Daniel Glavin

List of Publications by Year
in descending order

182 papers	17,571 citations	22548 61 h-index	15698 129 g-index
186 all docs	186 docs citations	186 times ranked	9851 citing authors

#	Article	IF	Citations
1	Comet 81P/Wild 2 Under a Microscope. Science, 2006, 314, 1711-1716.	6.0	848
2	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	6.0	687
3	Organics Captured from Comet 81P/Wild 2 by the Stardust Spacecraft. Science, 2006, 314, 1720-1724.	6.0	519
4	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	6.0	508
5	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	6.0	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.	3.3	460
7	The Sample Analysis at Mars Investigation and Instrument Suite. Space Science Reviews, 2012, 170, 401-478.	3.7	435
8	Cometary glycine detected in samples returned by Stardust. Meteoritics and Planetary Science, 2009, 44, 1323-1330.	0.7	397
9	Organic molecules in the Sheepbed Mudstone, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2015, 120, 495-514.	1.5	375
10	Mars methane detection and variability at Gale crater. Science, 2015, 347, 415-417.	6.0	373
11	Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars. Science, 2018, 360, 1096-1101.	6.0	369
12	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	6.0	367
13	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	6.0	327
14	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	6.0	327
15	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	6.0	326
16	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	6.0	323
17	Extraterrestrial nucleobases in the Murchison meteorite. Earth and Planetary Science Letters, 2008, 270, 130-136.	1.8	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.	1.5	306

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19	Understanding prebiotic chemistry through the analysis of extraterrestrial amino acids and nucleobases in meteorites. Chemical Society Reviews, 2012, 41, 5459.	18.7	301
20	The Miller Volcanic Spark Discharge Experiment. Science, 2008, 322, 404-404.	6.0	298
21	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	6.0	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.	3.3	278
23	Enrichment of the amino acid <scp>l</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.	3.3	264
24	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	6.0	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.	6.0	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.	3.3	232
27	In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166.	6.0	224
28	Background levels of methane in Marsâ€™ atmosphere show strong seasonal variations. Science, 2018, 360, 1093-1096.	6.0	224
29	The effects of parent body processes on amino acids in carbonaceous chondrites. Meteoritics and Planetary Science, 2010, 45, 1948-1972.	0.7	218
30	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	6.0	215
31	Radar-Enabled Recovery of the Sutterâ€™s Mill Meteorite, a Carbonaceous Chondrite Regolith Breccia. Science, 2012, 338, 1583-1587.	6.0	191
32	Origin and Evolution of Prebiotic Organic Matter As Inferred from the Tagish Lake Meteorite. Science, 2011, 332, 1304-1307.	6.0	189
33	The Mars Organic Molecule Analyzer (MOMA) Instrument: Characterization of Organic Material in Martian Sediments. Astrobiology, 2017, 17, 655-685.	1.5	185
34	Microfabricated Capillary Electrophoresis Amino Acid Chirality Analyzer for Extraterrestrial Exploration. Analytical Chemistry, 1999, 71, 4000-4006.	3.2	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.	3.3	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.	0.7	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.	1.5	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.	0.7	167
39	A Search for Endogenous Amino Acids in Martian Meteorite ALH84001. Science, 1998, 279, 362-365.	6.0	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.	3.3	158
41	The Search for Chiral Asymmetry as a Potential Biosignature in our Solar System. Chemical Reviews, 2020, 120, 4660-4689.	23.0	156
42	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	6.0	134
43	Episodes of particle ejection from the surface of the active asteroid (101955) Bennu. Science, 2019, 366, .	6.0	129
44	Meteoritic Amino Acids: Diversity in Compositions Reflects Parent Body Histories. ACS Central Science, 2016, 2, 370-379.	5.3	126
45	Detection of cometary amines in samples returned by Stardust. Meteoritics and Planetary Science, 2008, 43, 399-413.	0.7	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.	0.8	113
47	Mnâ€Cr isotope systematics of the D'Orbigny angrite. Meteoritics and Planetary Science, 2004, 39, 693-700.	0.7	113
48	The imprint of atmospheric evolution in the D/H of Hesperian clay minerals on Mars. Science, 2015, 347, 412-414.	6.0	113
49	Polycyclic aromatic hydrocarbons (PAHs) in Antarctic Martian meteorites, carbonaceous chondrites, and polar ice. Geochimica Et Cosmochimica Acta, 1997, 61, 475-481.	1.6	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.	0.7	106
51	Detecting pyrolysis products from bacteria on Mars. Earth and Planetary Science Letters, 2001, 185, 1-5.	1.8	103
52	Low Upper Limit to Methane Abundance on Mars. Science, 2013, 342, 355-357.	6.0	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.	3.3	92
54	A search for extraterrestrial amino acids in carbonaceous Antarctic micrometeorites. Origins of Life and Evolution of Biospheres, 1998, 28, 413-424.	0.8	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.	7.2	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.	0.7	77
57	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.	1.5	73
58	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, S3.	0.7	73
59	Bright carbonate veins on asteroid (101955) Bennu: Implications for aqueous alteration history. Science, 2020, 370, .	6.0	71
60	A propensity for <i>n</i>â€Ï‰â€amino acids in thermally altered Antarctic meteorites. Meteoritics and Planetary Science, 2012, 47, 374-386.	0.7	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.	1.5	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.	1.5	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.	0.8	59
65	Fall, recovery, and characterization of the Novato L6 chondrite breccia. Meteoritics and Planetary Science, 2014, 49, 1388-1425.	0.7	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.	0.7	57
67	Habitability, Taphonomy, and the Search for Organic Carbon on Mars. Science, 2014, 343, 386-387.	6.0	57
68	New Method for Estimating Bacterial Cell Abundances in Natural Samples by Use of Sublimation. Applied and Environmental Microbiology, 2004, 70, 5923-5928.	1.4	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.	0.7	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.	0.9	54
71	Large sulfur isotope fractionations in Martian sediments at Gale crater. Nature Geoscience, 2017, 10, 658-662.	5.4	53
72	Identifying the wide diversity of extraterrestrial purine and pyrimidine nucleobases in carbonaceous meteorites. Nature Communications, 2022, 13, 2008.	5.8	53

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73	Does aspartic acid racemization constrain the depth limit of the subsurface biosphere?. Geobiology, 2014, 12, 1-19.	1.1	52
74	MOMA: the challenge to search for organics and biosignatures on Mars. International Journal of Astrobiology, 2016, 15, 239-250.	0.9	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.	1.6	50
76	Amino acid composition, petrology, geochemistry, ¹⁴C terrestrial age and oxygen isotopes of the ShiÅŸr 033 CR chondrite. Meteoritics and Planetary Science, 2007, 42, 1581-1595.	0.7	50
77	Extraterrestrial amino acids in the Almahata Sitta meteorite. Meteoritics and Planetary Science, 2010, 45, 1695-1709.	0.7	50
78	OSIRIS-REx Contamination Control Strategy and Implementation. Space Science Reviews, 2018, 214, 1.	3.7	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.	1.5	50
80	The influence of mineralogy on recovering organic acids from Mars analogue materials using the â€œone-potâ€•derivatization experiment on the Sample Analysis at Mars (SAM) instrument suite. Planetary and Space Science, 2012, 67, 1-13.	0.9	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.	0.7	48
82	The effects of parent-body hydrothermal heating on amino acid abundances in CI-like chondrites. Polar Science, 2014, 8, 255-263.	0.5	46
83	Pathways to Meteoritic Glycine and Methylamine. ACS Earth and Space Chemistry, 2017, 1, 3-13.	1.2	46
84	Amino acids in the Tagish Lake meteorite. Meteoritics and Planetary Science, 2002, 37, 697-701.	0.7	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.	0.7	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.	0.7	42
87	Indigenous and exogenous organics and surfaceâ€“atmosphere cycling inferred from carbon and oxygen isotopes at Gale crater. Nature Astronomy, 2020, 4, 526-532.	4.2	41
88	The Urey Instrument: An Advanced In Situ Organic and Oxidant Detector for Mars Exploration. Astrobiology, 2008, 8, 583-595.	1.5	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.	1.8	39
90	The next frontier for planetary and human exploration. Nature Astronomy, 2019, 3, 116-120.	4.2	39

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91	Re-examination of amino acids in Antarctic micrometeorites. Advances in Space Research, 2004, 33, 106-113.	1.2	38
92	Abundant extraterrestrial amino acids in the primitive CM carbonaceous chondrite Asuka 12236. Meteoritics and Planetary Science, 2020, 55, 1979-2006.	0.7	38
93	Isolation of Amino Acids from Natural Samples Using Sublimation. Analytical Chemistry, 1998, 70, 3119-3122.	3.2	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.	1.2	36
95	Distribution and Stable Isotopic Composition of Amino Acids from Fungal Peptaibiotics: Assessing the Potential for Meteoritic Contamination. Astrobiology, 2011, 11, 123-133.	1.5	36
96	Amino acid analyses of R and CK chondrites. Meteoritics and Planetary Science, 2015, 50, 470-482.	0.7	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.	1.5	33
98	Measurements of Oxychlorine species on Mars. International Journal of Astrobiology, 2017, 16, 203-217.	0.9	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.	1.5	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, .	3.3	33
101	Returning Samples From Enceladus for Life Detection. Frontiers in Astronomy and Space Sciences, 2020, 7, .	1.1	32
102	Extraterrestrial hexamethylenetetramine in meteoritesâ€"a precursor of prebiotic chemistry in the inner solar system. Nature Communications, 2020, 11, 6243.	5.8	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.	1.5	31
104	Methodologies for Analyzing Soluble Organic Compounds in Extraterrestrial Samples: Amino Acids, Amines, Monocarboxylic Acids, Aldehydes, and Ketones. Life, 2019, 9, 47.	1.1	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.	0.7	30
106	The SariÃ§iÃ§ek 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.	0.7	30
107	MOD: an organic detector for the future robotic exploration of Mars. Planetary and Space Science, 2000, 48, 1087-1091.	0.9	29
108	Amino acid analysis in micrograms of meteorite sample by nanoliquid chromatographyâ€"high-resolution mass spectrometry. Journal of Chromatography A, 2014, 1332, 30-34.	1.8	29

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109	Organic molecules revealed in Marsâ€™s Bagnold Dunes by Curiosityâ€™s derivatization experiment. Nature Astronomy, 2022, 6, 129-140.	4.2	29
110	Heterogeneous distributions of amino acids provide evidence of multiple sources within the Almahata Sitta parent body, asteroid 2008 TC₃. Meteoritics and Planetary Science, 2011, 46, 1703-1712.	0.7	28
111	Urey: Mars Organic and Oxidant Detector. Space Science Reviews, 2008, 135, 269-279.	3.7	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.	0.9	27
113	Airfall on Comet 67P/Churyumovâ€“Gerasimenko. Icarus, 2021, 354, 114004.	1.1	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.	0.9	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.	0.9	25
116	Analysis of amino acids, hydroxy acids, and amines in CR chondrites. Meteoritics and Planetary Science, 2020, 55, 2422-2439.	0.7	25
117	VAPoR â€“ Volatile Analysis by Pyrolysis of Regolith â€“ an instrument for in situ detection of water, noble gases, and organics on the Moon. Planetary and Space Science, 2010, 58, 1007-1017.	0.9	24
118	Report of the workshop for life detection in samples from Mars. Life Sciences in Space Research, 2014, 2, 1-5.	1.2	24
119	New strategies to detect life on Mars. Astronomy and Geophysics, 2005, 46, 6.26-6.27.	0.1	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.	1.5	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.	1.5	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.	0.8	22
123	The impact and recovery of asteroid 2018 LA. Meteoritics and Planetary Science, 2021, 56, 844-893.	0.7	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.	0.7	19
125	Direct Isolation of Purines and Pyrimidines from Nucleic Acids Using Sublimation. Analytical Chemistry, 2002, 74, 6408-6412.	3.2	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.	0.7	18

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127	Enhanced Synthesis of Alkyl Amino Acids in Millerâ€™s 1958 H2S Experiment. Origins of Life and Evolution of Biospheres, 2011, 41, 569-574.	0.8	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.	5.8	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.	1.5	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.	3.3	16
131	The Mars Science Laboratory Organic Check Material. Space Science Reviews, 2012, 170, 479-501.	3.7	16
132	Preliminary Planning for Mars Sample Return (MSR) Curation Activities in a Sample Receiving Facility (SRF). Astrobiology, 2022, 22, S-57-S-80.	1.5	16
133	The Mars Astrobiology Explorer-Cacher (MAX-C): A Potential Rover Mission for 2018. Astrobiology, 2010, 10, 127-163.	1.5	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.	1.6	15
136	Final Report of the Mars Sample Return Science Planning Group 2 (MSPG2). Astrobiology, 2022, 22, S-5-S-26.	1.5	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.	0.7	14
138	Application of TMAH thermochemolysis to the detection of nucleobases: Application to the MOMA and SAM space experiment. Talanta, 2019, 204, 802-811.	2.9	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.	0.8	14
140	Rationale and Proposed Design for a Mars Sample Return (MSR) Science Program. Astrobiology, 2022, 22, S-27-S-56.	1.5	14
141	Role of the TenaxÂ® 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.	1.5	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.	0.9	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.	0.7	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.	0.7	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.	0.7	10
147	Influence of Calcium Perchlorate on the Search for Organics on Mars with Tetramethylammonium Hydroxide Thermochemolysis. Astrobiology, 2021, 21, 279-297.	1.5	10
148	Amino acid abundances and compositions in iron and stonyâ€iron meteorites. Meteoritics and Planetary Science, 2021, 56, 586-600.	0.7	10
149	Composition of organics on asteroid (101955) Bennu. Astronomy and Astrophysics, 2021, 653, L1.	2.1	10
150	Time-Sensitive Aspects of Mars Sample Return (MSR) Science. Astrobiology, 2021, , .	1.5	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.	0.7	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.	0.7	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.	0.3	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.	0.2	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.	0.8	7
158	Evidence for the protection of N-heterocycles from gamma radiation by Mars analogue minerals. Icarus, 2021, 368, 114540.	1.1	7
159	Volatile-rich Asteroids in the Inner Solar System. Planetary Science Journal, 2020, 1, 82.	1.5	7
160	Planning Implications Related to Sterilization-Sensitive Science Investigations Associated with Mars Sample Return (MSR). Astrobiology, 2022, 22, S-112-S-164.	1.5	7
161	Science and Curation Considerations for the Design of a Mars Sample Return (MSR) Sample Receiving Facility (SRF). Astrobiology, 2022, 22, S-217-S-237.	1.5	7
162	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, , n/a-n/a.	1.5	6

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163	Nonâ€protein amino acids identified in carbonâ€rich Hayabusa particles. Meteoritics and Planetary Science, 2022, 57, 776-793.	0.7	6
164	The Sample Analysis at Mars Investigation and Instrument Suite. , 2012, , 401-478.		5
165	The Scientific Importance of Returning Airfall Dust as a Part of Mars Sample Return (MSR). Astrobiology, 2022, 22, S-176-S-185.	1.5	5
166	Evaluation of the robustness of chromatographic columns in a simulated highly radiative Jovian environment. Planetary and Space Science, 2016, 122, 38-45.	0.9	4
167	Extraterrestrial hydroxy amino acids in CM and CR carbonaceous chondrites. Meteoritics and Planetary Science, 2021, 56, 1005-1023.	0.7	4
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