Mark A Sephton

List of Publications by Year
in descending order

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174	6,248	76326	85541
papers	citations	40 h-index	71 g-index

177	177	177	5472
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Organic compounds in carbonaceous meteorites. Natural Product Reports, 2002, 19, 292-311.	10.3	564
2	Extraterrestrial nucleobases in the Murchison meteorite. Earth and Planetary Science Letters, 2008, 270, 130-136.	4.4	317
3	Catastrophic soil erosion during the end-Permian biotic crisis. Geology, 2005, 33, 941.	4.4	234
4	Environmental mutagenesis during the end-Permian ecological crisis. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12952-12956.	7.1	208
5	Searching for Life on Mars: Selection of Molecular Targets for ESA's Aurora ExoMars Mission. Astrobiology, 2007, 7, 578-604.	3.0	172
6	Transitory microbial habitat in the hyperarid Atacama Desert. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2670-2675.	7.1	172
7	Defining biominerals and organominerals: Direct and indirect indicators of life. Sedimentary Geology, 2007, 201, 157-179.	2.1	150
8	Investigating the variations in carbon and nitrogen isotopes in carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 2003, 67, 2093-2108.	3.9	129
9	Shock synthesis of amino acids from impacting cometary and icy planet surface analogues. Nature Geoscience, 2013, 6, 1045-1049.	12.9	129
10	Î´13C of free and macromolecular aromatic structures in the murchison meteorite. Geochimica Et Cosmochimica Acta, 1998, 62, 1821-1828.	3.9	120
11	Clay mineralâ€organic matter relationships in the early solar system. Meteoritics and Planetary Science, 2002, 37, 1829-1833.	1.6	115
12	Analysis of conjugated steroid androgens: Deconjugation, derivatisation and associated issues. Journal of Pharmaceutical and Biomedical Analysis, 2009, 49, 1133-1140.	2.8	105
13	Hydropyrolysis of insoluble carbonaceous matter in the Murchison meteorite: new insights into its macromolecular structure 1 1Associate editor: G. D. Cody. Geochimica Et Cosmochimica Acta, 2004, 68, 1385-1393.	3.9	104
14	Aromatic moieties in meteoritic macromolecular materials: analyses by hydrous pyrolysis and Î´13C of individual compounds. Geochimica Et Cosmochimica Acta, 2000, 64, 321-328.	3.9	102
15	Carbon molecules in space: from astrochemistry to astrobiology. Faraday Discussions, 2006, 133, 277.	3.2	93
16	Baking black opal in the desert sun: The importance of silica in desert varnish. Geology, 2006, 34, 537.	4.4	87
17	The end Triassic mass extinction record of Williston Lake, British Columbia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 253, 385-406.	2.3	84
18	Carbon and nitrogen isotope disturbances and an end-Norian (Late Triassic) extinction event. Geology, 2002, 30, 1119.	4.4	78

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19	Geochemistry of the end-Permian extinction event in Austria and Italy: No evidence for an extraterrestrial component. Geology, 2004, 32, 1053.	4.4	78
20	On the Origins of Deep Hydrocarbons. Reviews in Mineralogy and Geochemistry, 2013, 75, 449-465.	4.8	76
21	Adsorption of l-lysine on montmorillonite. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 307, 142-149.	4.7	74
22	Plant spore walls as a record of long-term changes in ultraviolet-B radiation. Nature Geoscience, 2008, 1, 592-596.	12.9	68
23	High molecular weight organic matter in martian meteorites. Planetary and Space Science, 2002, 50, 711-716.	1.7	63
24	The alteration of organic matter in response to ionising irradiation: Chemical trends and implications for extraterrestrial sample analysis. Geochimica Et Cosmochimica Acta, 2006, 70, 1020-1039.	3.9	61
25	Fungal virulence at the time of the end-Permian biosphere crisis?. Geology, 2011, 39, 883-886.	4.4	59
26	Rapid determination of spore chemistry using thermochemolysis gas chromatography-mass spectrometry and micro-Fourier transform infrared spectroscopy. Photochemical and Photobiological Sciences, 2007, 6, 689.	2.9	58
27	Normal alkanes in meteorites: molecular Î´13C values indicate an origin by terrestrial contamination. Precambrian Research, 2001, 106, 47-58.	2.7	57
28	Recognizing life in the Solar System: guidance from meteoritic organic matter. International Journal of Astrobiology, 2005, 4, 269-276.	1.6	55
29	A new rapid method for shale oil and shale gas assessment. Fuel, 2015, 153, 231-239.	6.4	54
30	Separation of planetary noble gas carrier from bulk carbon in enstatite chondrites during stepped combustion. Earth and Planetary Science Letters, 2002, 199, 243-255.	4.4	53
31	Penetrators for in situ subsurface investigations of Europa. Advances in Space Research, 2011, 48, 725-742.	2.6	51
32	Meteorite ablation products and their contribution to the atmospheres of terrestrial planets: An experimental study using pyrolysis-FTIR. Geochimica Et Cosmochimica Acta, 2009, 73, 3512-3521.	3.9	50
33	Compound-specific isotope analysis of the organic constituents in carbonaceous chondrites. Mass Spectrometry Reviews, 2001, 20, 111-120.	5.4	49
34	Organic matter in carbonaceous meteorites: past, present and future research. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 2729-2742.	3.4	48
35	Cyclic diaryl ethers in a Late Permian sediment. Organic Geochemistry, 1999, 30, 267-273.	1.8	47
36	A multidisciplinary study of silica sinter deposits with applications to silica identification and detection of fossil life on Mars. Icarus, 2008, 198, 331-350.	2.5	47

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37	Changes in spore chemistry and appearance with increasing maturity. Review of Palaeobotany and Palynology, 2014, 201, 41-46.	1.5	46
38	Aromatic Moieties in Meteorites: Relics of Interstellar Grain Processes?. Astrophysical Journal, 2000, 540, 588-591.	4.5	45
39	Formation of a polyalkyl macromolecule from the hydrolysable component within sporopollenin during heating/pyrolysis experiments with Lycopodium spores. Journal of Analytical and Applied Pyrolysis, 2012, 95, 138-144.	5.5	44
40	The effects of oil on As(V) adsorption on illite, kaolinite, montmorillonite and chlorite. Geochimica Et Cosmochimica Acta, 2013, 121, 487-502.	3.9	44
41	Combined element (H and C) stable isotope ratios of methane in carbonaceous chondrites. Monthly Notices of the Royal Astronomical Society, 2004, 347, 807-812.	4.4	42
42	The effect of crude oil on arsenate adsorption on goethite. Water Research, 2010, 44, 5673-5683.	11.3	41
43	Astrobiology and habitability studies in preparation for future Mars missions: trends from investigating minerals, organics and biota. International Journal of Astrobiology, 2011, 10, 239-253.	1.6	41
44	The Urey Instrument: An Advanced In Situ Organic and Oxidant Detector for Mars Exploration. Astrobiology, 2008, 8, 583-595.	3.0	40
45	High temperature reactions of water with heavy oil and bitumen: Insights into aquathermolysis chemistry during steam-assisted recovery. Fuel, 2013, 113, 426-434.	6.4	39
46	UV-B absorbing pigments in spores: biochemical responses to shade in a high-latitude birch forest and implications for sporopollenin-based proxies of past environmental change. Polar Research, 2011, 30, 8312.	1.6	38
47	Subcritical water extraction of organic matter from sedimentary rocks. Analytica Chimica Acta, 2015, 879, 48-57.	5.4	38
48	Pyrolysisâ€“gas chromatographyâ€“isotope ratio mass spectrometry of macromolecular material in meteorites. Planetary and Space Science, 2001, 49, 465-471.	1.7	37
49	Extraterrestrial Organic Matter and the Detection of Life. Space Science Reviews, 2008, 135, 25-35.	8.1	35
50	Development status of the life marker chip instrument for ExoMars. Planetary and Space Science, 2012, 72, 129-137.	1.7	35
51	A novel palaeoaltimetry proxy based on spore and pollen wall chemistry. Earth and Planetary Science Letters, 2012, 353-354, 22-28.	4.4	35
52	Pollen and spores as a passive monitor of ultraviolet radiation. Frontiers in Ecology and Evolution, 2014, 2, .	2.2	35
53	Terrestrial acidification during the end-Permian biosphere crisis?. Geology, 2015, 43, 159-162.	4.4	35
54	Quantitative flash pyrolysis Fourier transform infrared spectroscopy of organic materials. Analytica Chimica Acta, 2009, 639, 62-66.	5.4	33

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55	Conjugated steroids: analytical approaches and applications. Analytical and Bioanalytical Chemistry, 2009, 393, 453-458.	3.7	33
56	Mars on Earth: soil analogues for future Mars missions. Astronomy and Geophysics, 2008, 49, 2.20-2.23.	0.2	32
57	Sulfate Minerals: A Problem for the Detection of Organic Compounds on Mars?. Astrobiology, 2015, 15, 247-258.	3.0	31
58	Pyrolysis and mass spectrometry studies of meteoritic organic matter. Mass Spectrometry Reviews, 2012, 31, 560-569.	5.4	30
59	How to Detect Life on Icy Moons. Astrobiology, 2018, 18, 843-855.	3.0	30
60	Identification of fossil worm tubes from Phanerozoic hydrothermal vents and cold seeps. Journal of Systematic Palaeontology, 2019, 17, 287-329.	1.5	30
61	Synchronous record of Î´¹³C shifts in the oceans and atmosphere at the end of the Permian. , 2002, , .		29
62	Extrasolar planets and false atmospheric biosignatures: The role of micrometeoroids. Planetary and Space Science, 2012, 73, 233-242.	1.7	29
63	Oxygen-containing aromatic compounds in a Late Permian sediment. Organic Geochemistry, 2005, 36, 371-384.	1.8	28
64	Biomass preservation in impact melt ejecta. Nature Geoscience, 2013, 6, 1018-1022.	12.9	28
65	Organic geochemical characteristics of black shales across the Ordovicianâ€“Silurian boundary in the Holy Cross Mountains, central Poland. Marine and Petroleum Geology, 2015, 66, 1042-1055.	3.3	28
66	Hydropyrolysis: A new technique for the analysis of macromolecular material in meteorites. Planetary and Space Science, 2005, 53, 1280-1286.	1.7	27
67	Raman spectroscopy of irradiated organic matter. Geochimica Et Cosmochimica Acta, 2007, 71, 2547-2568.	3.9	27
68	Pollen and spores as biological recorders of past ultraviolet irradiance. Scientific Reports, 2016, 6, 39269.	3.3	27
69	The use of model compounds to investigate the release of covalently bound biomarkers via hydropyrolysis. Organic Geochemistry, 2006, 37, 1705-1714.	1.8	26
70	Organic host analogues and the search for life on Mars. International Journal of Astrobiology, 2011, 10, 31-44.	1.6	26
71	Chemical constitution of a Permian-Triassic disaster species. Geology, 2009, 37, 875-878.	4.4	25
72	Amino acid analyses of type 3 chondrites Colony, Ornans, Chainpur, and Bishunpur. Meteoritics and Planetary Science, 2012, 47, 1502-1516.	1.6	25

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73	Correlating biodegradation to magnetization in oil bearing sedimentary rocks. Geochimica Et Cosmochimica Acta, 2013, 112, 146-165.	3.9	25
74	Formation of magnetic minerals at hydrocarbon-generation conditions. Marine and Petroleum Geology, 2015, 68, 509-519.	3.3	25
75	Indigenous Organicâ€Oxidized Fluid Interactions in the Tissint Mars Meteorite. Geophysical Research Letters, 2019, 46, 3090-3098.	4.0	25
76	Organic matter in ancient meteorites. Astronomy and Geophysics, 2004, 45, 2.08-2.14.	0.2	24
77	Investigating the contribution of methane produced by ablating micrometeorites to the atmosphere of Mars. Earth and Planetary Science Letters, 2009, 288, 382-385.	4.4	24
78	Meteorite gases and planetary atmospheres. Astronomy and Geophysics, 2010, 51, 5.21-5.22.	0.2	24
79	Extraction of amino acids from soils close to the Mars Desert Research Station (MDRS), Utah. International Journal of Astrobiology, 2011, 10, 231-238.	1.6	24
80	The Fate of Lipid Biosignatures in a Mars-Analogue Sulfur Stream. Scientific Reports, 2018, 8, 7586.	3.3	24
81	Effects of Oxygen-Containing Salts on the Detection of Organic Biomarkers on Mars and in Terrestrial Analog Soils. Astrobiology, 2019, 19, 711-721.	3.0	24
82	Biological Contamination Prevention for Outer Solar System Moons of Astrobiological Interest: What Do We Need to Know?. Astrobiology, 2019, 19, 951-974.	3.0	24
83	New strategies to detect life on Mars. Astronomy and Geophysics, 2005, 46, 6.26-6.27.	0.2	23
84	Type IV Kerogens as Analogues for Organic Macromolecular Materials in Aqueously Altered Carbonaceous Chondrites. Astrobiology, 2013, 13, 324-333.	3.0	22
85	Contamination by sesquiterpenoid derivatives in the Orgueil carbonaceous chondrite. Organic Geochemistry, 2003, 34, 37-47.	1.8	21
86	Carbon and nitrogen isotope ratios in meteoritic organic matter: indicators of alteration processes on the parent asteroid. International Journal of Astrobiology, 2004, 3, 221-227.	1.6	21
87	Habitability on planetary surfaces: interdisciplinary preparation phase for future Mars missions. International Journal of Astrobiology, 2009, 8, 301-315.	1.6	20
88	The contribution of sulphur dioxide from ablating micrometeorites to the atmospheres of Earth and Mars. Geochimica Et Cosmochimica Acta, 2011, 75, 1704-1717.	3.9	20
89	Detecting Nonvolatile Life- and Nonlife-Derived Organics in a Carbonaceous Chondrite Analogue with a New Multiplex Immunoassay and Its Relevance for Planetary Exploration. Astrobiology, 2018, 18, 1041-1056.	3.0	20
90	Supercritical fluid extraction of the non-polar organic compounds in meteorites. Planetary and Space Science, 2001, 49, 101-106.	1.7	19

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91	Novel solvent systems for in situ extraterrestrial sample analysis. Planetary and Space Science, 2010, 58, 1470-1474.	1.7	19
92	Sporopollenin, a Natural Copolymer, is Robust under High Hydrostatic Pressure. Macromolecular Chemistry and Physics, 2016, 217, 2494-2500.	2.2	19
93	Hydropyrolysis as a preparative method for the compound-specific carbon isotope analysis of fatty acids. Rapid Communications in Mass Spectrometry, 2005, 19, 323-325.	1.5	18
94	The labelling of meteoritic organic material using osmium tetroxide vapour impregnation. Planetary and Space Science, 2007, 55, 1310-1318.	1.7	18
95	The Moon as a Recorder of Organic Evolution in the Early Solar System: A Lunar Regolith Analog Study. Astrobiology, 2015, 15, 154-168.	3.0	18
96	Lithium Isotope Analyses of Inorganic Constituents from the Murchison Meteorite. Astrophysical Journal, 2004, 612, 588-591.	4.5	17
97	Organic geochemistry of late Jurassic paleosols (Dirt Beds) of Dorset, UK. Marine and Petroleum Geology, 2012, 37, 41-52.	3.3	17
98	Searching for biomolecules on Mars: Considerations for operation of a life marker chip instrument. Planetary and Space Science, 2013, 86, 66-74.	1.7	17
99	Perchlorateâ€induced combustion of organic matter with variable molecular weights: Implications for Mars missions. Geophysical Research Letters, 2014, 41, 7453-7460.	4.0	17
100	The Search for Hesperian Organic Matter on Mars: Pyrolysis Studies of Sediments Rich in Sulfur and Iron. Astrobiology, 2018, 18, 454-464.	3.0	16
101	Organic Records of Early Life on Mars: The Role of Iron, Burial, and Kinetics on Preservation. Astrobiology, 2020, 20, 53-72.	3.0	16
102	The origin of dark inclusions in Allende: New evidence from lithium isotopes. Meteoritics and Planetary Science, 2006, 41, 1039-1043.	1.6	14
103	Magnetic characterization of oil sands at Osmington Mills and Mupe Bay, Wessex Basin, UK. Geological Society Special Publication, 2012, 371, 189-198.	1.3	14
104	Organic Matter Detection on Mars by Pyrolysis-FTIR: An Analysis of Sensitivity and Mineral Matrix Effects. Astrobiology, 2016, 16, 831-845.	3.0	14
105	Minimising hydrogen sulphide generation during steam assisted production of heavy oil. Scientific Reports, 2015, 5, 8159.	3.3	13
106	Hydropyrolysis of steroids: a preparative step for compound-specific carbon isotope ratio analysis. Rapid Communications in Mass Spectrometry, 2005, 19, 3339-3342.	1.5	12
107	Desert varnish: an environmental recorder for Mars. Astronomy and Geophysics, 2006, 47, 4.34-4.35.	0.2	12
108	Extracting organic matter on Mars: A comparison of methods involving subcritical water, surfactant solutions and organic solvents. Planetary and Space Science, 2014, 99, 19-27.	1.7	12

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109	Heat, Aromatic Units, and Iron-Rich Phyllosilicates: A Mechanism for Making Macromolecules in the Early Solar System. Astrobiology, 2015, 15, 787-792.	3.0	12
110	Perchlorateâ€Driven Combustion of Organic Matter During Pyrolysisâ€Gas Chromatographyâ€Mass Spectrometry: Implications for Organic Matter Detection on Earth and Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1901-1909.	3.6	12
111	Mapping hydrocarbon charge-points in the Wessex Basin using seismic, geochemistry and mineral magnetics. Marine and Petroleum Geology, 2020, 111, 510-528.	3.3	12
112	New estimates of the production of volatile gases from ablating carbonaceous micrometeoroids at Earth and Mars during an E-belt-type Late Heavy Bombardment. Geochimica Et Cosmochimica Acta, 2014, 145, 175-205.	3.9	11
113	The chances of detecting life on Mars. Planetary and Space Science, 2015, 112, 15-22.	1.7	11
114	Mass Spectrometric Fingerprints of Bacteria and Archaea for Life Detection on Icy Moons. Astrobiology, 2022, 22, 143-157.	3.0	11
115	Selecting samples for Mars sample return: Triage by pyrolysisâ€“FTIR. Planetary and Space Science, 2013, 78, 45-51.	1.7	10
116	Life's sweet beginnings?. Nature, 2001, 414, 857-858.	27.8	9
117	How desert varnish forms?. , 2005, 5906, 276.		9
118	Thermochemolysis of the Murchison meteorite: identification of oxygen bound and occluded units in the organic macromolecule. International Journal of Astrobiology, 2010, 9, 201-208.	1.6	9
119	Extraction of polar and nonpolar biomarkers from the martian soil using aqueous surfactant solutions. Planetary and Space Science, 2012, 67, 109-118.	1.7	9
120	Aromatic units from the macromolecular material in meteorites: Molecular probes of cosmic environments. Geochimica Et Cosmochimica Acta, 2013, 107, 231-241.	3.9	9
121	Lithium isotopes as indicators of meteorite parent body alteration. Meteoritics and Planetary Science, 2013, 48, 872-878.	1.6	9
122	Role of Minerals in Hydrogen Sulfide Generation during Steam-Assisted Recovery of Heavy Oil. Energy & Fuels, 2018, 32, 4651-4654.	5.1	8
123	Biomarker analysis of the upper Jurassic Naokelekan and Barsarin formations in the Miran Well-2, Miran oil field, Kurdistan region, Iraq. Arabian Journal of Geosciences, 2018, 11, 1.	1.3	8
124	Hydropyrolysis over a platinum catalyst as a preparative technique for the compoundâ€specific carbon isotope ratio measurement of C₂₇ steroids. Rapid Communications in Mass Spectrometry, 2010, 24, 501-505.	1.5	7
125	Searching for Life on Mars: Degradation of Surfactant Solutions Used in Organic Extraction Experiments. Astrobiology, 2014, 14, 733-752.	3.0	7
126	Single-crystal X-ray diffraction study of synthetic sodiumâ€“hydronium jarosite. Physics and Chemistry of Minerals, 2016, 43, 377-386.	0.8	7

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127	COSPAR Sample Safety Assessment Framework (SSAF). Astrobiology, 2022, 22, S-186-S-216.	3.0	7
128	Macromolecular organic materials in carbonaceous chondrites: A review of their sources and their role in the origin of life on the early earth. , 2000, , 27-49.		6
129	A Bayesian statistical assessment of representative samples for asteroidal or meteoritical material. Meteoritics and Planetary Science, 2013, 48, 976-996.	1.6	6
130	Statistics Provide Guidance for Indigenous Organic Carbon Detection on Mars Missions. Astrobiology, 2014, 14, 706-713.	3.0	6
131	The Effects of Minerals on Heavy Oil and Bitumen Chemistry When Recovered Using Steam-Assisted Methods. , 2014, , .		6
132	Rapid habitability assessment of Mars samples by pyrolysis-FTIR. Planetary and Space Science, 2016, 121, 60-75.	1.7	6
133	Survivability of 1â€Chloronapthalene During Simulated Early Diagenesis: Implications for Chlorinated Hydrocarbon Detection on Mars. Journal of Geophysical Research E: Planets, 2018, 123, 2790-2802.	3.6	6
134	Mineral Matrix Effects on Pyrolysis Products of Kerogens Infer Difficulties in Determining Biological Provenance of Macromolecular Organic Matter at Mars. Astrobiology, 2022, 22, 520-540.	3.0	6
135	Two Rovers to the Same Site on Mars, 2018: Possibilities for Cooperative Science. Astrobiology, 2010, 10, 663-685.	3.0	5
136	Potential failure of life detection experiments on Mars resulting from adsorption of organic compounds on to common instrument materials. Planetary and Space Science, 2012, 73, 262-270.	1.7	5
137	AN ORGANIC COSMO-BAROMETER: DISTINCT PRESSURE AND TEMPERATURE EFFECTS FOR METHYL SUBSTITUTED POLYCYCLIC AROMATIC HYDROCARBONS. Astrophysical Journal, 2014, 784, 98.	4.5	5
138	Multiple Cosmic Sources for Meteorite Macromolecules?. Astrobiology, 2015, 15, 779-786.	3.0	5
139	Organic Matter Responses to Radiation under Lunar Conditions. Astrobiology, 2016, 16, 900-912.	3.0	5
140	Organic compound-mineral interactions: Using flash pyrolysis to monitor the adsorption of fatty acids on calcite. Journal of Analytical and Applied Pyrolysis, 2017, 123, 184-193.	5.5	5
141	Effect of Hydration State of Martian Perchlorate Salts on Their Decomposition Temperatures During Thermal Extraction. Journal of Geophysical Research E: Planets, 2017, 122, 2793-2802.	3.6	5
142	Artificial Maturation of Iron- and Sulfur-Rich Mars Analogues: Implications for the Diagenetic Stability of Biopolymers and Their Detection with Pyrolysisâ€“Gas Chromatographyâ€“Mass Spectrometry. Astrobiology, 2021, 21, 199-218.	3.0	5
143	Pyrolysis of Carboxylic Acids in the Presence of Iron Oxides: Implications for Life Detection on Missions to Mars. Astrobiology, 2021, 21, 673-691.	3.0	5
144	Heterogeneity within refractory organic matter from CM2 Carbonaceous Chondrites: Evidence from Raman spectroscopy. Earth and Planetary Science Letters, 2021, 574, 117149.	4.4	5

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145	Making silica rock coatings in the lab: synthetic desert varnish. , 2005, , .		4
146	Biomedical and Forensic Applications of Combined Catalytic Hydrogenation-Stable Isotope Ratio Analysis. Analytical Chemistry Insights, 2007, 2, 117739010700200.	2.7	4
147	Insights into the nature of cometary organic matter from terrestrial analogues. International Journal of Astrobiology, 2012, 11, 83-92.	1.6	4
148	A magnetic solution to the Mupe Bay mystery. Marine and Petroleum Geology, 2013, 46, 165-172.	3.3	4
149	Quantitative Laboratory Assessment Of Aquathermolysis Chemistry During Steam-assisted Recovery Of Heavy Oils And Bitumen, With A Focus On Sulfur. , 2013, , .		4
150	Quantifying Preservation Potential: Lipid Degradation in a Mars-Analog Circumneutral Iron Deposit. Astrobiology, 2021, 21, 638-654.	3.0	4
151	Thiophenes as indicators of aqueous alteration in carbonaceous meteorites. , 2006, 6309, 232.		3
152	Reply to comments on defining biominerals and organominerals: Direct and indirect indicators of life [Perry et al., Sedimentary Geology, 201, 157â€“179]. Sedimentary Geology, 2009, 213, 156.	2.1	3
153	Astrobiology can help space science, education and the economy. Space Policy, 2014, 30, 146-148.	1.5	3
154	In-situ vibrational optical rotatory dispersion of molecular organic crystals at high pressures. Analytica Chimica Acta, 2014, 842, 51-56.	5.4	3
155	A Method for Choosing the Best Samples for Mars Sample Return. Astrobiology, 2018, 18, 556-570.	3.0	3
156	Biomedical and forensic applications of combined catalytic hydrogenation-stable isotope ratio analysis. Analytical Chemistry Insights, 2007, 2, 37-42.	2.7	3
157	Delving into Allende's dark secrets. Astronomy and Geophysics, 2006, 47, 6.37-6.38.	0.2	2
158	Biomarker indicators of bacterial activity and organic fluxes during end Triassic mass extinction event. , 2008, , .		2
159	Fluorescence spectroscopy for the detection of life in the Salten Skov Mars regolith analogue. Planetary and Space Science, 2012, 68, 42-47.	1.7	2
160	Spectrofluorometric analysis of amino acid mixtures: Implications for future space missions. Planetary and Space Science, 2012, 60, 336-341.	1.7	2
161	Effects of Pressure on Model Compounds of Meteorite Organic Matter. ACS Earth and Space Chemistry, 2017, 1, 475-482.	2.7	2
162	Transformation of Cyanobacterial Biomolecules by Iron Oxides During Flash Pyrolysis: Implications for Mars Life-Detection Missions. Astrobiology, 2021, 21, 1363-1386.	3.0	2

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163	New Solvents for Space Missions: Utility for Life Detection Instruments and Notable Terrestrial Applications. Recent Patents on Space Technology, 2011, 1, 7-11.	0.1	2
164	Molecular, isotopic and in situ analytical approaches to the study of meteoritic organic material. International Journal of Astrobiology, 2004, 3, 107-116.	1.6	1
165	A noble record. Astronomy and Geophysics, 2005, 46, 2.12-2.14.	0.2	1
166	PRESSURE EFFECTS IN POLYCYCLIC AROMATIC NITROGENATED HETEROCYCLES (PANHs): DIAGNOSTIC QUALITIES AND COSMOBAROMETRY POTENTIAL. Astrophysical Journal, 2016, 819, 64.	4.5	1
167	Selecting Mars samples to return to Earth. Astronomy and Geophysics, 2018, 59, 1.36-1.38.	0.2	1
168	Solid Phase Micro Extraction: Potential for Organic Contamination Control for Planetary Protection of Life-Detection Missions to the Icy Moons of the Outer Solar System. Astrobiology, 2019, 19, 1153-1166.	3.0	1
169	Environmental screening of water associated with shale gas extraction by fluorescence excitation emission matrix. Environmental Science: Water Research and Technology, 2022, 8, 2196-2206.	2.4	1
170	Carbon isotopic gradients in the Martian crust: implications for past or present life on Mars. , 2006, , .		0
171	Organic Compounds in Carbonaceous Meteorites. ChemInform, 2002, 33, 262-262.	0.0	0
172	Meteoritics. Encyclopedia of Earth Sciences Series, 2011, , 568-574.	0.1	0
173	New Solvents for Space Missions: Utility for Life Detection Instruments and Notable Terrestrial Applications. Recent Patents on Space Technology, 2011, 1, 7-11.	0.1	0
174	Using geophysics and geochemistry to find life in the solar system. First Break, 2019, 37, 79-80.	0.4	0