Andrew Steele

List of Publications by Year
in descending order

193 papers	17,458 citations	14614 66 h-index	13727 129 g-index
199 all docs	199 docs citations	199 times ranked	9971 citing authors

#	Article	IF	Citations
1	Questioning the evidence for Earth's oldest fossils. Nature, 2002, 416, 76-81.	13.7	866
2	Comet 81P/Wild 2 Under a Microscope. Science, 2006, 314, 1711-1716.	6.0	848
3	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	6.0	687
4	Organics Captured from Comet 81P/Wild 2 by the Stardust Spacecraft. Science, 2006, 314, 1720-1724.	6.0	519
5	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	6.0	508
6	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	6.0	475
7	The Sample Analysis at Mars Investigation and Instrument Suite. Space Science Reviews, 2012, 170, 401-478.	3.7	435
8	Organic compounds on comet 67P/Churyumov-Gerasimenko revealed by COSAC mass spectrometry. Science, 2015, 349, aab0689.	6.0	376
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	Unique Meteorite from Early Amazonian Mars: Water-Rich Basaltic Breccia Northwest Africa 7034. Science, 2013, 339, 780-785.	6.0	340
14	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	6.0	327
15	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	6.0	327
16	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	6.0	326
17	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	6.0	323
18	The impact and recovery of asteroid 2008 TC3. Nature, 2009, 458, 485-488.	13.7	311

#	Article	IF	Citations
19	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
20	Deep Mantle Cycling of Oceanic Crust: Evidence from Diamonds and Their Mineral Inclusions. Science, 2011, 334, 54-57.	6.0	294
21	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	6.0	280
22	Nominally hydrous magmatism on the Moon. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11223-11228.	3.3	257
23	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	6.0	246
24	Morphological Biosignatures and the Search for Life on Mars. Astrobiology, 2003, 3, 351-368.	1.5	244
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	Critical testing of Earth's oldest putative fossil assemblage from the â^¼3.5Ga Apex chert, Chinaman Creek, Western Australia. Precambrian Research, 2005, 140, 55-102.	1.2	229
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	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	6.0	215
30	Radar-Enabled Recovery of the Sutterâ€™s Mill Meteorite, a Carbonaceous Chondrite Regolith Breccia. Science, 2012, 338, 1583-1587.	6.0	191
31	A Reduced Organic Carbon Component in Martian Basalts. Science, 2012, 337, 212-215.	6.0	182
32	Searching for Life on Mars: Selection of Molecular Targets for ESA's Aurora ExoMars Mission. Astrobiology, 2007, 7, 578-604.	1.5	172
33	Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the Curiosity 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
34	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
35	Infrared Spectroscopy of Comet 81P/Wild 2 Samples Returned by Stardust. Science, 2006, 314, 1728-1731.	6.0	163
36	Solar Hydrogen Production by a Two-Step Cycle Based on Mixed Iron Oxides. Journal of Solar Energy Engineering, Transactions of the ASME, 2006, 128, 125-133.	1.1	140

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37	Fluorine and chlorine abundances in lunar apatite: Implications for heterogeneous distributions of magmatic volatiles in the lunar interior. Geochimica Et Cosmochimica Acta, 2011, 75, 5073-5093.	1.6	140
38	Test operation of a 100kW pilot plant for solar hydrogen production from water on a solar tower. Solar Energy, 2011, 85, 634-644.	2.9	138
39	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	6.0	134
40	The use of atomic force microscopy for studying interactions of bacterial biofilms with surfaces. Colloids and Surfaces B: Biointerfaces, 2002, 23, 231-247.	2.5	131
41	The Simulated Silicification of Bacteriaâ€" New Clues to the Modes and Timing of Bacterial Preservation and Implications for the Search for Extraterrestrial Microfossils. Astrobiology, 2002, 2, 1-26.	1.5	130
42	The problem of deep carbonâ€"An Archean paradox. Precambrian Research, 2005, 143, 1-22.	1.2	122
43	Detection of structurally bound hydroxyl in fluorapatite from Apollo Mare basalt 15058,128 using TOF-SIMS. American Mineralogist, 2010, 95, 1141-1150.	0.9	116
44	The imprint of atmospheric evolution in the D/H of Hesperian clay minerals on Mars. Science, 2015, 347, 412-414.	6.0	113
45	Polymeric substances and biofilms as biomarkers in terrestrial materials: Implications for extraterrestrial samples. Journal of Geophysical Research, 2000, 105, 24511-24527.	3.3	111
46	Earth's Oldest (~ 3.5 Ga) Fossils and the `Early Eden Hypothesis': Questioning the Evidence. Origins of Life and Evolution of Biospheres, 2004, 34, 257-269.	0.8	110
47	Findings of the Mars Special Regions Science Analysis Group. Astrobiology, 2006, 6, 677-732.	1.5	104
48	Morphologic and spectral investigation of exceptionally well-preserved bacterial biofilms from the Oligocene Enspel formation, Germany. Geochimica Et Cosmochimica Acta, 2002, 66, 1773-1791.	1.6	103
49	Low Upper Limit to Methane Abundance on Mars. Science, 2013, 342, 355-357.	6.0	103
50	Heterogeneous distribution of H₂O in the Martian interior: Implications for the abundance of H₂O in depleted and enriched mantle sources. Meteoritics and Planetary Science, 2016, 51, 2036-2060.	0.7	103
51	Hydrothermal jarosite and hematite in a pyroxene-hosted melt inclusion in martian meteorite Miller Range (MIL) 03346: Implications for magmatic-hydrothermal fluids on Mars. Geochimica Et Cosmochimica Acta, 2009, 73, 4907-4917.	1.6	102
52	Perseveranceâ€™s Scanning Habitable Environments with Raman and Luminescence for Organics and Chemicals (SHERLOC) Investigation. Space Science Reviews, 2021, 217, 1.	3.7	94
53	Comprehensive imaging and Raman spectroscopy of carbonate globules from Martian meteorite ALH 84001 and a terrestrial analogue from Svalbard. Meteoritics and Planetary Science, 2007, 42, 1549-1566.	0.7	93
54	Life on Mars: evaluation of the evidence within Martian meteorites ALH84001, Nakhla, and Shergotty. Precambrian Research, 2001, 106, 15-34.	1.2	91

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55	Geochemistry of a continental site of serpentinization, the Tablelands Ophiolite, Gros Morne National Park: A Mars analogue. Icarus, 2013, 224, 286-296.	1.1	90
56	Combined microâ€Raman, microâ€infrared, and field emission scanning electron microscope analyses of comet 81P/Wild 2 particles collected by Stardust. Meteoritics and Planetary Science, 2008, 43, 367-397.	0.7	89
57	The provenance, formation, and implications of reduced carbon phases in Martian meteorites. Meteoritics and Planetary Science, 2016, 51, 2203-2225.	0.7	80
58	Microscopic Physical Biomarkers in Carbonate Hot Springs: Implications in the Search for Life on Mars. Icarus, 2000, 147, 49-67.	1.1	78
59	TandEM: Titan and Enceladus mission. Experimental Astronomy, 2009, 23, 893-946.	1.6	77
60	High primary productivity and nitrogen cycling after the Paleoproterozoic phosphogenic event in the Aravalli Supergroup, India. Precambrian Research, 2009, 171, 37-56.	1.2	76
61	Mineralogy and petrography of the Almahata Sitta ureilite. Meteoritics and Planetary Science, 2010, 45, 1618-1637.	0.7	74
62	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
63	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
64	Isotopes of nitrogen on Mars: Atmospheric measurements byâ€‰Curiosity's mass spectrometer. Geophysical Research Letters, 2013, 40, 6033-6037.	1.5	72
65	Spectroscopic and microscopic characterizations of color lamellae in natural pink diamonds. Diamond and Related Materials, 2010, 19, 1207-1220.	1.8	71
66	Graphite in the martian meteorite Allan Hills 84001. American Mineralogist, 2012, 97, 1256-1259.	0.9	68
67	Diamond growth from Câ€“Hâ€“Nâ€“O recycled fluids in the lithosphere: Evidence from CH 4 micro-inclusions and Î´ 13 Câ€“ Î´ 15 Nâ€“N content in Marange mixed-habit diamonds. Lithos, 2016, 265, 68-81.	0.6	66
68	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
69	Geologic history of Martian regolith breccia Northwest Africa 7034: Evidence for hydrothermal activity and lithologic diversity in the Martian crust. Journal of Geophysical Research E: Planets, 2016, 121, 2120-2149.	1.5	65
70	Molecular identification of fungi microfossils in a Neoproterozoic shale rock. Science Advances, 2020, 6, eaax7599.	4.7	65
71	Organic matter in extraterrestrial water-bearing salt crystals. Science Advances, 2018, 4, eaao3521.	4.7	64
72	Organic synthesis on Mars by electrochemical reduction of CO ₂. Science Advances, 2018, 4, eaat5118.	4.7	61

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73	Planning for Mars Returned Sample Science: Final Report of the MSR End-to-End International Science Analysis Group (E2E-iSAG). Astrobiology, 2012, 12, 175-230.	1.5	58
74	Ancient graphite in the Eoarchean quartzâ€“pyroxene rocks from Akilia in southern West Greenland I: Petrographic and spectroscopic characterization. Geochimica Et Cosmochimica Acta, 2010, 74, 5862-5883.	1.6	55
75	Large sulfur isotope fractionations in Martian sediments at Gale crater. Nature Geoscience, 2017, 10, 658-662.	5.4	53
76	An atomic force microscopy study of the biodeterioration of stainless steel in the presence of bacterial biofilms. International Biodeterioration and Biodegradation, 1994, 34, 35-46.	1.9	52
77	Chlorine distribution and its isotopic composition in â€œrusty rockâ€•66095. Implications for volatile element enrichments of â€œrusty rockâ€•and lunar soils, origin of â€œrustyâ€•alteration, and volatile element behavior on the Moon. Geochimica Et Cosmochimica Acta, 2014, 139, 411-433.	1.6	52
78	Investigations into an unknown organism on the martian meteorite Allan Hills 84001. Meteoritics and Planetary Science, 2000, 35, 237-241.	0.7	51
79	Young poorly crystalline graphite in the >3.8-Gyr-old Nuvvuagittuq banded iron formation. Nature Geoscience, 2011, 4, 376-379.	5.4	51
80	Ancient graphite in the Eoarchean quartz-pyroxene rocks from Akilia in southern West Greenland II: Isotopic and chemical compositions and comparison with Paleoproterozoic banded iron formations. Geochimica Et Cosmochimica Acta, 2010, 74, 5884-5905.	1.6	47
81	Short- and Long-Term Olivine Weathering in Svalbard: Implications for Mars. Astrobiology, 2008, 8, 1079-1092.	1.5	44
82	UV irradiation of biomarkers adsorbed on minerals under Martian-like conditions: Hints for life detection on Mars. Icarus, 2018, 313, 38-60.	1.1	44
83	Widespread abiotic methane in chromitites. Scientific Reports, 2018, 8, 8728.	1.6	43
84	Graphite in an Apollo 17 Impact Melt Breccia. Science, 2010, 329, 51-51.	6.0	42
85	Science Priorities for Mars Sample Return. Astrobiology, 2008, 8, 489-535.	1.5	41
86	Micro Raman Spectroscopy of Carbonaceous Material in Microfossils and Meteorites: Improving a Method for Life Detection. Astrobiology, 2013, 13, 103-113.	1.5	41
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	HEPES-Stabilized Encapsulation ofSalmonellatyphimurium. Langmuir, 2007, 23, 1365-1374.	1.6	40
89	Graphite Whiskers in CV3 Meteorites. Science, 2008, 320, 91-93.	6.0	40
90	High optical quality multicarat single crystal diamond produced by chemical vapor deposition. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 101-104.	0.8	39

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91	Catalytic/Protective Properties of Martian Minerals and Implications for Possible Origin of Life on Mars. Life, 2018, 8, 56.	1.1	38
92	Time of flight secondary ion mass spectrometry (ToFSIMS) of a number of hopanoids. Organic Geochemistry, 2001, 32, 905-911.	0.9	37
93	Automatic Measurement of Drilling Fluid and Drill-Cuttings Properties. SPE Drilling and Completion, 2009, 24, 611-625.	0.9	37
94	Comparison of Antibodyâ^'Antigen Interactions on Collagen Measured by Conventional Immunological Techniques and Atomic Force Microscopy. Langmuir, 2004, 20, 11053-11063.	1.6	33
95	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
96	MicroRaman spectroscopy of diamond and graphite in Almahata Sitta and comparison with other ureilites. Meteoritics and Planetary Science, 2011, 46, 364-378.	0.7	32
97	Speciation of <scp>l</scp>-DOPA on Nanorutile as a Function of pH and Surface Coverage Using Surface-Enhanced Raman Spectroscopy (SERS). Langmuir, 2012, 28, 17322-17330.	1.6	32
98	Organic synthesis associated with serpentinization and carbonation on early Mars. Science, 2022, 375, 172-177.	6.0	32
99	Raman Spectroscopy and Confocal Raman Imaging in Mineralogy and Petrography. Springer Series in Optical Sciences, 2010, , 111-135.	0.5	31
100	Planning Considerations Related to the Organic Contamination of Martian Samples and Implications for the Mars 2020 Rover. Astrobiology, 2014, 14, 969-1027.	1.5	31
101	Characterization of purified biomarker compounds using time of flight-secondary ion mass spectrometry (ToF-SIMS). Organic Geochemistry, 2004, 35, 793-811.	0.9	30
102	Observations from a 4-Year Contamination Study of a Sample Depth Profile Through Martian Meteorite Nakhla. Astrobiology, 2007, 7, 389-401.	1.5	30
103	High-pressure tolerance in Halobacterium salinarum NRC-1 and other non-piezophilic prokaryotes. Extremophiles, 2012, 16, 355-361.	0.9	27
104	A cometary origin for martian atmospheric methane. Geochemical Perspectives Letters, 2016, 2, 10-23.	1.0	25
105	Atomic force microscopy imaging of fragments from the Martian meteorite ALH84001. Journal of Microscopy, 1998, 189, 2-6.	0.8	24
106	Report of the workshop for life detection in samples from Mars. Life Sciences in Space Research, 2014, 2, 1-5.	1.2	24
107	Rapid Culture-Independent Microbial Analysis Aboard the International Space Station (ISS). Astrobiology, 2009, 9, 759-775.	1.5	22
108	Raman Imaging Spectroscopy of a Putative Microfossil from the â^¼3.46 Ga Apex Chert: Insights from Quartz Grain Orientation. Astrobiology, 2016, 16, 169-180.	1.5	21

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109	Capture effects in carbonaceous material: A Stardust analogue study. Meteoritics and Planetary Science, 2009, 44, 1465-1474.	0.7	19
110	Microbial Diversity of Hypersaline Sediments from Lake Lucero Playa in White Sands National Monument, New Mexico, USA. Microbial Ecology, 2018, 76, 404-418.	1.4	19
111	Examination of an Oligocene lacustrine ecosystem using C and N stable isotopes. Palaeogeography, Palaeoclimatology, Palaeoecology, 2006, 230, 335-351.	1.0	18
112	Setting a Standard: TheLimulusAmebocyte Lysate Assay and the Assessment of Microbial Contamination on Spacecraft Surfaces. Astrobiology, 2010, 10, 845-852.	1.5	18
113	A carbon-rich region in Miller Range 091004 and implications for ureilite petrogenesis. Geochimica Et Cosmochimica Acta, 2017, 198, 379-395.	1.6	18
114	Origin of Life on Mars: Suitability and Opportunities. Life, 2021, 11, 539.	1.1	18
115	Automatic Measurement of Drilling Fluid and Drill Cuttings Properties. , 2008, , .		17
116	A Field-Based Cleaning Protocol for Sampling Devices Used in Life-Detection Studies. Astrobiology, 2009, 9, 455-465.	1.5	17
117	Comparison of Prototype and Laboratory Experiments on MOMA GCMS: Results from the AMASE11 Campaign. Astrobiology, 2014, 14, 780-797.	1.5	17
118	In-situ characterization of oxalic acid breakdown at elevated P and T: Implications for organic C-O-H fluid sources in petrologic experiments. American Mineralogist, 2014, 99, 2258-2271.	0.9	17
119	The Co-Evolution of Fe-Oxides, Ti-Oxides, and Other Microbially Induced Mineral Precipitates In Sandy Sediments: Understanding the Role of Cyanobacteria In Weathering and Early Diagenesis. Journal of Sedimentary Research, 2015, 85, 1213-1227.	0.8	16
120	Coordinated <scp>EDX</scp> and microâ€Raman analysis of presolar silicon carbide: A novel, nondestructive method to identify rare subgroup SiC. Meteoritics and Planetary Science, 2017, 52, 2550-2569.	0.7	16
121	Diamonds and the Mantle Geodynamics of Carbon. , 2019, , 89-128.		16
122	Detecting Ce3+ as a biosignature mimicker using UV time-resolved laser-induced fluorescence and Raman spectroscopy: Implications for planetary missions. Icarus, 2021, 354, 114093.	1.1	16
123	Effects of sterilizing doses of gamma radiation on Mars analog rocks and minerals. Journal of Geophysical Research, 1999, 104, 27043-27066.	3.3	15
124	Stable isotopic evidence for fossil food webs in Eocene Lake Messel. Paleobiology, 2007, 33, 590-609.	1.3	15
125	The search for and analysis of direct samples of early Solar System aqueous fluids. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20150386.	1.6	15
126	Microbial community composition and endolith colonization at an <scp>A</scp>rctic thermal spring are driven by calcite precipitation. Environmental Microbiology Reports, 2013, 5, 648-659.	1.0	14

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127	Organic carbon concentrations in 3.5-billion-year-old lacustrine mudstones of Mars. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	14
128	Alteration of the carbon and nitrogen isotopic composition in the Martian surface rocks due to cosmic ray exposure. Journal of Geophysical Research E: Planets, 2014, 119, 1390-1402.	1.5	13
129	Discreditation of bobdownsite and the establishment of criteria for the identification of minerals with essential monofluorophosphate (PO3F2â€“). American Mineralogist, 2018, 103, 1319-1328.	0.9	13
130	Evaluation of cell lysis procedures and use of a micro fluidic system for an automated DNA-based cell identification in interplanetary missions. Planetary and Space Science, 2006, 54, 1600-1611.	0.9	12
131	Improved Drilling Process Control Through Continuous Particle and Cuttings Monitoring. , 2007, , .		12
132	Experimental formation of geomacromolecules from microbial lipids. Organic Geochemistry, 2014, 67, 35-40.	0.9	12
133	Sample acquisition and caching using detachable scoops for mars sample return. , 2009, , .		11
134	An inventory of potentially habitable environments on Mars: Geological and biological perspectives. , 2011, , .		11
135	Microbial Nitrogen and Sulfur Cycles at the Gypsum Dunes of White Sands National Monument, New Mexico. Geomicrobiology Journal, 2012, 29, 733-751.	1.0	11
136	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
137	The power of paired proximity science observations: Co-located data from SHERLOC and PIXL on Mars. Icarus, 2022, 387, 115179.	1.1	11
138	Experimental results of rover-based coring and caching. , 2011, , .		10
139	Effects of Metabolism and Physiology on the Production of Okenone and Bacteriochlorophyllain Purple Sulfur Bacteria. Geomicrobiology Journal, 2014, 31, 128-137.	1.0	10
140	Detection and Degradation of Adenosine Monophosphate in Perchlorate-Spiked Martian Regolith Analog, by Deep-Ultraviolet Spectroscopy. Astrobiology, 2021, 21, 511-525.	1.5	10
141	Isotopic and geochemical investigation of two distinct Mars analog environments using evolved gas techniques in Svalbard, Norway. Icarus, 2013, 224, 297-308.	1.1	9
142	Geoscience Meets Biology: Raman Spectroscopy in Geobiology and Biomineralization. Elements, 2020, 16, 111-116.	0.5	9
143	The Extreme Biology of Meteorites: Their Role in Understanding the Origin and Distribution of Life on Earth and in the Universe. , 2017, , 283-325.		9
144	DNA perseverance of microorganisms exposed to silica: an experimental study. Geobiology, 2008, 6, 503-511.	1.1	8

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145	Differential high pressure survival in stationary-phaseEscherichia coliMG1655. High Pressure Research, 2011, 31, 325-333.	0.4	8
146	Nitrogen in Extraterrestrial Environments: Clues to the Possible Presence of Life. Elements, 2013, 9, 367-372.	0.5	8
147	The effects of atmospheric entry heating on organic matter in interplanetary dust particles and micrometeorites. Earth and Planetary Science Letters, 2020, 540, 116266.	1.8	8
148	Raman spectroscopy provides insight into carbonate rock fabric based on calcite and dolomite crystal orientation. Journal of Raman Spectroscopy, 2021, 52, 1155-1166.	1.2	8
149	Fossil Biofilms and the Search for Life on Mars. , 2003, , 447-465.		8
150	UV Irradiation and Near Infrared Characterization of Laboratory Mars Soil Analog Samples. Frontiers in Astronomy and Space Sciences, 2020, 7, .	1.1	8
151	ESA's Cometary Mission Rosettaâ€”Reâ€Characterization of the COSAC Mass Spectrometry Results. Angewandte Chemie - International Edition, 2022, 61, .	7.2	8
152	AN EXPERIMENTAL LOOK AT THE TAPHONOMY OF CYANOBACTERIAL MATS IN SILICICLASTIC SEDIMENTS. Palaios, 2017, 32, 725-738.	0.6	7
153	Raman Spectroscopy and Confocal Raman Imaging in Mineralogy and Petrography. Springer Series in Surface Sciences, 2018, , 209-236.	0.3	6
154	Association of anatase (TiO₂) and microbes: Unusual fossilization effect or a potential biosignature?. , 2009, , .		6
155	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
156	Tracing H isotope effects in the dynamic metabolic network using multi-nuclear (1H, 2H and 13C) solid state NMR and GCâ€“MS. Organic Geochemistry, 2013, 57, 84-94.	0.9	5
157	Ecologically and geologically relevant isotope signatures of C, N, and S: okenone producing purple sulfur bacteria part I. Geobiology, 2015, 13, 278-291.	1.1	5
158	Preservation of organic carbon in dolomitized Cambrian stromatolites and implications for microbial biosignatures in diagenetically replaced carbonate rock. Sedimentary Geology, 2020, 410, 105777.	1.0	5
159	The Sample Analysis at Mars Investigation and Instrument Suite. , 2012, , 401-478.		5
160	A Cathodoluminescene (and Raman) Imaging and Spectroscopic Study of Ancient Polycrystalline Diamond. Microscopy and Microanalysis, 2006, 12, 1518-1519.	0.2	3
161	Design and Modelling of a Microfluidic Electro-Lysis Device with Controlling Plates. Journal of Physics: Conference Series, 2006, 34, 620-625.	0.3	3
162	Competence evaluation of COSAC flight spare model mass spectrometer: In preparation of arrival of Philae lander on comet 67P/Churyumovâ€“Gerasimenko. Planetary and Space Science, 2015, 106, 132-141.	0.9	3

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163	Pigment production and isotopic fractionations in continuous culture: okenone producing purple sulfur bacteria Part <scp>II</scp>. Geobiology, 2015, 13, 292-301.	1.1	3
164	Evidence for protosolar graphene in Allende and QUE 94366 CV3 meteorites. Planetary and Space Science, 2021, 203, 105267.	0.9	3
165	COSAC's Only Gas Chromatogram Taken on Comet 67P/Churyumovâ€Gerasimenko. ChemPlusChem, 2022, 87, .	1.3	3
166	Reply to Schoell: Implications of a temperature trend in methane evolved from Cumberland during Mars evolved gas analyses experiments. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	3
167	Quantitation of Ink Transferred During Pharmaceutical Printing Operations Using Inductively Coupled Plasma Atomic Emission Spectroscopy. Drug Development and Industrial Pharmacy, 1995, 21, 487-494.	0.9	2
168	Two Phase Flow Analysis on Filling Processes of Microfluidic/Microarray Integrated Systems. , 2006, , 1.		2
169	Rapid Monitoring of Bacteria and Fungi Aboard the International Space Station (ISS). , 2009, , .		2
170	ESAs Kometenâ€Mission Rosetta â€“ Neuâ€Analyse der Daten des COSAC Massenspektrometers. Angewandte Chemie, 2022, 134, .	1.6	2
171	Detection of porphyrins in vertebrate fossils from the Messel and implications for organic preservation in the fossil record. PLoS ONE, 2022, 17, e0269568.	1.1	2
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