D.L., Scully, J.E.C., Garry, W.B., McCord, T.B., Combe, J.-P., Jaumann, R., Pieters, C.M., Nathues, A., Le Corre, L., Hoffmann, M., Reddy, V., Schafer, M., Roatsch, T., Preusker, F., Marchi, S., Kneissl, T., Schmedemann, N., Neukum, G., Hiesinger, H., De Sanctis, M.C., Ammannito, E., Frigeri, A., Prettyman, T.H., Russell, C.T., Raymond, C.A., the Dawn Science Team. 2014. The geology of the Marcia quadrangle of asteroid Vesta: Assessing the effects of large, young craters. *Icarus*, 244: 74-88. 10.1016/j.icarus.2014.01.033
- Williams, D. A., O'Brien, D. P., Schenk, P. M., Denevi, B. W., Carsenty, U., Marchi, S., Scully, J.E.C., Jaumann, R., De Sanctis, M.C., Palomba, E., Ammannito, E., Longobardo, A., Magni, G., Frigeri, A., Russell, C.T., Raymond, C.A., Davison, T.M., the Dawn Science Team. 2014. Lobate and flow-like features on asteroid Vesta. *Planetary and Space Science*, 103: 24-35. 10.1016/j.pss.2013.06.017
- Alexander, C.M. O'D., Cody, G.D., Kebukawa, Y., Bowden, R., Fogel, M.L., Kilcoyne, A.L.D., Nittler, L.R., and Herd, C.D.K. 2014. Elemental, Isotopic and Structural Changes in Tagish Lake Insoluble Organic Matter Produced by Parent Body Processes. *Meteoritics and Planetary Science*, 49(4): 503-525. 10.1111/maps.12282
- Ballouza, R.-L., Richardson, D.C., Michel, P., Schwartz, S.R., Yu, Y. 2015. Numerical simulations of collisional disruption of rotating gravitational aggregates: Dependence on material properties. *Planetary and Space Science*, 107: 29-35. 10.1016/j.pss.2014.06.003
- Binzel, R.P., DeMeo, F.E., Burt, B.J., Cloutis, E.A., Rozitis, B., Burbine, T.H., Campins, H., Clark, B.E., Emery, J.P., Hergenrother, C.W., Howell, E.S. Laurretta, D.S, Nolan, M.C., Mansfield, M., Pietrasz, V., Polishook, D., Scheeres, D.J. 2015. Spectral slope variations for OSIRIS-REx target Asteroid (101955) Bennu: Possible evidence for a fine-grained regolith equatorial ridge. *Icarus*, 256: 22-29. 10.1016/j.icarus.2015.04.011
- Blinova, A.I., Herd, C.D.K., and Duke, M.J.M. 2014. Testing Variations within the Tagish Lake Meteorite – II: Whole-Rock Chemistry of Pristine Samples. *Meteoritics and Planetary Science*, 49(6): 1100-1118. 10.1111/maps.12303
- Blinova, A.I., Zega, T.J., Herd, C.D.K., and Stroud, R.M. 2014. Testing Variations within the Tagish Lake Meteorite – I: Mineralogy and Petrology of Pristine Samples. *Meteoritics and Planetary Science*, 49(4): 473-502. 10.1111/maps.12271
- Britt D.T., Consolmagno G.J., and Lebofsky L.A. 2014. Asteroids. In: *The Encyclopedia of the Solar System*. T. Spohn Ed., Academic Press
- Cellino, A., Bagnulo, S., Tanga, P., Novakovic, B., Delbo, M. 2014. A successful search for hidden Barbarians in the Watsonia asteroid family. *Monthly Notices Letters of the Royal Astronomical Society*, 439(1): L75-L79. 10.1093/mnras/slt184
- Cohen, B.A., Miller, J.S., Li, Z.-H., Swindle, T.D., French, R.A. 2014. The Potassium-Argon Laser Experiment (KArLE): In Situ Geochronology for Planetary Robotic Missions. *Geostandards and Geoanalytical Research*, 38(4): 421-439. 10.1111/j.1751-908X.2014.00319.x
- Friedrich, J.M., Rubin, A.E., Beard, S.P., Swindle, T.D., Isachsen, C.E., Rivers, M.L., Macke R.J. 2014. Ancient porosity preserved in ordinary chondrites: Examining shock and compaction on young asteroids. *Meteoritics & Planetary Science*, 49(7): 1214-1231. 10.1111/maps.12328
- Hargrove, K.D., Emery, J.P., Campins, H., Kelley, M.S.P. 2015. Asteroid (90) Antiope: Another icy member of the Themis family? *Icarus*, 254: 150-156. 10.1016/j.icarus.2015.03.008
- Hirabayashi, M. and Scheeres, D.J. 2015. Stress and failure analysis of rapidly rotating asteroid (29075) 1950 DA. *The Astrophysical Journal Letters*, 798(1): L8. 10.1088/2041-8205/798/1/L8
- Hilts, R.W., Herd, C.D.K., Simkus, D.N., and Slater, G.F. 2014. Soluble Organic Compounds in the Tagish Lake Meteorite. *Meteoritics and Planetary Science*, 49(4): 526-549. 10.1111/maps.12272
- Lane, J. E., Kasparis, T., Metzger, P.T., Jones, W. L. 2014. In Situ Disdrometer Calibration Using Multiple DSD Moments. *Acta Geophysica*, 62(6): 1450-1477. 10.2478/s11600-014-0237-2
- Laurretta, D.S., Bartels, A.E., Barucci, M.A., Bierhaus, E.B., Binzel, R.P., Bottke, W.F., Campins, H., Chesley, S.R., Clark, B.C., Clark, B.E., Cloutis, E.A., Connolly, H.C., Crombie, M.K., Delbo, M., Dworkin, J.P., Emery, J.P., Glavin, D.P., Hamilton, V.E., Hergenrother, C.W., Johnson, C.L., Keller, L.P., Michel, P., Nolan, M.C., Sandford, S.A., Scheeres, D.J., Simon, A.A., Sutter, B.M., Vokrouhlicky, D., and Walsh, K.J. 2015. The OSIRIS-REx target asteroid (101955) Bennu: Constraints on its physical, geological, and dynamical nature from astronomical observations. *Meteoritics and Planetary Science*, 50(4): 834-849. 10.1111/maps.12353
- Lust, N.B., Britt, D., Harrington, J., Nymeyer, S., Stevenson, K.B., Ross, E.L., Bowman, W., Fraine, J. 2014. Least Asymmetry Centering Method and Comparison. *Astronomical Society of the Pacific*, 126(946): 1092-1101. 10.1086/679470
- Metzger P.T. 2014. Plume Interactions with Asteroid Regolith during Proximity Operations. NASA report to Asteroid Return Mission (ARM) Alternative Study.
- Metzger P.T. 2014. Estimation of Regolith Backscatter during OSIRIS-REx Sample Capture. NASA report to OSIRIS-Rex Project.

- Michel, P., Jutzi, M., Richardson, D.C., Goodrich, C.A., Hartmann, W.K., O'Brien, D.P. 2015. Selective sampling during catastrophic disruption: Mapping the location of reaccumulated fragments in the original parent body. *Planetary and Space Science*, 107: 24-28. 10.1016/j.pss.2014.08.005
- Mommert, M., Hora, J.L., Harris, A.W., Reach, W.T., Emery, J.P., Thomas, C.A., Mueller, M., Cruikshank, D.P., Trilling, D.E., Delbo, M., Smith, H.A. 2014. The Discovery of Cometary Activity in Near-Earth Asteroid (3552) Don Quixote. *The Astrophysical Journal*, 781(1): 25. 10.1088/0064-637X/781/1/25
- Moreno F., Licandro J., Alvarez-Iglesias C., Cabrera-Lavers A., Pozuelos F. 2014. Intermittent Dust Mass Loss from Activated Asteroid P/2013 P5 (PANSTARRS). *The Astrophysical Journal*, 781(2): 118. 10.1088/0004-637X/781/2/118
- Murchie S., Britt D.T., and Pieters C.M. 2014. The value of Phobos sample return. *Planetary and Space Science*, 102: 176-182. 10.1016/j.pss.2014.04.014
- Newman J.D. and Herd C.D.K. 2015. Mineralogy, petrology, and distribution of meteorites at the Whitecourt crater, Alberta, Canada. *Meteoritics and Planetary Science*, 50(2): 305-317. 10.1111/maps.12422
- Pernet-Fisher, J.F., Howarth, G.H., Liu Y., Chen Y., Taylor L.A. 2014. Estimating the lunar mantle water budget from phosphates: Complications associated with silicate-liquid-immiscibility. *Geochimica et Cosmochimica Acta*, 144: 326-341. 10.1016/j.gca.2014.09.004
- Silber, E.A., Brown, P.G., Krzeminski, Z. 2015. Optical observations of meteors generating infrasound - II: Weak shock theory and validation. *Journal of Geophysical Research - Planets*, 120(3): 413-428. 10.1002/2014JE004680
- Thomas, C.A., Emery, J.P., Trilling, D.E., Delbo, M., Hora, J.L., Mueller, M. 2014. Physical characterization of Warm Spitzer-observed near-Earth objects. *Icarus*, 228: 217-246. 10.1016/j.icarus.2013.10.004
- Vilas, F., and Hendrix, A.R. 2015. The UV/blue effects of space weathering manifested in S-complex asteroids I: Quantifying Change with Asteroid Age. *The Astronomical Journal*, 150(2):64. 10.1088/0004-6256/150/2/64
- Schambeau, C.A., Fernández, Y.R., Lisse, C.M., Samarasinha, N., Woodney, L.M. 2015. A new analysis of Spitzer observations of Comet 29P/Schwassmann-Wachmann 1. *Icarus*, 260: 60-72. 10.1016/j.icarus.2015.06.038
- Szalay, J.R., Horanyi, M. Annual Variation and Synodic Modulation of the Sporadic Meteoroid Flux to the Moon. *Geophysical Research Letters*
- Goodrich, C. A., Kita, N.T., Sutton, S.R., Wirick, S., and Gross, J. The Miller Range 090340 and 090206 Meteorites: New Brachinite-Like Achondrites with Implications for the Diversity and Petrogenesis of the Brachinite Clan. *Meteoritics & Planetary Science*
- Poppe, A. R. et al. 2016. The Phobos neutral and ionized torus. *Journal of Geophysical Research*. 121. DOI: 10.1002/2105JE004948
- Collier, M. R., Vondrak, R.R., Hoyt, R.P., Mesarch, M.A., Farrell, W.M., Keller, J.W., Clark, P.E., Petro, N.E. and Hwang, K.-J. Tethered lunar subsatellites for multi-point and low altitude measurements. *Journal of Spacecraft and Rockets*
- Nekvasil, H., Lindsley, D.H., DiFrancesco, N., Catalano, T., Coraor, A.E., and Charlier, B. 2015. Uncommon behavior of plagioclase yields new insights into old lunar crust. *Geophysical Research Letters*
- Williams, K.B., Jackson, C.R.M., Cheek, L.C., Donaldson Hanna, K.L., Parman, S.W., Pieters, C.M., Dyar, M.D., Prissel, T.C. Reflectance spectroscopy of chromium-bearing spinel with application to recent orbital data from the Moon. *The American Mineralogist*, preprint. 10.2138/am-2016-5535
- Wetzel, D.T., Hauri, E.H., Saal, A.E., Rutherford, M.J. 2015. Carbon content and degassing history of the lunar volcanic glasses. *Nature Geoscience*, 8: 755-758. 10.1038/ngeo2511
- Tikoo, S.M., Gattacceca, J., Swanson-Hysell, N.L., Weiss, B.P., Suavet, C., Cournède, C. 2015. Preservation and detectability of shock-induced magnetization. *Journal of Geophysical Research - Planets*, 120(9): 1461-1475. 10.1002/2015JE004840
- Benner, L., and 11 colleagues 2014. Arecibo and Goldstone radar evidence for boulders on near-Earth asteroids. *Asteroids, Comets, Meteors 2014* 38.
- Cahill, J.T.S., Hagerty, J.J., Lawrence, D.J., Klima, R.L., Blewett, D.T., 2014. Surveying the South Pole-Aitken basin magnetic anomaly for remnant impactor metallic iron. *Icarus* 243, 27-30.
- Clegg, R.N., Jolliff, B.L., Robinson, M.S., Hapke, B.W., Plescia, J.B., 2014. Effects of rocket exhaust on lunar soil reflectance properties. *Icarus* 227, 176-194.
- Jawin, E.R., Kiefer, W.S., Fassett, C.I., Bussey, B.J., Cahill, J.T.S., Dyar, M.D., Lawrence, S.J., and Spudis, P.D., 2014. The relationship between radar scattering and surface roughness of lunar volcanic features, *Journal of Geophysical Research-Planets*, doi: 10.1002/2014JE004668.
- Lucey, P.G., and 15 colleagues, 2014. The global albedo of the Moon at 1064 nm from LOLA. *Journal of Geophysical Research (Planets)* 119, 1665-1679.
- Lucey, P.G., Neumann, G.A., Riner, M.A., Mazarico, E., Smith, D.E., Zuber, M.T., Paige, D.A., Bussey, D.B., Cahill, J.T., McGovern, J.A., Isaacson, P., Corley, L.M., Torrence, M.H., Melosh, H.J., Head, J.W., and Song, E., 2014. The global albedo of the Moon at 1064 nm from LOLA, *Journal of Geophysical Research-Planets*, 119, doi: 10.1002/2013JE004592.
- Teodoro, L.F.A., Eke, V.R., Elphic, R.C., Feldman, W.C., Lawrence, D.J., 2014. How well do we know the polar hydrogen distribution on the Moon? *Journal of Geophysical Research (Planets)* 119, 574-593.
- Trigo-Rodríguez, J.M., and 10 colleagues 2014. UV to far-IR reflectance spectra of carbonaceous chondrites - I. Implications for remote characterization of dark primitive asteroids targeted by sample-return missions. *Monthly Notices of the Royal Astronomical Society* 437, 227-240.
- Becker, T.M., and 20 colleagues 2015. Physical modeling of triple near-Earth Asteroid (153591) 2001 SN263 from radar and optical light curve observations. *Icarus* 248, 499-515.

- Eke, V.R., and 10 colleagues, 2015. The effect of craters on the lunar neutron flux. *Journal of Geophysical Research (Planets)* 120, 1377-1395.
- Fernandez, Y.R., Li, J.-Y., Howell, E.S., Woodney, L.M. 2015. Asteroids and Comets. ArXiv e-prints arXiv: 1507.06578.
- Hayne, P.O., Hendrix, A., Sefton-Nash, E., Siegler, M.A., Lucey, P.G., Retherford, K.D., Williams, J.-P., Greenhagen, B.T., Paige, D.A., 2015. Evidence for exposed water ice in the Moon's south polar regions from Lunar Reconnaissance Orbiter ultraviolet albedo and temperature measurements. *Icarus* 255, 58-69.
- Nazari, M., Wauson, R., Critz, T., Butcher, E.A., Scheeres, D.J. 2014. Observer-based body-frame hovering control over a tumbling asteroid. *Acta Astronautica*, 102: 124-139. 10.1016/j.actaastro.2014.05.016
- Ramesh, K.T., Hogan, J.D., Kimberley, J., Stickle, A., 2015. A review of mechanisms and models for dynamic failure, strength, and fragmentation. *Planetary and Space Science* 107, 10-23.
- Reddy, V., Vokrouhlický, D., Bottke, W.F., Petr Pravec, P., Sanchez, J.A., Gary, B.L., Klima, R., Cloutis, E. A., Galád, A., Thiam Guan, T., Hornoch, K., Izawa, M.R.M., Kušnirák, P., Le Corre, L., Mann, P., Moskovitz, M., Skiff, B., and Vrástil, J., 2015. Link between the Potentially Hazardous Asteroid (86039) 1999 NC43 and the Chelyabinsk meteoroid tenuous. *Icarus*, 252, 129-143.
- Rivkin, A.S., Campins, H., Emery, J.P., Howell, E.S., Licandro, J., Takir, D., Vilas, F. 2015. Astronomical Observations of Volatiles on Asteroids. ArXiv e-prints arXiv: 1502.06442.
- Rivkin, A. S., Thomas, C. A., Howell, E. S., and Emery, J. P. 2015. The Ch-class asteroids: Connecting a visible taxonomic class to a 3 micron band shape AJ, 2015arXiv151101196R.
- Rivkin, A. S., and 6 colleagues 2016 Astronomical Observations of Volatiles on Asteroids Chapter to appear in *Space Science Series Asteroids IV* 2015arXiv150206442R.
- Shepard, M.K., and 15 colleagues 2015. A radar survey of M- and X-class asteroids. III. Insights into their composition, hydration state, and structure. *Icarus* 245, 38-55.
- Siegler, M., Paige, D., Williams, J.-P., Bills, B. 2015. Evolution of lunar polar ice stability. *Icarus* 255, 78-87.
- Spudis P.D. (2015) The Moon as an Enabling Asset for Spaceflight. *Space Policy* 32, 9-10.
- Izawa, M. R. M., T. Schäfer, V. B. Pietrasz*, E. A. Cloutis, P. Mann, A. Nathues, K. Mengel, M. Schäfer, G. Thangjam, M. Hoffman, K. T. Tait, and D. M. Applin (2016), Effects of viewing geometry, aggregation state, and particle size on reflectance spectra of the Murchison CM2 chondrite deconvolved to Dawn FC band passes, *Icarus*, 266, 235-248.
- F. M. Thayer, D. M. Malaspina, A. Collette, Z. Sternovsky. 2016. Variation in Relative Dust Impact Charge Recollection with Antenna to Spacecraft Potential on STEREO. *JGR*.
- J. R. Szalay, M. Horanyi, . 2015. Annual Variation and Synodic Modulation of the Sporadic Meteoroid Flux to the Moon, . *GRL*. 42: 10580-10584. 10.1002/2015GL066908.
- A. Collette, D. Malaspina, Z. Sternovsky. 2016. Energy Distribution of Charged Particles Following Hypervelocity Dust Impact. *J. Geophys. Res.*
- Sachse, M., Schmidt, J., Kempf, S., & Spahn, F.. 2015. Correlation between speed and size for ejecta from hypervelocity impacts. *Journal of Geophysical Research: Planets*. 120(11), 1847–1858. 10.1002/2015JE004844.
- Farrell, W. M., D. H. Hurley, M. J. Poston, M. I. Zimmerman, T. M. Orlando, C. A. Hibbitts, and R. M. Killen . 2016. The Gas-Surface Interaction of a Human-Occupied Spacecraft with a Near Earth Object. *Advances in Space Research*.
- Joyce, C. J., Schwadron, N. A., Townsend, L. W., Mewaldt, R. A., Cohen, C. M. S., Rosengvinge, T. T., Case, A. W., Spence, H. E., Wilson, J. K., Gorby, M., Quinn, M., and Zeitlin, C. J. . 2015. Analysis of the potential radiation hazard of the 23 July 2012 SEP event observed by STEREO A using the EMMREM model and LRO/CRaTER. *Space Weather*. 13: 560.
- Hodges, R.R. and P.R. Mahaffy. 2016. Synodic and semiannual oscillations of Argon-40 in the lunar exosphere. *Geophys. Res. Lett.* . 43: 22-27. 10.1002/2015GL067293.
- Sears D.W.. 2015. Induced thermoluminescence dating of basalt. *Ancient TL*. 33: 14-19. .
- Sears, D.W.. 2015. The Explored Asteroids: Science and Exploration in the Space Age. *Space Science Reviews*. 194(1): 139-235.
- Andrew Oakleigh Nelson, Richard Dee, Gudipati, Mihály Horányi, David James, Sascha Kempf, Tobin Munsat, Zoltán Sternovsky, and Zach Ulibarri. 2016. New experimental capability to investigate the hypervelocity micrometeoroid bombardment of cryogenic surfaces. *Review of Scientific Instruments*. 87: 024502. <http://dx.doi.org/10.1063/1.4941960>.
- Dyar, M. D., E. A. Speicher, M. E. Gunter, A. Lanzirotti, J. M. Tucker*, M. L. Carmosino*, S. A. Peel*, E. B. Brown*, R. Oberti, and J. S. Delaney . 2016. Synchrotron micro-XANES analysis of Fe³⁺ in oriented amphiboles. *Am. Miner.*
- Olshevsky, V., Deca, J., Divin, A., Peng, I., Markidis, S., Innocenti, M.E., Cazzola, E., Lapenta, G.. 2016. Magnetic Null Points in Kinetic Simulations of Space Plasmas. *The Astrophysical Journal*. 819:52. . doi:10.3847/0004-637X/819/1/52.
- Young, K. E., C. A. Evans, K. V. Hodges, J. E. Bleacher, and T. G. Graff. 2016. A review of the handheld X-ray fluorescence spectrometer as a tool for field geologic investigations on Earth and in planetary surface exploration. *Appl. Geochem.* . .
- Jaret, S. J.*, B. L. Phillips, D. T. King Jr., T. D. Glotch, Z. Rahman, and S. P. Wright. 2016. An unusual occurrence of coesite at the Lonar Crater, India, . *Met. Planet. Sci.* . .
- G. Y. Kramer, B. Jaiswal, B. R. Hawke, T. Öhman, T. A. Giguere, and K. Johnson. 2015. The basalts of Mare Frigoris. *Journal of Geophysical Research – Planets*. 120: 1646-1670. doi:10.1002/2014JE004753.
- Krishna, N., and P. Senthil Kumar . 2016. Impact spallation processes on the Moon: A case study from the size and shape analysis of ejecta boulders and secondary craters of Censorinus crater. *Icarus* . 264: 274–299. .

- Snape, J.F.*, A. A. Nemchin, M. L. Grange, J. J. Bellucci*, F. Thiessen**, and M. J. Whitehouse. 2016. Phosphate ages in Apollo 14 breccias: Resolving multiple impact events with high precision U-Pb SIMS analyses. *Geochimica et Cosmochimica Acta* . 174: 13-29. .
- Hurwitz, D.** and D. A. Kring . 2016. Identifying the geologic context of Apollo 17 impact melt breccias. . *Earth and Planetary Science Letters* . 436: 64–70. .
- Senthil Kumar, P., U. Sruthi, N. Krishna, K.J.P. Lakshmi, Rajeev Menon, Amitabh, B., Gopala Krishna, David A. Kring, James W. Head, J.N. Goswami, and A.S. Kiran Kumar. 2016. Recent shallow moonquake and impact-triggered boulder falls on the Moon: New insights from the Schrödinger basin. *Journal of Geophysical Research* . .
- Schmieder, M.**, D. A. Kring, T. D. Swindle, J. C. Bond, and C. B. Moore. 2016. The Gao-Guenie impact melt breccia – Sampling a rapidly cooled impact melt dike on an H-chondrite asteroid? . *Meteoritics and Planetary Science* . .
- Hurley, D.M., A. Colaprete, R. C. Elphic, W. M. Farrell, P. Hayne, J. L. Heldmann, C. A. Hibbitts, T. A. Livengood, P. Lucey, K. Klaus, D. A. Kring, W. Patterson, and B. Sherwood. 2016. Lunar Polar Volatiles: Assessment of Existing Observations for Exploration. White Paper responding to request from NASA's Human Exploration and Operations Mission Directorate (HEOMD). . .
- McDonald, F., D. Martin, N. Curran, and A. Calzada-Diaz. 2015. Exploring the Moon on Earth. . *Astronomy and Geophysics* . 56(6): 6.31-6.32. doi:10.1093/astrogeo/atv199.
- Eppler, D.B.. 2015. Yet another lunar surface geologic exploration architecture concept (what, again?): A senior field geologist's integrated view. Annual Meeting of the Lunar Exploration Analysis Group. Abstract #2028. .
- Brown, S. M., and T. L. Grove. 2015. The origin of Apollo 14, 15 and 17 yellow ultramafic glass: evidence for late stage overturn of the lunar magma ocean. *Geochimica et Cosmochimica Acta*. 171: 201-215. doi: 10.1016/j.gca.2015.09.001.
- Donaldson Hanna, K. L.**, B. T. Greenhagen, W. R. Patterson III, C. M. Pieters, J. F. Mustard, N. E. Bowles, D. A. Paige, T. D. Glotch, and C. Thompson. 2016. Effects of varying environmental conditions on emissivity spectra of bulk lunar soils: Application to Diviner thermal infrared observations of the Moon. *Icarus*.
- Dygert, N., G. Hirth, and Y. Liang. 2016. A flow law for ilmenite in dislocation creep: Implications for lunar cumulate mantle overturn. *Geophys. Res. Lett.*. 43: 532-540. doi: 10.1002/2015GL066546.
- Head III, J. W., and L. Wilson. 2016. Generation, ascent and eruption of magma on the Moon: New insights into source depths, magma supply, intrusions and effusive/explosive eruptions (part 2: observations). *Icarus*.
- Hercik, D., H.-U. Auster, J. Blum, K.-H. Fornaçon, M. Fujimoto, K. Gebauer, C. Güttler, O. Hillenmaier, A. Hördt, E. Liebert, A. Matsuoka, R. Nomura, I. Richter, B. Stoll, B. P. Weiss, and K.-H. Glassmeier. 2016. The MASCOT magnetometer. *Space Science Review* . . doi: 10.1007/s11214-016-0236-5.
- Johnson, B. C., G. S. Collins, D. A. Minton, T. J. Bowling, B. M. Simonson, and M. T. Zuber. 2016. Spherule layers, crater scaling laws, and the population of ancient terrestrial impactors. *Icarus* . doi: 10.1016/j.icarus.2016.02.023.
- Kameda, S., H. Suzuki, Y. Cho, S. Koga, M. Yamada, T. Nakamura, T. Hiroi, H. Sawada, R. Honda, T. Morota, C. Honda, A. Takei, T. Takamatsu, Y. Okumura, M. Sato, T. Yasuda, K. Shibasaki, S. Ikezawa, and S. Sugita. 2015. Detectability of hydrous minerals using ONC-T camera onboard the Hayabusa2 spacecraft. *Advances in Space Research*. 56: 1519-1524. doi: 10.1016/j.asr.2015.06.037.
- Li, S., and R. E. Milliken. 2015. Estimating the modal mineralogy of eucrite and diogenite meteorites using visible-near infrared reflectance spectroscopy. *Meteoritics & Planetary Science*. 50: 1821-1850. doi: 10.1111/maps.12513.
- Pilorget, C., J. Fernando, B. L. Ehlmann, F. Schmidt, and T. Hiroi. 2016. Wavelength dependence of scattering properties in the VIS-NIR and links with grain-scale physical and compositional properties. *Icarus*. 267: 296-314. doi: 10.1016/j.icarus.2015.12.029.
- Taylor, L.A., C.M. Pieters, and D. Britt. 2016. Evaluations of lunar regolith simulants. *Planet. Space Sci*.
- Wetzel, D. T., S. D. Jacobsen, S.-M. Thomas, E. H. Hauri, M. J. Rutherford, and A. E. Saal. 2016. Speciation of water in the lunar picritic glasses. *Geochimica et Cosmochimica Acta*. . .
- Williams, K., C. R. M. Jackson, L. Cheek, K. L. Donaldson Hanna, S. W. Parman, C. M. Pieters, M. D. Dyar, and T. C. Prissel. 2016. Reflectance spectroscopy of chromium-bearing spinel with application to recent orbital data from the Moon. *American Mineralogist*.
- Yamamoto, S., R. Nakamura, T. Matsunaga, Y. Ogawa, Y. Ishihara, T. Morota, N. Hirata, H. Ohtake, T. Hiroi, Y. Yokota, and J. Haruyama (2015). 2015. Global occurrence trend of high-Ca pyroxene on lunar highlands and its implications. *J. Geophys. Res.*. 120: 831-848. doi: 10.1002/2014JE004740.
- Yamamoto, S., R. Nakamura, T. Matsunaga, Y. Ogawa, Y. Ishihara, T. Morota, N. Hirata, M. Ohtake, T. Hiroi, Y. Yokota, and J. Haruyama. 2015. Featureless spectra on the Moon as evidence of residual lunar primordial crust. *J. Geophys. Res.*. 120: 2190-2205. doi: 10.1002/2015JE004935.
- Zhu, M.-H., K. Wuennemann, and R. W. K. Potter. 2015. Numerical modeling of the ejecta distribution and formation of the Orientale basin on the Moon. *J. Geophys. Res.*. 120: 2118–2134. doi: 10.1002/2015JE004827.
- Sori, M. M., M. T. Zuber, J. W. Head III, and W. S. Kiefer. 2016. Gravitational search for cryptovolcanism on the Moon: Evidence for large volumes of early igneous activity. *Icarus* . . doi: 10.1016/j.icarus.2016.02.009.
- Jones, A. P., Bleacher, L. V., Young, K. E., Selvin, B., Firstman R., Glotch. T. D., and Bleacher, J. E.. 2016. Connecting the next generation of science journalists with scientists in action. *GSA Today*.
- Stroud, R. M., T. C. Lovejoy, M. Falke, N. D. Bassim, J. Corbin, N. Dellby, P. Hrcirik, A. Kaeppl, M. Noack, W. Hahn, M. Rohde, and O. L. Krivanek. 2016. Individual heteroatom identification with X-ray spectroscopy. *Appl. Phys. Lett.*. 117.764583333333.
- Cloutis, E., P. Szymanski, D. Applin, and D. Goltz. 2016. Identification and discrimination of polycyclic aromatic hydrocarbons using Raman spectroscopy. *Icarus*. 274: 211-230.

- K. H. Lepore, C. I. Fassett, E. A. Breves*, S. Byrne*, S. Giguere*, T. Boucher*, J.M. Rhodes, M. Vollinger, C. Anderson*, R.W. Murray, and M. Darby Dyar. 2016. Matrix Effects in Quantitative Analysis of Laser Induced Breakdown Spectroscopy of Rock Powders Doped with Cr, Mn, Ni, Zn and Co. *Applied Spectroscopy*.
- M. D. Dyar, C. I. Fassett, S. Giguere*, K. Lepore, S. Byrne*, T. Boucher*, C. J. Carey*, and S. Mahadevan. 2016. Comparison of Univariate and Multivariate Models for Prediction of Major and Minor Elements from LIBS Spectra with and without Masking. *Spectrochimica Acta Part B*.
- Zimmerman, MI, W. M. Farrell, C. M. Hartzell, X. Wang, and M. Horanyi. 2016. Grain-scale supercharging on airless regolith. *J. Geophys. Res.- Planets*.
- Hodges, R. R.. 2016. Methane in the lunar exosphere: Implications for solar wind carbon escape. *Geophys. Res. Lett.*, 43. doi:10.1002/2016GL068994
- Halekas, J. S., A. R. Poppe, W. M. Farrell, and J. P. McFadden. 2016. Structure and composition of the distant lunar exosphere: Constraints from ARTEMIS observations of ion acceleration in time-varying fields. *J. Geophys. Res. - Planets* . .
- Piquette, M. Horanyi. 2016. The effect of asymmetric surface topography on dust dynamics in the lunar plasma environment. *Icarus*.
- Deca et al.. 2016. Reflected charged particle populations around dipolar lunar magnetic anomalies. *APJ*.
- Pieters, C. M.. 2016. The inspiring 50++ years of lunar exploration. *IKI 50th Anniversary Special Book Publication*.
- Prissel, T. C., J. L. Whitten, S. W. Parman, and J. W. Head III. 2016. On the potential for lunar highlands Mg-suite extrusive volcanism & implications concerning crustal evolution. *Icarus*. 277: 319-329. doi: 10.1016/j.icarus.2016.05.018.
- Borovička J., Shrubný L., Kalenda P., Loskutov N., Brown P., Spurný P., Cooke W., Blaauw R., Moser D. E., and Kingery A.. 2016. A catalog of video records of the 2013 Chelyabinsk superbolide. *Astronomy and Astrophysics*. 585: A90. doi: <http://dx.doi.org/10.1051/0004-6361/201526680>.
- Hendrix A. R., Vilas F., and Li J.-Y. 2016. The UV signature of carbon in the solar system. *Meteoritics and Planetary Science* . 51: 105-115.
- Licandro J., Alí-Lagoa V., Tancredi G., and Fernández Y. 2016. Size and albedo distributions of asteroids in cometary orbits using WISE data. *Astronomy and Astrophysics* . 585: A9. doi: <http://dx.doi.org/10.1051/0004-6361/201526866>
- Licandro J., Müller T., Alvarez C., Alí-Lagoa V., and Delbo M. 2016. GTC/CanariCam observations of (99942) Apophis. *Astronomy and Astrophysics*. 585: A10. doi: <http://dx.doi.org/10.1051/0004-6361/201526888>
- Morate D., de León J., De Prá M., Licandro J., Cabrera-Lavers A., Campins H., Pinilla-Alonso N., and Alí-Lagoa V. 2016. Compositional study of asteroids in the Erigone collisional family using visible spectroscopy at the 10.4 m GTC. *Astronomy and Astrophysics*. 586: A129. doi: <http://dx.doi.org/10.1051/0004-6361/201527453>
- Ye Q.-Z., Hui M.-T., Brown P. G., Campbell-Brown M. D., Pokorný P., Wiegert P. A., and Gao X. 2016. When comets get old: A synthesis of comet and meteor observations of the low activity comet 209P/LINEAR. *Icarus*. 264: 48-61
- Sevecek P., et al.. 2016. Obliquity dependence of the tangential YORP. *Astronomy and Astrophysics*. . doi: <http://dx.doi.org/10.1051/0004-6361/201628746>.
- Scheeres, D.J. . 2016. Relative Equilibria in the Spherical, Finite Density 3-Body Problem. *Journal of Nonlinear Science*.
- Hirabayashi, M., et al.. 2016. Fission and reconfiguration of bilobate comets as revealed by 67P/Churyumov/Gerasimenko. *Nature*.
- Peplowski, Beck, Lawrence. 2016. Geochemistry of the lunar highlands as revealed by measurements of thermal neutrons. *JGR*. 121: 388-401. doi: 10.1002/2015JE004950.
- Miller et al. 2016. First Light: MeV Astrophysics from the Moon. *The Astrophysical Journal Letters* . 823:L31. . doi: 10.3847/2041-8205/823/2/L31.
- Hurley, et al.. 2016. Understanding temporal and spatial variability of the lunar helium atmosphere using simultaneous observations from LRO, LADEE, and ARTEMIS. *Icarus*. 273: 45-52.
- Hiroi, T., H. Kaiden, A. Yamaguchi, H. Kojima, K. Uemoto, M. Ohtake, T. Arai, and S. Sasaki. 2016. Visible and near-infrared spectral survey of lunar meteorites recovered by the National Institute of Polar Research. *Polar Science*. doi: 10.1016/j.polar.2016.06.004.
- J. J. Barnes**, D. A. Kring, R. Tartèse, I. A. Franchi, M. Anand, and S. S. Russell. 2016. An asteroidal origin for water in the Moon. *Nature Communications* . 7: A11684. doi: 10.1038/ncomms11684.
- J. J. Barnes**, R. Tartèse, M. Anand, F. M. McCubbin, C. R. Neal, and I. A. Franchi. 2016. Early degassing of lunar urKREEP by crust-breaching impact(s). *Earth and Planetary Science Letters*. 447: 84-94.
- K. L. Robinson**, J. J. Barnes**, K. Nagashima, A. Thomen, I. A. Franchi, G. R. Huss, M. Anand, and G. J. Taylor. 2016. Water in evolved lunar rocks: Evidence for multiple reservoirs. *Geochimica et Cosmochimica Acta*. 188: 244-260.
- Worsham, E.A.*, K. R. Bermingham**, and R. J. Walker. 2016. Siderophile element systematics of IAB complex iron meteorites: New insights into the formation of an enigmatic group. *Geochimica et Cosmochimica Acta* . 188: 261-283.
- Applin, D. M.*, M.R.M. Izawa, and E. A. Cloutis. 2016. Reflectance spectroscopy of oxalate minerals and relevance to Solar System carbon inventories. *Icarus*. 278: 7-30.
- Deca, J., A. Divin, X Wang, B. Lembege, S. Markidis, G. Lapenta, and M. Horanyi. 2016. 3-D full-kinetic simulation of the solar wind interaction with a vertical dipolar lunar magnetic anomaly. *GRL*. 43: 4136-4144. doi: 10.1002/2016GL068535.
- Szalay, J.R., M. Horanyi, . 2016. Lunar Meteoritic Gardening Rate Derived from In-Situ LADEE/LDEX Measurements. *GRL*. 43: 4893-4898. doi:10.1002/2016GL069148.
- Poppe, A.R., J. S. Halekas, J. R. Szalay, M. Horanyi, Z. Levin, S. Kempf. 2016. LADEE/LDEX observations of lunar

pick-up ion variability. GRL. 43: 3069-3077. doi: 10.1002/2016GL068393.

Wang, Z., Q. Liu, W. Waganar, J. Fontanese, D. James, and T. Munsat. 2016. Four-dimensional (4D) tracking of high-temperature micro particles. Rev. Sci. Instrum.. 87: 11D601. doi: <http://dx.doi.org/10.1063/1.4955280>.