Gregory A Neumann

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Mars Orbiter Laser Altimeter: Experiment summary after the first year of global mapping of Mars. Journal of Geophysical Research, 2001, 106, 23689-23722. | 3.3 | 1,344 |
| 2 | The Clobal Topography of Mars and Implications for Surface Evolution. Science, 1999, 284, 1495-1503. | 12.6 | 826 |
| 3 | The Crust of the Moon as Seen by GRAIL. Science, 2013, 339, 671-675. | 12.6 | 726 |
| 4 | Internal Structure and Early Thermal Evolution of Mars from Mars Global Surveyor Topography and Gravity. Science, 2000, 287, 1788-1793. | 12.6 | 518 |
| 5 | The Lunar Orbiter Laser Altimeter Investigation onÂtheÂLunar Reconnaissance Orbiter Mission. Space Science Reviews, 2010, 150, 209-241. | 8.1 | 394 |
| 6 | Gravity Field of the Moon from the Gravity Recovery and Interior Laboratory (GRAIL) Mission. Science, 2013, 339, 668-671. | 12.6 | 389 |
| 7 | Crustal structure of Mars from gravity and topography. Journal of Geophysical Research, 2004, 109, . | 3.3 | 360 |
| 8 | Initial observations from the Lunar Orbiter Laser Altimeter (LOLA). Geophysical Research Letters, 2010, 37, . | 4.0 | 356 |
| 9 | The Shape and Internal Structure of the Moon from the Clementine Mission. Science, 1994, 266, 1839-1843. | 12.6 | 349 |
| 10 | A new lunar digital elevation model from the Lunar Orbiter Laser Altimeter and SELENE Terrain Camera. Icarus, 2016, 273, 346-355. | 2.5 | 326 |
| 11 | Report of the IAU Working Group on Cartographic Coordinates and Rotational Elements: 2009. Celestial Mechanics and Dynamical Astronomy, 2011, 109, 101-135. | 1.4 | 305 |
| 12 | Gravity Field and Internal Structure of Mercury from MESSENGER. Science, 2012, 336, 214-217. | 12.6 | 305 |
| 13 | New Perspectives on Ancient Mars. Science, 2005, 307, 1214-1220. | 12.6 | 265 |
| 14 | Hydrogen Mapping of the Lunar South Pole Using the LRO Neutron Detector Experiment LEND. Science, 2010, 330, 483-486. | 12.6 | 265 |
| 15 | Topography of the Moon from the Clementine lidar. Journal of Geophysical Research, 1997, 102, 1591-1611. | 3.3 | 246 |
| 16 | Localized gravity/topography admittance and correlation spectra on Mars: Implications for regional and global evolution. Journal of Geophysical Research, 2002, 107, 19-1-19-25. | 3.3 | 243 |
| 17 | Observations of the North Polar Region of Mars from the Mars Orbiter Laser Altimeter. , 1998, 282, 2053-2060. | | 231 |
| 18 | The Mercury Laser Altimeter Instrument for the MESSENGER Mission. Space Science Reviews, 2007, 131, 451-479. | 8.1 | 231 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 19 | An improved solution of the gravity field of Mars (GMM-2B) from Mars Global Surveyor. Journal of Geophysical Research, 2001, 106, 23359-23376. | 3.3 | 227 |
| 20 | Topography of the Northern Hemisphere of Mercury from MESSENGER Laser Altimetry. Science, 2012, 336, 217-220. | 12.6 | 223 |
| 21 | Illumination conditions of the lunar polar regions using LOLA topography. Icarus, 2011, 211, 1066-1081. | 2.5 | 218 |
| 22 | Report of the IAU/IAG Working Group on cartographic coordinates and rotational elements: 2006. Celestial Mechanics and Dynamical Astronomy, 2007, 98, 155-180. | 1.4 | 216 |
| 23 | Seasonal Variations of Snow Depth on Mars. Science, 2001, 294, 2141-2146. | 12.6 | 212 |
| 24 | Global Distribution of Large Lunar Craters: Implications for Resurfacing and Impactor Populations. Science, 2010, 329, 1504-1507. | 12.6 | 210 |
| 25 | The lunar crust: Clobal structure and signature of major basins. Journal of Geophysical Research, 1996, 101, 16841-16863. | 3.3 | 206 |
| 26 | Bright and Dark Polar Deposits on Mercury: Evidence for Surface Volatiles. Science, 2013, 339, 296-300. | 12.6 | 197 |
| 27 | Lunar interior properties from the GRAIL mission. Journal of Geophysical Research E: Planets, 2014, 119, 1546-1578. | 3.6 | 185 |
| 28 | Shape of (101955) Bennu indicative of a rubble pile with internal stiffness. Nature Geoscience, 2019, 12, 247-252. | 12.9 | 179 |
| 29 | Ancient Igneous Intrusions and Early Expansion of the Moon Revealed by GRAIL Gravity Gradiometry. Science, 2013, 339, 675-678. | 12.6 | 177 |
| 30 | The Origin of Lunar Mascon Basins. Science, 2013, 340, 1552-1555. | 12.6 | 174 |
| 31 | Lunar impact basins revealed by Gravity Recovery and Interior Laboratory measurements. Science Advances, 2015, 1, e1500852. | 10.3 | 173 |
| 32 | Seasonal and static gravity field of Mars from MGS, Mars Odyssey and MRO radio science. Icarus, 2016, 272, 228-245. | 2.5 | 172 |
| 33 | The Shape of 433 Eros from the NEAR-Shoemaker Laser Rangefinder. Science, 2000, 289, 2097-2101. | 12.6 | 171 |
| 34 | Constraints on the volatile distribution within Shackleton crater at the lunar south pole. Nature, 2012, 486, 378-381. | 27.8 | 159 |
| 35 | GRGM900C: A degree 900 lunar gravity model from GRAIL primary and extended mission data. Geophysical Research Letters, 2014, 41, 3382-3389. | 4.0 | 152 |
| 36 | Correction to "Localized gravity/topography admittance and correlation spectra on Mars: Implications for regional and global evolution― Journal of Geophysical Research, 2004, 109, . | 3.3 | 151 |

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| 37 | Global surface slopes and roughness of the Moon from the Lunar Orbiter Laser Altimeter. Journal of Geophysical Research, 2011, 116, . | 3.3 | 149 |
| 38 | Crossover analysis of Mars Orbiter Laser Altimeter data. Journal of Geophysical Research, 2001, 106, 23753-23768. | 3.3 | 145 |
| 39 | A 70th degree lunar gravity model (GLGM-2) from Clementine and other tracking data. Journal of Geophysical Research, 1997, 102, 16339-16359. | 3.3 | 125 |
| 40 | Thermal Stability of Volatiles in the North Polar Region of Mercury. Science, 2013, 339, 300-303. | 12.6 | 119 |
| 41 | Evidence for surface water ice in the lunar polar regions using reflectance measurements from the Lunar Orbiter Laser Altimeter and temperature measurements from the Diviner Lunar Radiometer Experiment. Icarus, 2017, 292, 74-85. | 2.5 | 119 |
| 42 | Orbit determination of the Lunar Reconnaissance Orbiter. Journal of Geodesy, 2012, 86, 193-207. | 3.6 | 117 |
| 43 | Summary of the results from the lunar orbiter laser altimeter after seven years in lunar orbit. Icarus, 2017, 283, 70-91. | 2.5 | 116 |
| 44 | Lunar impact basins: Stratigraphy, sequence and ages from superposed impact crater populations measured from Lunar Orbiter Laser Altimeter (LOLA) data. Journal of Geophysical Research, 2012, 117, . | 3.3 | 114 |
| 45 | High‒degree gravity models from GRAIL primary mission data. Journal of Geophysical Research E: Planets, 2013, 118, 1676-1698. | 3.6 | 114 |
| 46 | The gravity field, orientation, and ephemeris of Mercury from MESSENGER observations after three years in orbit. Journal of Geophysical Research E: Planets, 2014, 119, 2417-2436. | 3.6 | 110 |
| 47 | Two-Way Laser Link over Interplanetary Distance. Science, 2006, 311, 53-53. | 12.6 | 107 |
| 48 | The paradox of the axial profile: Isostatic compensation along the axis of the Midâ€Atlantic Ridge?. Journal of Geophysical Research, 1993, 98, 17891-17910. | 3.3 | 106 |
| 49 | Asymmetric Distribution of Lunar Impact Basins Caused by Variations in Target Properties. Science, 2013, 342, 724-726. | 12.6 | 103 |
| 50 | Lunar floorâ€ f ractured craters: Classification, distribution, origin and implications for magmatism and shallow crustal structure. Journal of Geophysical Research, 2012, 117, . | 3.3 | 99 |
| 51 | The global albedo of the Moon at 1064 nm from LOLA. Journal of Geophysical Research E: Planets, 2014, 119, 1665-1679. | 3.6 | 96 |
| 52 | Improved estimate of tidal dissipation within Mars from MOLA observations of the shadow of Phobos. Journal of Geophysical Research, 2005, 110, . | 3.3 | 94 |
| 53 | The Lunar Reconnaissance Orbiter Laser Ranging Investigation. Space Science Reviews, 2010, 150, 63-80. | 8.1 | 91 |
| 54 | Lunar topographic roughness maps from Lunar Orbiter Laser Altimeter (LOLA) data: Scale dependence and correlation with geologic features and units. Icarus, 2013, 226, 52-66. | 2.5 | 90 |

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| 55 | Mars Orbiter Laser Altimeter pulse width measurements and footprint-scale roughness. Geophysical Research Letters, 2003, 30, . | 4.0 | 89 |
| 56 | Low-altitude magnetic field measurements by MESSENGER reveal Mercury's ancient crustal field. Science, 2015, 348, 892-895. | 12.6 | 89 |
| 57 | Structure and evolution of the lunar Procellarum region as revealed by GRAIL gravity data. Nature, 2014, 514, 68-71. | 27.8 | 85 |
| 58 | Diurnal variation and radiative influence of Martian water ice clouds. Geophysical Research Letters, 2007, 34, . | 4.0 | 82 |
| 59 | Evidence for a low bulk crustal density for Mars from gravity and topography. Geophysical Research Letters, 2017, 44, 7686-7694. | 4.0 | 82 |
| 60 | Solar system expansion and strong equivalence principle as seen by the NASA MESSENGER mission. Nature Communications, 2018, 9, 289. | 12.8 | 81 |
| 61 | Digital terrain mapping by the OSIRIS-REx mission. Planetary and Space Science, 2020, 180, 104764. | 1.7 | 81 |
| 62 | Geodetic Evidence That Mercury Has A Solid Inner Core. Geophysical Research Letters, 2019, 46, 3625-3633. | 4.0 | 80 |
| 63 | Global inventory and characterization of pyroclastic deposits on Mercury: New insights into pyroclastic activity from MESSENGER orbital data. Journal of Geophysical Research E: Planets, 2014, 119, 635-658. | 3.6 | 79 |
| 64 | The transition from complex crater to peak-ring basin on the Moon: New observations from the Lunar Orbiter Laser Altimeter (LOLA) instrument. Icarus, 2011, 214, 377-393. | 2.5 | 74 |
| 65 | Depth, distribution, and density of CO2deposition on Mars. Journal of Geophysical Research, 2004, 109, | 3.3 | 72 |
| 66 | Mantle control of a dynamically evolving spreading center: Mid-Atlantic Ridge 31–34°S. Earth and Planetary Science Letters, 1994, 121, 451-468. | 4.4 | 70 |
| 67 | Thickness of proximal ejecta from the Orientale Basin from Lunar Orbiter Laser Altimeter (LOLA) data: Implications for multi-ring basin formation. Geophysical Research Letters, 2011, 38, n/a-n/a. | 4.0 | 68 |
| 68 | Large impact basins on Mercury: Global distribution, characteristics, and modification history from MESSENGER orbital data. Journal of Geophysical Research, 2012, 117, . | 3.3 | 68 |
| 69 | Images of surface volatiles in Mercury's polar craters acquired by the MESSENGER spacecraft. Geology, 2014, 42, 1051-1054. | 4.4 | 67 |
| 70 | Small-Scale Topography of 433 Eros from Laser Altimetry and Imaging. Icarus, 2002, 155, 51-74. | 2.5 | 66 |
| 71 | Illumination conditions at the lunar south pole using high resolution Digital Terrain Models from LOLA. Icarus, 2014, 243, 78-90. | 2.5 | 65 |
| 72 | Free space laser communication experiments from Earth to the Lunar Reconnaissance Orbiter in lunar orbit. Optics Express, 2013, 21, 1865. | 3.4 | 63 |

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| 73 | The fractured Moon: Production and saturation of porosity in the lunar highlands from impact cratering. Geophysical Research Letters, 2015, 42, 6939-6944. | 4.0 | 63 |
| 74 | The lunar moho and the internal structure of the Moon: A geophysical perspective. Tectonophysics, 2013, 609, 331-352. | 2.2 | 59 |
| 75 | Two Mars years of clouds detected by the Mars Orbiter Laser Altimeter. Journal of Geophysical Research, 2003, 108, . | 3.3 | 58 |
| 76 | The use of laser altimetry in the orbit and attitude determination of Mars Global Surveyor. Geophysical Research Letters, 1999, 26, 1191-1194. | 4.0 | 57 |
| 77 | The formation of lunar mascon basins from impact to contemporary form. Journal of Geophysical Research E: Planets, 2014, 119, 2378-2397. | 3.6 | 57 |
| 78 | Hemispherical differences in the shape and topography of asteroid (101955) Bennu. Science Advances, 2020, 6, . | 10.3 | 57 |
| 79 | The morphology of craters on Mercury: Results from MESSENGER flybys. Icarus, 2012, 219, 414-427. | 2.5 | 53 |
| 80 | Illumination conditions at the lunar poles: Implications for future exploration. Planetary and Space Science, 2018, 162, 170-178. | 1.7 | 53 |
| 81 | Analyzing the ages of south polar craters on the Moon: Implications for the sources and evolution of surface water ice Icarus, 2020, 336, 113455. | 2.5 | 53 |
| 82 | Testing lunar permanently shadowed regions for water ice: LEND results from LRO. Journal of Geophysical Research, 2012, 117, . | 3.3 | 49 |
| 83 | Stratigraphy of the Caloris basin, Mercury: Implications for volcanic history and basin impact melt. Icarus, 2015, 250, 413-429. | 2.5 | 49 |
| 84 | Mars: Northern hemisphere slopes and slope distributions. Geophysical Research Letters, 1998, 25, 4413-4416. | 4.0 | 48 |
| 85 | Improved LOLA elevation maps for south pole landing sites: Error estimates and their impact on illumination conditions. Planetary and Space Science, 2021, 203, 105119. | 1.7 | 48 |
| 86 | Comparison of marine gravity from shipboard and highâ€density satellite altimetry along the Midâ€Atlantic Ridge, 30.5°–35.5°S. Geophysical Research Letters, 1993, 20, 1639-1642. | 4.0 | 47 |
| 87 | Detection of the lunar body tide by the Lunar Orbiter Laser Altimeter. Geophysical Research Letters, 2014, 41, 2282-2288. | 4.0 | 45 |
| 88 | Laser Altimeter Observations from MESSENGER's First Mercury Flyby. Science, 2008, 321, 77-79. | 12.6 | 44 |
| 89 | First <scp>MESSENGER</scp> orbital observations of Mercury's librations. Geophysical Research Letters, 2015, 42, 7881-7889. | 4.0 | 44 |
| 90 | The equatorial shape and gravity field of Mercury from MESSENGER flybys 1 and 2. Icarus, 2010, 209, 88-100. | 2.5 | 43 |

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|-----|---|------|-----------|
| 91 | The transition from complex craters to multiâ€ring basins on the Moon: Quantitative geometric properties from Lunar Reconnaissance Orbiter Lunar Orbiter Laser Altimeter (LOLA) data. Journal of Geophysical Research, 2012, 117, . | 3.3 | 40 |
| 92 | Comparison of areas in shadow from imaging and altimetry in the north polar region of Mercury and implications for polar ice deposits. Icarus, 2016, 280, 158-171. | 2.5 | 40 |
| 93 | Kilometerâ€scale topographic roughness of Mercury: Correlation with geologic features and units. Geophysical Research Letters, 2014, 41, 8245-8251. | 4.0 | 39 |
| 94 | Deep-seated thrust faults bound the Mare Crisium lunar mascon. Earth and Planetary Science Letters, 2015, 427, 183-190. | 4.4 | 39 |
| 95 | Orbit determination of the Lunar Reconnaissance Orbiter: Status after seven years. Planetary and Space Science, 2018, 162, 2-19. | 1.7 | 39 |
| 96 | Laser Altimetry of Small-Scale Features on 433 Eros from NEAR-Shoemaker. Science, 2001, 292, 488-491. | 12.6 | 38 |
| 97 | Investigating the origin of candidate lava channels on Mercury with MESSENGER data: Theory and observations. Journal of Geophysical Research E: Planets, 2013, 118, 471-486. | 3.6 | 38 |
| 98 | Global characteristics of porosity and density stratification within the lunar crust from GRAIL gravity and Lunar Orbiter Laser Altimeter topography data. Geophysical Research Letters, 2014, 41, 1882-1889. | 4.0 | 38 |
| 99 | Gravity field of the Orientale basin from the Gravity Recovery and Interior Laboratory Mission. Science, 2016, 354, 438-441. | 12.6 | 38 |
| 100 | Highâ€Resolution Gravity Field Models from GRAIL Data and Implications for Models of the Density Structure of the Moon's Crust. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006086. | 3.6 | 38 |
| 101 | Subsurface morphology and scaling of lunar impact basins. Journal of Geophysical Research E: Planets, 2016, 121, 1695-1712. | 3.6 | 37 |
| 102 | New evidence for surface water ice in smallâ€scale cold traps and in three large craters at the north polar region of Mercury from the Mercury Laser Altimeter. Geophysical Research Letters, 2017, 44, 9233-9241. | 4.0 | 37 |
| 103 | Enigmatic northern plains of Mars. Nature, 2001, 410, 651-651. | 27.8 | 36 |
| 104 | The lowâ€degree shape of Mercury. Geophysical Research Letters, 2015, 42, 6951-6958. | 4.0 | 36 |
| 105 | The age of lunar south circumpolar craters Haworth, Shoemaker, Faustini, and Shackleton: Implications for regional geology, surface processes, and volatile sequestration. Icarus, 2015, 255, 70-77. | 2.5 | 36 |
| 106 | Global maps of lunar neutron fluxes from the LEND instrument. Journal of Geophysical Research, 2012, 117, . | 3.3 | 35 |
| 107 | Improved calibration of reflectance data from the LRO Lunar Orbiter Laser Altimeter (LOLA) and implications for space weathering. Icarus, 2016, 273, 315-328. | 2.5 | 34 |
| 108 | High resolution statistical estimation of seafloor morphology: Oblique and orthogonal fabric on the flanks of the Mid-Atlantic Ridge, 34�?35.5� S. Marine Geophysical Researches, 1995, 17, 221-250. | 1.2 | 33 |

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| 109 | Interannual and seasonal behavior of Martian residual ice-cap albedo. Planetary and Space Science, 2008, 56, 194-211. | 1.7 | 33 |
| 110 | Co-registration of laser altimeter tracks with digital terrain models and applications in planetary science. Planetary and Space Science, 2013, 89, 111-117. | 1.7 | 32 |
| 111 | Ring faults and ring dikes around the Orientale basin on the Moon. Icarus, 2018, 310, 1-20. | 2.5 | 31 |
| 112 | The Long Valley/Mono Basin Volcanic Complex: A preliminary magnetotelluric and magnetic variation interpretation. Journal of Geophysical Research, 1984, 89, 8325-8337. | 3.3 | 29 |
| 113 | Accommodation of lithospheric shortening on Mercury from altimetric profiles of ridges and lobate scarps measured during MESSENGER flybys 1 and 2. Icarus, 2010, 209, 247-255. | 2.5 | 29 |
| 114 | Extension and uplift at Alba Patera, Mars: Insights from MOLA observations and loading models. Journal of Geophysical Research, 2001, 106, 23769-23809. | 3.3 | 27 |
| 115 | The Geophysics of Mercury: Current Status and Anticipated Insights from the MESSENGER Mission. Space Science Reviews, 2007, 131, 105-132. | 8.1 | 27 |
| 116 | Analysis of MOLA data for the Mars Exploration Rover landing sites. Journal of Geophysical Research, 2003, 108, . | 3.3 | 25 |
| 117 | Time variations of Mars' gravitational field and seasonal changes in the masses of the polar ice caps. Journal of Geophysical Research, 2009, 114, . | 3.3 | 25 |
| 118 | Geodetic constraints from multi-beam laser altimeter crossovers. Journal of Geodesy, 2010, 84, 343-354. | 3.6 | 25 |
| 119 | Space Lidar Developed at the NASA Goddard Space Flight Center—The First 20 Years. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 1660-1675. | 4.9 | 25 |
| 120 | Shape of the northern hemisphere of Mars from the Mars Orbiter Laser Altimeter (MOLA). Geophysical Research Letters, 1998, 25, 4393-4396. | 4.0 | 23 |
| 121 | Observational constraints on the identification of shallow lunar magmatism: Insights from floor-fractured craters. Icarus, 2017, 283, 224-231. | 2.5 | 23 |
| 122 | The laser ranging experiment of the Lunar Reconnaissance Orbiter: Five years of operations and data analysis. Icarus, 2017, 283, 55-69. | 2.5 | 23 |
| 123 | Mercury's internal magnetic field: Constraints on large- and small-scale fields of crustal origin. Earth and Planetary Science Letters, 2009, 285, 340-346. | 4.4 | 22 |
| 124 | Calibration of the Mercury Laser Altimeter on the MESSENGER Spacecraft. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 2860-2874. | 6.3 | 22 |
| 125 | ICESAT/GLAS Altimetry Measurements: Received Signal Dynamic Range and Saturation Correction. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 5440-5454. | 6.3 | 22 |
| 126 | LASER RANGING FOR GRAVITATIONAL, LUNAR AND PLANETARY SCIENCE. International Journal of Modern Physics D, 2007, 16, 2151-2164. | 2.1 | 21 |

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| 127 | Photogrammetric Analysis of the Mars Global Surveyor Mapping Data. Photogrammetric Engineering and Remote Sensing, 2005, 71, 97-108. | 0.6 | 20 |
| 128 | Mars 1064 nm spectral radiance measurements determined from the receiver noise response of the Mars Orbiter Laser Altimeter. Applied Optics, 2006, 45, 3960. | 2.1 | 20 |
| 129 | GRAIL-identified gravity anomalies in Oceanus Procellarum: Insight into subsurface impact and magmatic structures on the Moon. Icarus, 2019, 331, 192-208. | 2.5 | 20 |
| 130 | Lunar phase function at 1064Ânm from Lunar Orbiter Laser Altimeter passive and active radiometry. Icarus, 2016, 273, 96-113. | 2.5 | 19 |
| 131 | GRAIL gravity observations of the transition from complex crater to peak-ring basin on the Moon: Implications for crustal structure and impact basin formation. Icarus, 2017, 292, 54-73. | 2.5 | 19 |
| 132 | Ice in Micro Cold Traps on Mercury: Implications for Age and Origin. Journal of Geophysical Research E: Planets, 2018, 123, 2178-2191. | 3.6 | 19 |
| 133 | Age constraints of Mercury's polar deposits suggest recent delivery of ice. Earth and Planetary Science Letters, 2019, 520, 26-33. | 4.4 | 19 |
| 134 | Characterization of the morphometry of impact craters hosting polar deposits in Mercury's north polar region. Journal of Geophysical Research, 2012, 117, . | 3.3 | 17 |
| 135 | Simulated recovery of Europa's global shape and tidal Love numbers from altimetry and radio tracking during a dedicated flyby tour. Geophysical Research Letters, 2015, 42, 3166-3173. | 4.0 | 17 |
| 136 | Constraining the thickness of polar ice deposits on Mercury using the Mercury Laser Altimeter and small craters in permanently shadowed regions. Icarus, 2018, 305, 139-148. | 2.5 | 17 |
| 137 | The Rio Grande rift: new electromagnetic constraints on the Socorro magma body. Physics of the Earth and Planetary Interiors, 1991, 66, 101-117. | 1.9 | 15 |
| 138 | Rotational states and shapes of Ryugu and Bennu: Implications for interior structure and strength. Planetary and Space Science, 2021, 204, 105268. | 1.7 | 15 |
| 139 | Electromagnetic core-mantle coupling and paleomagnetic reversal paths. Geophysical Research Letters, 1996, 23, 2705-2708. | 4.0 | 14 |
| 140 | Low-amplitude topographic features and textures on the Moon: Initial results from detrended Lunar Orbiter Laser Altimeter (LOLA) topography. Icarus, 2017, 283, 138-145. | 2.5 | 13 |
| 141 | Assessing the Roughness Properties of Circumpolar Lunar Craters: Implications for the Timing of Waterâ€lce Delivery to the Moon. Geophysical Research Letters, 2020, 47, e2020GL087782. | 4.0 | 13 |
| 142 | Highâ€resolution local gravity model of the south pole of the Moon from GRAIL extended mission data. Geophysical Research Letters, 2014, 41, 3367-3374. | 4.0 | 12 |
| 143 | Analysis of one-way laser ranging data to LRO, time transfer and clock characterization. Icarus, 2017, 283, 38-54. | 2.5 | 12 |
| 144 | The geomagnetic coast effect in the Pacific Northwest of North America. Geophysical Research Letters, 1985, 12, 502-505. | 4.0 | 11 |

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| 145 | Locating the LCROSS Impact Craters. Space Science Reviews, 2012, 167, 71-92. | 8.1 | 11 |
| 146 | Demonstration of orbit determination for the Lunar Reconnaissance Orbiter using one-way laser ranging data. Planetary and Space Science, 2016, 129, 32-46. | 1.7 | 11 |
| 147 | The thickness of radar-bright deposits in Mercury's northern hemisphere from individual Mercury Laser Altimeter tracks. Icarus, 2019, 323, 40-45. | 2.5 | 10 |
| 148 | The Lunar Orbiter Laser Altimeter Investigation onÂtheÂLunar Reconnaissance Orbiter Mission. , 2009, , 209-241. | | 10 |
| 149 | First two-way laser ranging to a lunar orbiter: infrared observations from the Grasse station to LRO's retro-reflector array. Earth, Planets and Space, 2020, 72, . | 2.5 | 10 |
| 150 | Mercury's Crust and Lithosphere: Structure and Mechanics. , 2018, , 52-84. | | 9 |
| 151 | Mercury's Polar Deposits. , 2018, , 346-370. | | 9 |
| 152 | Deriving Mercury Geodetic Parameters With Altimetric Crossovers From the Mercury Laser Altimeter (MLA). Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006683. | 3.6 | 9 |
| 153 | The regional subsurface structure of Long Valley (California) caldera fill from gravity and magnetotelluric data. Bulletin of the Geological Society of America, 1988, 100, 1819-1823. | 3.3 | 8 |
| 154 | Trilogy, a planetary geodesy mission concept for measuring the expansion of the solar system. Planetary and Space Science, 2018, 153, 127-133. | 1.7 | 8 |
| 155 | The Mercury Laser Altimeter Instrument for the MESSENGER Mission. , 2007, , 451-479. | | 8 |
| 156 | A high-density remote reference magnetic variation profile in the Pacific northwest of North America. Physics of the Earth and Planetary Interiors, 1989, 53, 305-319. | 1.9 | 7 |
| 157 | Evidence for multiple boundary faults beneath the northwest moat of Long Valley Caldera: Magnetotelluric results. Geophysical Research Letters, 1988, 15, 1437-1440. | 4.0 | 6 |
| 158 | Simultaneous laser ranging and communication from an Earth-based satellite laser ranging station to the Lunar Reconnaissance Orbiter in lunar orbit. , 2013, , . | | 6 |
| 159 | The location of Airyâ€0, the Mars prime meridian reference, from stereo photogrammetric processing of THEMIS IR imaging and digital elevation data. Journal of Geophysical Research E: Planets, 2014, 119, 2471-2486. | 3.6 | 6 |
| 160 | In-flight characterization of the lunar orbiter laser altimeter instrument pointing and far-field pattern. Applied Optics, 2018, 57, 7702. | 1.8 | 6 |
| 161 | Searching for Lunar Horizon Glow With the Lunar Orbiter Laser Altimeter. Journal of Geophysical Research E: Planets, 2019, 124, 2728-2744. | 3.6 | 6 |
| 162 | Degassing of volcanic extrusives on Mercury: Potential contributions to transient atmospheres and buried polar deposits. Earth and Planetary Science Letters, 2021, 564, 116907. | 4.4 | 6 |

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| 163 | Comparison of Viking Lander Descent Data and MOLA Topography Reveals Kilometer-Scale Offset in Mars Atmosphere Profiles. Icarus, 2002, 159, 259-261. | 2.5 | 5 |
| 164 | Seeing the Missing Half. Science, 2009, 323, 885-887. | 12.6 | 5 |
| 165 | Geodetic investigations of the mission concept MAGIC to reveal Callisto's internal structure. Acta Astronautica, 2022, 195, 68-76. | 3.2 | 5 |
| 166 | Temperatureâ€Dependent Changes in the Normal Albedo of the Lunar Surface at 1,064Ânm. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006338. | 3.6 | 4 |
| 167 | The Lunar Reconnaissance Orbiter Laser Ranging Investigation. , 2009, , 63-80. | | 4 |
| 168 | Baseline Design and Performance Analysis of Laser Altimeter for Korean Lunar Orbiter. Journal of Astronomy and Space Sciences, 2016, 33, 211-219. | 1.0 | 3 |
| 169 | Magnetic variations in the reconnaissance of sedimentary basins: Field procedure and generalized inversion of shortâ€period data from the Rio Grande rift. Geophysics, 1990, 55, 1567-1576. | 2.6 | 1 |
| 170 | Laser Altimeter Measurements from MESSENGERâ \in Ms s Recent Mercury Flybys. , 2009, , . | | 1 |
| 171 | High Degree and Order Spherical Harmonic Models for the Moon From Clementine and Historic S-Band Data. International Association of Geodesy Symposia, 1996, , 176-185. | 0.4 | 1 |
| 172 | Instrument design and in orbit performance of planetary lidars developed at NASA GSFC. , 2012, , . | | 0 |
| 173 | In-flight performance of the Mercury Laser Altimeter laser transmitter. Proceedings of SPIE, 2014, , . | 0.8 | 0 |
| 174 | The Geophysics of Mercury: Current Status and Anticipated Insights from the MESSENGER Mission. , 2007, , 105-132. | | 0 |