Daniel Glavin

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Comet 81P/Wild 2 Under a Microscope. Science, 2006, 314, 1711-1716. | 12.6 | 848 |
| 2 | A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777. | 12.6 | 687 |
| 3 | Organics Captured from Comet 81P/Wild 2 by the Stardust Spacecraft. Science, 2006, 314, 1720-1724. | 12.6 | 519 |
| 4 | Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480. | 12.6 | 508 |
| 5 | Mars' Surface Radiation Environment Measured with the Mars Science Laboratory's Curiosity Rover. Science, 2014, 343, 1244797. | 12.6 | 475 |
| 6 | Carbonaceous meteorites contain a wide range of extraterrestrial nucleobases. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13995-13998. | 7.1 | 460 |
| 7 | The Sample Analysis at Mars Investigation and Instrument Suite. Space Science Reviews, 2012, 170, 401-478. | 8.1 | 435 |
| 8 | Cometary glycine detected in samples returned by Stardust. Meteoritics and Planetary Science, 2009, 44, 1323-1330. | 1.6 | 397 |
| 9 | Organic molecules in the Sheepbed Mudstone, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2015, 120, 495-514. | 3.6 | 375 |
| 10 | Mars methane detection and variability at Gale crater. Science, 2015, 347, 415-417. | 12.6 | 373 |
| 11 | Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars. Science, 2018, 360, 1096-1101. | 12.6 | 369 |
| 12 | Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937. | 12.6 | 367 |
| 13 | X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932. | 12.6 | 327 |
| 14 | Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266. | 12.6 | 327 |
| 15 | Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072. | 12.6 | 326 |
| 16 | Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267. | 12.6 | 323 |
| 17 | Extraterrestrial nucleobases in the Murchison meteorite. Earth and Planetary Science Letters, 2008, 270, 130-136. | 4.4 | 317 |
| 18 | Evidence for perchlorates and the origin of chlorinated hydrocarbons detected by SAM at the Rocknest aeolian deposit in Gale Crater. Journal of Geophysical Research E: Planets, 2013, 118, 1955-1973. | 3.6 | 306 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Understanding prebiotic chemistry through the analysis of extraterrestrial amino acids and nucleobases in meteorites. Chemical Society Reviews, 2012, 41, 5459. | 38.1 | 301 |
| 20 | The Miller Volcanic Spark Discharge Experiment. Science, 2008, 322, 404-404. | 12.6 | 298 |
| 21 | Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505. | 12.6 | 280 |
| 22 | Extraterrestrial amino acids in Orgueil and Ivuna: Tracing the parent body of CI type carbonaceous chondrites. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 2138-2141. | 7.1 | 278 |
| 23 | Enrichment of the amino acid <scp>I</scp> -isovaline by aqueous alteration on CI and CM meteorite parent bodies. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5487-5492. | 7.1 | 264 |
| 24 | Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734. | 12.6 | 246 |
| 25 | Isotope Ratios of H, C, and O in CO ₂ and H ₂ O of the Martian Atmosphere. Science, 2013, 341, 260-263. | 12.6 | 241 |
| 26 | Primordial synthesis of amines and amino acids in a 1958 Miller H ₂ S-rich spark discharge experiment. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5526-5531. | 7.1 | 232 |
| 27 | In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166. | 12.6 | 224 |
| 28 | Background levels of methane in Mars' atmosphere show strong seasonal variations. Science, 2018, 360, 1093-1096. | 12.6 | 224 |
| 29 | The effects of parent body processes on amino acids in carbonaceous chondrites. Meteoritics and Planetary Science, 2010, 45, 1948-1972. | 1.6 | 218 |
| 30 | Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670. | 12.6 | 215 |
| 31 | Radar-Enabled Recovery of the Sutter's Mill Meteorite, a Carbonaceous Chondrite Regolith Breccia. Science, 2012, 338, 1583-1587. | 12.6 | 191 |
| 32 | Origin and Evolution of Prebiotic Organic Matter As Inferred from the Tagish Lake Meteorite. Science, 2011, 332, 1304-1307. | 12.6 | 189 |
| 33 | The Mars Organic Molecule Analyzer (MOMA) Instrument: Characterization of Organic Material in Martian Sediments. Astrobiology, 2017, 17, 655-685. | 3.0 | 185 |
| 34 | Microfabricated Capillary Electrophoresis Amino Acid Chirality Analyzer for Extraterrestrial Exploration. Analytical Chemistry, 1999, 71, 4000-4006. | 6.5 | 178 |
| 35 | Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the <i>Curiosity</i> rover investigations at Gale crater, Mars. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4245-4250. | 7.1 | 172 |
| 36 | The OSIRISâ€REx target asteroid (101955) Bennu: Constraints on its physical, geological, and dynamical nature from astronomical observations. Meteoritics and Planetary Science, 2015, 50, 834-849. | 1.6 | 168 |

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|----|---|------|-----------|
| 37 | Evolved gas analyses of sedimentary rocks and eolian sediment in Gale Crater, Mars: Results of the Curiosity rover's sample analysis at Mars instrument from Yellowknife Bay to the Namib Dune. Journal of Geophysical Research E: Planets, 2017, 122, 2574-2609. | 3.6 | 168 |
| 38 | Amino acid analyses of Antarctic CM2 meteorites using liquid chromatography-time of flight-mass spectrometry. Meteoritics and Planetary Science, 2006, 41, 889-902. | 1.6 | 167 |
| 39 | A Search for Endogenous Amino Acids in Martian Meteorite ALH84001. Science, 1998, 279, 362-365. | 12.6 | 164 |
| 40 | Extraterrestrial ribose and other sugars in primitive meteorites. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24440-24445. | 7.1 | 158 |
| 41 | The Search for Chiral Asymmetry as a Potential Biosignature in our Solar System. Chemical Reviews, 2020, 120, 4660-4689. | 47.7 | 156 |
| 42 | The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463. | 12.6 | 134 |
| 43 | Episodes of particle ejection from the surface of the active asteroid (101955) Bennu. Science, 2019, 366, . | 12.6 | 129 |
| 44 | Meteoritic Amino Acids: Diversity in Compositions Reflects Parent Body Histories. ACS Central Science, 2016, 2, 370-379. | 11.3 | 126 |
| 45 | Detection of cometary amines in samples returned by Stardust. Meteoritics and Planetary Science, 2008, 43, 399-413. | 1.6 | 117 |
| 46 | Relative amino acid concentrations as a signature for parent body processes of carbonaceous chondrites. Origins of Life and Evolution of Biospheres, 2002, 32, 143-163. | 1.9 | 113 |
| 47 | Mnâ€Cr isotope systematics of the D'Orbigny angrite. Meteoritics and Planetary Science, 2004, 39, 693-700. | 1.6 | 113 |
| 48 | The imprint of atmospheric evolution in the D/H of Hesperian clay minerals on Mars. Science, 2015, 347, 412-414. | 12.6 | 113 |
| 49 | Polycyclic aromatic hydrocarbons (PAHs) in Antarctic Martian meteorites, carbonaceous chondrites, and polar ice. Geochimica Et Cosmochimica Acta, 1997, 61, 475-481. | 3.9 | 107 |
| 50 | Unusual nonterrestrial <scp>l</scp> â€proteinogenic amino acid excesses in the Tagish Lake meteorite. Meteoritics and Planetary Science, 2012, 47, 1347-1364. | 1.6 | 106 |
| 51 | Detecting pyrolysis products from bacteria on Mars. Earth and Planetary Science Letters, 2001, 185, 1-5. | 4.4 | 103 |
| 52 | Low Upper Limit to Methane Abundance on Mars. Science, 2013, 342, 355-357. | 12.6 | 103 |
| 53 | Amino acids in the Martian meteorite Nakhla. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 8835-8838. | 7.1 | 92 |
| 54 | A search for extraterrestrial amino acids in carbonaceous Antarctic micrometeorites. Origins of Life and Evolution of Biospheres, 1998, 28, 413-424. | 1.9 | 84 |

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| 55 | A Plausible Simultaneous Synthesis of Amino Acids and Simple Peptides on the Primordial Earth. Angewandte Chemie - International Edition, 2014, 53, 8132-8136. | 13.8 | 82 |
| 56 | Compoundâ€specific carbon, nitrogen, and hydrogen isotopic ratios for amino acids in CM and CR chondrites and their use in evaluating potential formation pathways. Meteoritics and Planetary Science, 2012, 47, 1517-1536. | 1.6 | 77 |
| 5 7 | Abundances and implications of volatileâ€bearing species from evolved gas analysis of the Rocknest aeolian deposit, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 237-254. | 3.6 | 73 |
| 58 | The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, S3. | 1.6 | 73 |
| 59 | Bright carbonate veins on asteroid (101955) Bennu: Implications for aqueous alteration history. Science, 2020, 370, . | 12.6 | 71 |
| 60 | A propensity for <i>n</i> â€i‰â€amino acids in thermally altered Antarctic meteorites. Meteoritics and Planetary Science, 2012, 47, 374-386. | 1.6 | 66 |
| 61 | Sulfur-bearing phases detected by evolved gas analysis of the Rocknest aeolian deposit, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 373-393. | 3.6 | 65 |
| 62 | The Origin and Evolution of Organic Matter in Carbonaceous Chondrites and Links to Their Parent Bodies. , 2018, , 205-271. | | 60 |
| 63 | Survival of Amino Acids in Micrometeorites During Atmospheric Entry. Astrobiology, 2001, 1, 259-269. | 3.0 | 59 |
| 64 | Prebiotic Synthesis of Methionine and Other Sulfur-Containing Organic Compounds on the Primitive Earth: A Contemporary Reassessment Based on an Unpublished 1958 Stanley Miller Experiment. Origins of Life and Evolution of Biospheres, 2011, 41, 201-212. | 1.9 | 59 |
| 65 | Fall, recovery, and characterization of the Novato L6 chondrite breccia. Meteoritics and Planetary Science, 2014, 49, 1388-1425. | 1.6 | 59 |
| 66 | The amino acid composition of the Sutter's Mill <scp>CM</scp> 2 carbonaceous chondrite. Meteoritics and Planetary Science, 2014, 49, 2074-2086. | 1.6 | 57 |
| 67 | Habitability, Taphonomy, and the Search for Organic Carbon on Mars. Science, 2014, 343, 386-387. | 12.6 | 57 |
| 68 | New Method for Estimating Bacterial Cell Abundances in Natural Samples by Use of Sublimation. Applied and Environmental Microbiology, 2004, 70, 5923-5928. | 3.1 | 55 |
| 69 | Assessment and control of organic and other contaminants associated with the Stardust sample return from comet 81P/Wild 2. Meteoritics and Planetary Science, 2010, 45, 406-433. | 1.6 | 55 |
| 70 | A new extraction technique for in situ analyses of amino and carboxylic acids on Mars by gas chromatography mass spectrometry. Planetary and Space Science, 2006, 54, 1592-1599. | 1.7 | 54 |
| 71 | Large sulfur isotope fractionations in Martian sediments at Gale crater. Nature Geoscience, 2017, 10, 658-662. | 12.9 | 53 |
| 72 | Identifying the wide diversity of extraterrestrial purine and pyrimidine nucleobases in carbonaceous meteorites. Nature Communications, 2022, 13, 2008. | 12.8 | 53 |

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|----|--|------|-----------|
| 73 | Does aspartic acid racemization constrain the depth limit of the subsurface biosphere?. Geobiology, 2014, 12, 1-19. | 2.4 | 52 |
| 74 | MOMA: the challenge to search for organics and biosignatures on Mars. International Journal of Astrobiology, 2016, 15, 239-250. | 1.6 | 52 |
| 75 | Preservation of amino acids from in situâ€produced bacterial cell wall peptidoglycans in northeastern Atlantic continental margin sediments. Limnology and Oceanography, 2002, 47, 1521-1524. | 3.1 | 50 |
| 76 | Amino acid composition, petrology, geochemistry, ¹⁴ C terrestrial age and oxygen isotopes of the ShiÅŸr 033 CR chondrite. Meteoritics and Planetary Science, 2007, 42, 1581-1595. | 1.6 | 50 |
| 77 | Extraterrestrial amino acids in the Almahata Sitta meteorite. Meteoritics and Planetary Science, 2010, 45, 1695-1709. | 1.6 | 50 |
| 78 | OSIRIS-REx Contamination Control Strategy and Implementation. Space Science Reviews, 2018, 214, 1. | 8.1 | 50 |
| 79 | First Detections of Dichlorobenzene Isomers and Trichloromethylpropane from Organic Matter Indigenous to Mars Mudstone in Gale Crater, Mars: Results from the Sample Analysis at Mars Instrument Onboard the Curiosity Rover. Astrobiology, 2020, 20, 292-306. | 3.0 | 50 |
| 80 | The influence of mineralogy on recovering organic acids from Mars analogue materials using the "one-pot―derivatization experiment on the Sample Analysis at Mars (SAM) instrument suite. Planetary and Space Science, 2012, 67, 1-13. | 1.7 | 49 |
| 81 | Extraterrestrial amino acids identified in metalâ€rich <scp>CH</scp> and <scp>CB</scp> carbonaceous chondrites from Antarctica. Meteoritics and Planetary Science, 2013, 48, 390-402. | 1.6 | 48 |
| 82 | The effects of parent-body hydrothermal heating on amino acid abundances in CI-like chondrites. Polar Science, 2014, 8, 255-263. | 1.2 | 46 |
| 83 | Pathways to Meteoritic Glycine and Methylamine. ACS Earth and Space Chemistry, 2017, 1, 3-13. | 2.7 | 46 |
| 84 | Amino acids in the Tagish Lake meteorite. Meteoritics and Planetary Science, 2002, 37, 697-701. | 1.6 | 45 |
| 85 | A search for amino acids and nucleobases in the Martian meteorite Roberts Massif 04262 using liquid chromatographyâ€mass spectrometry. Meteoritics and Planetary Science, 2013, 48, 786-795. | 1.6 | 43 |
| 86 | Extraterrestrial amino acids and Lâ€enantiomeric excesses in the <scp>CM</scp> 2 carbonaceous chondrites Aguas Zarcas and Murchison. Meteoritics and Planetary Science, 2021, 56, 148-173. | 1.6 | 42 |
| 87 | Indigenous and exogenous organics and surface–atmosphere cycling inferred from carbon and oxygen isotopes at Gale crater. Nature Astronomy, 2020, 4, 526-532. | 10.1 | 41 |
| 88 | The Urey Instrument: An Advanced In Situ Organic and Oxidant Detector for Mars Exploration. Astrobiology, 2008, 8, 583-595. | 3.0 | 40 |
| 89 | Light and variable 37 Cl/ 35 Cl ratios in rocks from Gale Crater, Mars: Possible signature of perchlorate. Earth and Planetary Science Letters, 2016, 438, 14-24. | 4.4 | 39 |
| 90 | The next frontier for planetary and human exploration. Nature Astronomy, 2019, 3, 116-120. | 10.1 | 39 |

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|-----|--|------|-----------|
| 91 | Re-examination of amino acids in Antarctic micrometeorites. Advances in Space Research, 2004, 33, 106-113. | 2.6 | 38 |
| 92 | Abundant extraterrestrial amino acids in the primitive CM carbonaceous chondrite Asuka 12236. Meteoritics and Planetary Science, 2020, 55, 1979-2006. | 1.6 | 38 |
| 93 | Isolation of Amino Acids from Natural Samples Using Sublimation. Analytical Chemistry, 1998, 70, 3119-3122. | 6.5 | 37 |
| 94 | Development of a gas chromatography compatible Sample Processing System (SPS) for the in-situ analysis of refractory organic matter in martian soil: preliminary results. Advances in Space Research, 2009, 43, 143-151. | 2.6 | 36 |
| 95 | Distribution and Stable Isotopic Composition of Amino Acids from Fungal Peptaibiotics: Assessing the Potential for Meteoritic Contamination. Astrobiology, 2011, 11, 123-133. | 3.0 | 36 |
| 96 | Amino acid analyses of R and CK chondrites. Meteoritics and Planetary Science, 2015, 50, 470-482. | 1.6 | 36 |
| 97 | Potential precursor compounds for chlorohydrocarbons detected in Gale Crater, Mars, by the SAM instrument suite on the Curiosity Rover. Journal of Geophysical Research E: Planets, 2016, 121, 296-308. | 3.6 | 33 |
| 98 | Measurements of Oxychlorine species on Mars. International Journal of Astrobiology, 2017, 16, 203-217. | 1.6 | 33 |
| 99 | Recovery of Fatty Acids from Mineralogic Mars Analogs by TMAH Thermochemolysis for the Sample Analysis at Mars Wet Chemistry Experiment on the Curiosity Rover. Astrobiology, 2019, 19, 522-546. | 3.0 | 33 |
| 100 | Depleted carbon isotope compositions observed at Gale crater, Mars. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 7.1 | 33 |
| 101 | Returning Samples From Enceladus for Life Detection. Frontiers in Astronomy and Space Sciences, 2020, 7, . | 2.8 | 32 |
| 102 | Extraterrestrial hexamethylenetetramine in meteorites—a precursor of prebiotic chemistry in the inner solar system. Nature Communications, 2020, 11, 6243. | 12.8 | 32 |
| 103 | Magnesium sulfate as a key mineral for the detection of organic molecules on Mars using pyrolysis. Journal of Geophysical Research E: Planets, 2016, 121, 61-74. | 3.6 | 31 |
| 104 | Methodologies for Analyzing Soluble Organic Compounds in Extraterrestrial Samples: Amino Acids, Amines, Monocarboxylic Acids, Aldehydes, and Ketones. Life, 2019, 9, 47. | 2.4 | 31 |
| 105 | Polycyclic aromatic hydrocarbons and amino acids in meteorites and ice samples from LaPaz Icefield, Antarctica. Meteoritics and Planetary Science, 2008, 43, 1465-1480. | 1.6 | 30 |
| 106 | The Sariçiçek howardite fall in Turkey: Source crater of <scp>HED</scp> meteorites on Vesta and impact risk of Vestoids. Meteoritics and Planetary Science, 2019, 54, 953-1008. | 1.6 | 30 |
| 107 | MOD: an organic detector for the future robotic exploration of Mars. Planetary and Space Science, 2000, 48, 1087-1091. | 1.7 | 29 |
| 108 | Amino acid analysis in micrograms of meteorite sample by nanoliquid chromatography–high-resolution mass spectrometry. Journal of Chromatography A, 2014, 1332, 30-34. | 3.7 | 29 |

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| 109 | Organic molecules revealed in Mars's Bagnold Dunes by Curiosity's derivatization experiment. Nature Astronomy, 2022, 6, 129-140. | 10.1 | 29 |
| 110 | Heterogeneous distributions of amino acids provide evidence of multiple sources within the Almahata Sitta parent body, asteroid 2008 TC ₃ . Meteoritics and Planetary Science, 2011, 46, 1703-1712. | 1.6 | 28 |
| 111 | Urey: Mars Organic and Oxidant Detector. Space Science Reviews, 2008, 135, 269-279. | 8.1 | 27 |
| 112 | In situ analysis of martian regolith with the SAM experiment during the first mars year of the MSL mission: Identification of organic molecules by gas chromatography from laboratory measurements. Planetary and Space Science, 2016, 129, 88-102. | 1.7 | 27 |
| 113 | Airfall on Comet 67P/Churyumov–Gerasimenko. Icarus, 2021, 354, 114004. | 2.5 | 26 |
| 114 | Biological contamination studies of lunar landing sites: implications for future planetary protection and life detection on the Moon and Mars. International Journal of Astrobiology, 2004, 3, 265-271. | 1.6 | 25 |
| 115 | Sublimation extraction coupled with gas chromatography-mass spectrometry: A new technique for future in situ analyses of purines and pyrimidines on Mars. Planetary and Space Science, 2006, 54, 1584-1591. | 1.7 | 25 |
| 116 | Analysis of amino acids, hydroxy acids, and amines in CR chondrites. Meteoritics and Planetary Science, 2020, 55, 2422-2439. | 1.6 | 25 |
| 117 | VAPoR – Volatile Analysis by Pyrolysis of Regolith – an instrument for in situ detection of water, noble gases, and organics on the Moon. Planetary and Space Science, 2010, 58, 1007-1017. | 1.7 | 24 |
| 118 | Report of the workshop for life detection in samples from Mars. Life Sciences in Space Research, 2014, 2, 1-5. | 2.3 | 24 |
| 119 | New strategies to detect life on Mars. Astronomy and Geophysics, 2005, 46, 6.26-6.27. | 0.2 | 23 |
| 120 | Evaluation of the Tenax trap in the Sample Analysis at Mars instrument suite on the Curiosity rover as a potential hydrocarbon source for chlorinated organics detected in Gale Crater. Journal of Geophysical Research E: Planets, 2015, 120, 1446-1459. | 3.6 | 23 |
| 121 | Abiotic Input of Fixed Nitrogen by Bolide Impacts to Gale Crater During the Hesperian: Insights From the Mars Science Laboratory. Journal of Geophysical Research E: Planets, 2019, 124, 94-113. | 3.6 | 23 |
| 122 | Determination of low bacterial concentrations in hyperarid Atacama soils: comparison of biochemical and microscopy methods with real-time quantitative PCR. Canadian Journal of Microbiology, 2011, 57, 953-963. | 1.7 | 22 |
| 123 | The impact and recovery of asteroid 2018 LA. Meteoritics and Planetary Science, 2021, 56, 844-893. | 1.6 | 21 |
| 124 | Effect of polychromatic Xâ€ray microtomography imaging on the amino acid content of the Murchison <scp>CM</scp> chondrite. Meteoritics and Planetary Science, 2019, 54, 220-228. | 1.6 | 19 |
| 125 | Direct Isolation of Purines and Pyrimidines from Nucleic Acids Using Sublimation. Analytical Chemistry, 2002, 74, 6408-6412. | 6.5 | 18 |
| 126 | Development of an evolved gas-time-of-flight mass spectrometer for the Volatile Analysis by Pyrolysis of Regolith (VAPoR) instrument. International Journal of Mass Spectrometry, 2010, 295, 124-132. | 1.5 | 18 |

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|-----|---|------|-----------|
| 127 | Enhanced Synthesis of Alkyl Amino Acids in Miller's 1958 H2S Experiment. Origins of Life and Evolution of Biospheres, 2011, 41, 569-574. | 1.9 | 18 |
| 128 | The search for organic compounds with TMAH thermochemolysis: From Earth analyses to space exploration experiments. TrAC - Trends in Analytical Chemistry, 2020, 127, 115896. | 11.4 | 18 |
| 129 | Rapid Radiolytic Degradation of Amino Acids in the Martian Shallow Subsurface: Implications for the Search for Extinct Life. Astrobiology, 2022, 22, 1099-1115. | 3.0 | 17 |
| 130 | Inconclusive evidence for nonterrestrial isoleucine enantiomeric excesses in primitive meteorites. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3288-E3288. | 7.1 | 16 |
| 131 | The Mars Science Laboratory Organic Check Material. Space Science Reviews, 2012, 170, 479-501. | 8.1 | 16 |
| 132 | Preliminary Planning for Mars Sample Return (MSR) Curation Activities in a Sample Receiving Facility (SRF). Astrobiology, 2022, 22, S-57-S-80. | 3.0 | 16 |
| 133 | The Mars Astrobiology Explorer-Cacher (MAX-C): A Potential Rover Mission for 2018. Astrobiology, 2010, 10, 127-163. | 3.0 | 15 |
| 134 | Characterization of nitrogen-incorporated ultrananocrystalline diamond as a robust cold cathode material. Proceedings of SPIE, 2010, , . | 0.8 | 15 |
| 135 | The origin of amino acids in lunar regolith samples. Geochimica Et Cosmochimica Acta, 2016, 172, 357-369. | 3.9 | 15 |
| 136 | Final Report of the Mars Sample Return Science Planning Group 2 (MSPG2). Astrobiology, 2022, 22, S-5-S-26. | 3.0 | 15 |
| 137 | Effect of a synchrotron Xâ€ray microtomography imaging experiment on the amino acid content of a <scp>CM</scp> chondrite. Meteoritics and Planetary Science, 2016, 51, 429-437. | 1.6 | 14 |
| 138 | Application of TMAH thermochemolysis to the detection of nucleobases: Application to the MOMA and SAM space experiment. Talanta, 2019, 204, 802-811. | 5.5 | 14 |
| 139 | A Review of Sample Analysis at Mars-Evolved Gas Analysis Laboratory Analog Work Supporting the Presence of Perchlorates and Chlorates in Gale Crater, Mars. Minerals (Basel, Switzerland), 2021, 11, 475. | 2.0 | 14 |
| 140 | Rationale and Proposed Design for a Mars Sample Return (MSR) Science Program. Astrobiology, 2022, 22, S-27-S-56. | 3.0 | 14 |
| 141 | Role of the Tenax® Adsorbent in the Interpretation of the EGA and GCâ€MS Analyses Performed With the Sample Analysis at Mars in Gale Crater. Journal of Geophysical Research E: Planets, 2019, 124, 2819-2851. | 3.6 | 13 |
| 142 | Carbonaceous matter in the rocks of the Sudbury Basin, Ontario, Canada. , 1999, , . | | 12 |
| 143 | Investigating the effects of gamma radiation on selected chemicals for use in biosignature detection instruments on the surface of Jupiter's moon Europa. Planetary and Space Science, 2019, 175, 1-12. | 1.7 | 11 |
| 144 | The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, 667-671. | 1.6 | 11 |

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| 145 | Extraterrestrial organic compounds and cyanide in the CM2 carbonaceous chondrites Aguas Zarcas and Murchison. Meteoritics and Planetary Science, 2020, 55, 1509-1524. | 1.6 | 11 |
| 146 | Distribution of aliphatic amines in <scp>CO</scp> , <scp> CV</scp> , and <scp>CK</scp> carbonaceous chondrites and relation to mineralogy and processing history. Meteoritics and Planetary Science, 2017, 52, 2632-2646. | 1.6 | 10 |
| 147 | Influence of Calcium Perchlorate on the Search for Organics on Mars with Tetramethylammonium Hydroxide Thermochemolysis. Astrobiology, 2021, 21, 279-297. | 3.0 | 10 |
| 148 | Amino acid abundances and compositions in iron and stonyâ€iron meteorites. Meteoritics and Planetary Science, 2021, 56, 586-600. | 1.6 | 10 |
| 149 | Composition of organics on asteroid (101955) Bennu. Astronomy and Astrophysics, 2021, 653, L1. | 5.1 | 10 |
| 150 | Time-Sensitive Aspects of Mars Sample Return (MSR) Science. Astrobiology, 2021, , . | 3.0 | 10 |
| 151 | Volatile Analysis by Pyrolysis of Regolith for planetary resource exploration. , 2012, , . | | 9 |
| 152 | The CM carbonaceous chondrite regolith Diepenveen. Meteoritics and Planetary Science, 2019, 54, 1431-1461. | 1.6 | 9 |
| 153 | Exploring the environments of Martian impactâ€generated hydrothermal systems and their potential to support life. Meteoritics and Planetary Science, 2021, 56, 1350-1368. | 1.6 | 9 |
| 154 | In Situ Biological Contamination Studies of the Moon: Implications for Planetary Protection and Life Detection Missions. Earth, Moon and Planets, 2010, 107, 87-93. | 0.6 | 8 |
| 155 | Organics Analyzer for Sampling Icy Surfaces: A liquid chromatograph-mass spectrometer for future in situ small body missions. , 2013, , . | | 8 |
| 156 | Conducting Miller-Urey Experiments. Journal of Visualized Experiments, 2014, , e51039. | 0.3 | 8 |
| 157 | Mauna Kea, Hawaii, as an Analog Site for Future Planetary Resource Exploration: Results from the 2010 ILSO-ISRU Field-Testing Campaign. Journal of Aerospace Engineering, 2013, 26, 183-196. | 1.4 | 7 |
| 158 | Evidence for the protection of N-heterocycles from gamma radiation by Mars analogue minerals. Icarus, 2021, 368, 114540. | 2.5 | 7 |
| 159 | Volatile-rich Asteroids in the Inner Solar System. Planetary Science Journal, 2020, 1, 82. | 3.6 | 7 |
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