

# Cyril Szopa

## List of Publications by Year in descending order

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158  
papers

10,823  
citations

53794

45  
h-index

31849

101  
g-index

160  
all docs

160  
docs citations

160  
times ranked

6127  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1242777.	12.6	687
2	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1243480.	12.6	508
3	Mars's™ Surface Radiation Environment Measured with the Mars Science Laboratory's™ Curiosity Rover. <i>Science</i> , 2014, 343, 1244797.	12.6	475
4	The Sample Analysis at Mars Investigation and Instrument Suite. <i>Space Science Reviews</i> , 2012, 170, 401-478.	8.1	435
5	Organic compounds on comet 67P/Churyumov-Gerasimenko revealed by COSAC mass spectrometry. <i>Science</i> , 2015, 349, aab0689.	12.6	376
6	Organic molecules in the Sheepbed Mudstone, Gale Crater, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 495-514.	3.6	375
7	Habitability on Early Mars and the Search for Biosignatures with the ExoMars Rover. <i>Astrobiology</i> , 2017, 17, 471-510.	3.0	371
8	Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars. <i>Science</i> , 2018, 360, 1096-1101.	12.6	369
9	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. <i>Science</i> , 2013, 341, 1238937.	12.6	367
10	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. <i>Science</i> , 2013, 341, 1238932.	12.6	327
11	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. <i>Science</i> , 2013, 341, 263-266.	12.6	327
12	Martian Fluvial Conglomerates at Gale Crater. <i>Science</i> , 2013, 340, 1068-1072.	12.6	326
13	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1245267.	12.6	323
14	Evidence for perchlorates and the origin of chlorinated hydrocarbons detected by SAM at the Rocknest aeolian deposit in Gale Crater. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1955-1973.	3.6	306
15	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. <i>Science</i> , 2013, 341, 1239505.	12.6	280
16	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. <i>Science</i> , 2014, 343, 1244734.	12.6	246
17	Complex organic matter in Titan's atmospheric aerosols from in situ pyrolysis and analysis. <i>Nature</i> , 2005, 438, 796-799.	27.8	228
18	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. <i>Science</i> , 2013, 341, 1238670.	12.6	215

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19	The Mars Organic Molecule Analyzer (MOMA) Instrument: Characterization of Organic Material in Martian Sediments. <i>Astrobiology</i> , 2017, 17, 655-685.	3.0	185
20	Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the <i>Curiosity</i> rover investigations at Gale crater, Mars. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4245-4250.	7.1	172
21	Formation of Amino Acids and Nucleotide Bases in a Titan Atmosphere Simulation Experiment. <i>Astrobiology</i> , 2012, 12, 809-817.	3.0	158
22	PAMPRE: A dusty plasma experiment for Titan's tholins production and study. <i>Planetary and Space Science</i> , 2006, 54, 394-404.	1.7	154
23	New experimental constraints on the composition and structure of tholins. <i>Icarus</i> , 2008, 198, 218-231.	2.5	144
24	The Petrochemistry of Jake_M: A Martian Mugearite. <i>Science</i> , 2013, 341, 1239463.	12.6	134
25	Cosac, The Cometary Sampling and Composition Experiment on Philae. <i>Space Science Reviews</i> , 2007, 128, 257-280.	8.1	127
26	Low Upper Limit to Methane Abundance on Mars. <i>Science</i> , 2013, 342, 355-357.	12.6	103
27	Oxidants at the Surface of Mars: A Review in Light of Recent Exploration Results. <i>Astrobiology</i> , 2016, 16, 977-996.	3.0	83
28	Chemical Characterization of Titan's Tholins: Solubility, Morphology and Molecular Structure Revisited. <i>Journal of Physical Chemistry A</i> , 2009, 113, 11195-11203.	2.5	81
29	Science Goals and Objectives for the Dragonfly Titan Rotorcraft Relocatable Lander. <i>Planetary Science Journal</i> , 2021, 2, 130.	3.6	80
30	Titan's atmosphere: An optimal gas mixture for aerosol production?. <i>Icarus</i> , 2010, 209, 704-714.	2.5	79
31	TandEM: Titan and Enceladus mission. <i>Experimental Astronomy</i> , 2009, 23, 893-946.	3.7	77
32	Nitrile gas chemistry in Titan's atmosphere. <i>Icarus</i> , 2011, 213, 625-635.	2.5	73
33	Sublimation of water ice mixed with silicates and tholins: Evolution of surface texture and reflectance spectra, with implications for comets. <i>Icarus</i> , 2016, 267, 154-173.	2.5	73
34	Production of Hexamethylenetetramine in Photolyzed and Irradiated Interstellar Cometary Ice Analogs. <i>Astrophysical Journal</i> , 2001, 561, L139-L142.	4.5	66
35	Gas chromatography-mass spectrometry analysis of amino acid enantiomers as methyl chloroformate derivatives: Application to space analysis. <i>Journal of Chromatography A</i> , 2007, 1150, 162-172.	3.7	65
36	Mid- and far-infrared absorption spectroscopy of Titan's aerosols analogues. <i>Icarus</i> , 2012, 221, 320-327.	2.5	63

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37	Laboratory insights into the chemical and kinetic evolution of several organic molecules under simulated Mars surface UV radiation conditions. <i>Icarus</i> , 2014, 242, 50-63.	2.5	56
38	A new extraction technique for in situ analyses of amino and carboxylic acids on Mars by gas chromatography mass spectrometry. <i>Planetary and Space Science</i> , 2006, 54, 1592-1599.	1.7	54
39	MOMA: the challenge to search for organics and biosignatures on Mars. <i>International Journal of Astrobiology</i> , 2016, 15, 239-250.	1.6	52
40	Can laboratory tholins mimic the chemistry producing Titan's aerosols? A review in light of ACP experimental results. <i>Planetary and Space Science</i> , 2013, 77, 91-103.	1.7	51
41	Investigating the Photostability of Carboxylic Acids Exposed to Mars Surface Ultraviolet Radiation Conditions. <i>Astrobiology</i> , 2009, 9, 543-549.	3.0	50
42	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. <i>Astrobiology</i> , 2020, 20, 292-306.	3.0	50
43	Capacitively coupled plasma used to simulate Titan's atmospheric chemistry. <i>Plasma Sources Science and Technology</i> , 2010, 19, 015008.	3.1	49
44	Very high resolution mass spectrometry of HCN polymers and tholins. <i>Faraday Discussions</i> , 2010, 147, 495.	3.2	49
45	The influence of mineralogy on recovering organic acids from Mars analogue materials using the $\alpha$ -one-pot $\alpha$ -derivatization experiment on the Sample Analysis at Mars (SAM) instrument suite. <i>Planetary and Space Science</i> , 2012, 67, 1-13.	1.7	49
46	Effect of Nontronite Smectite Clay on the Chemical Evolution of Several Organic Molecules under Simulated Martian Surface Ultraviolet Radiation Conditions. <i>Astrobiology</i> , 2015, 15, 221-237.	3.0	49
47	Search for evidence of life in space: Analysis of enantiomeric organic molecules by N,N-dimethylformamide dimethylacetal derivative dependant Gas Chromatography $\alpha$ Mass Spectrometry. <i>Journal of Chromatography A</i> , 2010, 1217, 731-740.	3.7	48
48	Orbitrap mass analyser for in situ characterisation of planetary environments: Performance evaluation of a laboratory prototype. <i>Planetary and Space Science</i> , 2016, 131, 33-45.	1.7	47
49	Influence of methane concentration on the optical indices of Titan $\alpha$ TM's aerosols analogues. <i>Icarus</i> , 2012, 221, 670-677.	2.5	44
50	New insights into the structure and chemistry of Titan $\alpha$ TM's tholins via $^{13}\text{C}$ and $^{15}\text{N}$ solid state nuclear magnetic resonance spectroscopy. <i>Icarus</i> , 2012, 221, 844-853.	2.5	39
51	Chemical evolution of organic molecules under Mars-like UV radiation conditions simulated in the laboratory with the $\alpha$ one-pot $\alpha$ -derivatization and evolution $\alpha$ -(MOMIE) setup. <i>Planetary and Space Science</i> , 2013, 85, 188-197.	1.7	39
52	Nitrogen incorporation in Titan's tholins inferred by high resolution orbitrap mass spectrometry and gas chromatography $\alpha$ mass spectrometry. <i>Earth and Planetary Science Letters</i> , 2014, 404, 33-42.	4.4	39
53	Heterogeneous solid/gas chemistry of organic compounds related to comets, meteorites, Titan, and Mars: Laboratory and in lower Earth orbit experiments. <i>Advances in Space Research</i> , 2008, 42, 2019-2035.	2.6	38
54	Development of a gas chromatography compatible Sample Processing System (SPS) for the in-situ analysis of refractory organic matter in martian soil: preliminary results. <i>Advances in Space Research</i> , 2009, 43, 143-151.	2.6	36

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55	Sublimation of iceâ€“tholins mixtures: A morphological and spectro-photometric study. <i>Icarus</i> , 2016, 266, 288-305.	2.5	35
56	Laboratory light-scattering measurements with Titan's aerosols analogues produced by a dusty plasma. <i>Planetary and Space Science</i> , 2009, 57, 1631-1641.	1.7	34
57	Gas chromatography in space exploration. <i>Journal of Chromatography A</i> , 1999, 846, 307-315.	3.7	33
58	The PROCESS Experiment: Amino and Carboxylic Acids Under Mars-Like Surface UV Radiation Conditions in Low-Earth Orbit. <i>Astrobiology</i> , 2012, 12, 436-444.	3.0	33
59	Optical constants from 370nm to 900nm of Titan tholins produced in a low pressure RF plasma discharge. <i>Icarus</i> , 2012, 218, 356-363.	2.5	33
60	Recovery of Fatty Acids from Mineralogic Mars Analogs by TMAH Thermochemolysis for the Sample Analysis at Mars Wet Chemistry Experiment on the Curiosity Rover. <i>Astrobiology</i> , 2019, 19, 522-546.	3.0	33
61	Analysis of complex mixtures recovered from space missions. <i>Journal of Chromatography A</i> , 2001, 939, 69-77.	3.7	32
62	Did life exist on Mars? Search for organic and inorganic signatures, one of the goals for â€œSAMâ€• (sample analysis at Mars). <i>Advances in Space Research</i> , 2004, 33, 2240-2245.	2.6	32
63	Magnesium sulfate as a key mineral for the detection of organic molecules on Mars using pyrolysis. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 61-74.	3.6	31
64	Identification of Chlorobenzene in the Viking Gas Chromatographâ€“Mass Spectrometer Data Sets: Reanalysis of Viking Mission Data Consistent With Aromatic Organic Compounds on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1674-1683.	3.6	31
65	UVolution, a Photochemistry Experiment in Low Earth Orbit: Investigation of the Photostability of Carboxylic Acids Exposed to Mars Surface UV Radiation Conditions. <i>Astrobiology</i> , 2010, 10, 449-461.	3.0	30
66	In situ analysis of the Martian soil by gas chromatography: Decoding of complex chromatograms of organic molecules of exobiological interest. <i>Journal of Chromatography A</i> , 2005, 1071, 255-261.	3.7	29
67	Search for past life on Mars: Physical and chemical characterization of minerals of biotic and abiotic origin: part 1 - Calcite. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	29
68	A porosity gradient in 67P/C-G nucleus suggested from CONSERT and SESAME-PP results: an interpretation based on new laboratory permittivity measurements of porous icy analogues. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 462, S89-S98.	4.4	29
69	Experimenting with Mixtures of Water Ice and Dust as Analogues for Icy Planetary Material. <i>Space Science Reviews</i> , 2019, 215, 1.	8.1	29
70	Organic molecules revealed in Marsâ€™s Bagnold Dunes by Curiosityâ€™s derivatization experiment. <i>Nature Astronomy</i> , 2022, 6, 129-140.	10.1	29
71	The PROCESS Experiment: An Astrochemistry Laboratory for Solid and Gaseous Organic Samples in Low-Earth Orbit. <i>Astrobiology</i> , 2012, 12, 412-425.	3.0	28
72	Titan's atmosphere simulation experiment using continuum UVâ€“VUV synchrotron radiation. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 778-788.	3.6	27

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73	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. <i>Planetary and Space Science</i> , 2016, 129, 88-102.	1.7	27
74	What can we expect from the in situ chemical investigation of a cometary nucleus by gas chromatography: First results from laboratory studies. <i>Planetary and Space Science</i> , 2003, 51, 863-877.	1.7	26
75	Prototype of the gas chromatograph-mass spectrometer to investigate volatile species in the lunar soil for the Luna-Resurs mission. <i>Planetary and Space Science</i> , 2015, 111, 126-133.	1.7	25
76	Analysis of carbon and nitrogen signatures with laser-induced breakdown spectroscopy; the quest for organics under Mars-like conditions. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 131, 8-17.	2.9	25
77	Gas chromatography for in situ analysis of a cometary nucleus. <i>Journal of Chromatography A</i> , 2002, 953, 165-173.	3.7	24
78	COSAC prepares for sampling and in situ analysis of cometary matter from comet 67P/Churyumov-Gerasimenko. <i>Planetary and Space Science</i> , 2014, 103, 318-330.	1.7	23
79	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. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 1446-1459.	3.6	23
80	Formation of analogs of cometary nitrogen-rich refractory organics from thermal degradation of tholin and HCN polymer. <i>Icarus</i> , 2015, 250, 53-63.	2.5	23
81	Abiotic Input of Fixed Nitrogen by Bolide Impacts to Gale Crater During the Hesperian: Insights From the Mars Science Laboratory. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 94-113.	3.6	23
82	Gas chromatography for in situ analysis of a cometary nucleus: characterization and optimization of diphenyl/dimethylpolysiloxane stationary phases. <i>Journal of Chromatography A</i> , 1999, 863, 157-169.	3.7	22
83	Gas chromatography for in situ analysis of a cometary nucleus. <i>Journal of Chromatography A</i> , 2002, 982, 303-312.	3.7	22
84	A laboratory pilot for in situ analysis of refractory organic matter in Martian soil by gas chromatography-mass spectrometry. <i>Advances in Space Research</i> , 2007, 39, 337-344.	2.6	22
85	Enantiomeric separation of volatile organics by gas chromatography for the in situ analysis of extraterrestrial materials: Kinetics and thermodynamics investigation of various chiral stationary phases. <i>Journal of Chromatography A</i> , 2013, 1306, 59-71.	3.7	22
86	Influence of CO on Titan atmospheric reactivity. <i>Icarus</i> , 2014, 238, 221-229.	2.5	22
87	GC-MS analysis of amino acid enantiomers as their N(O,S)-perfluoroacyl perfluoroalkyl esters: Application to space analysis. <i>Chirality</i> , 2006, 18, 279-295.	2.6	21
88	Development of HPLC-Orbitrap method for identification of N-bearing molecules in complex organic material relevant to planetary environments. <i>Icarus</i> , 2016, 275, 259-266.	2.5	21
89	Gas chromatography for in situ analysis of a cometary nucleus. <i>Journal of Chromatography A</i> , 2000, 904, 73-85.	3.7	19
90	Carbon isotopic enrichment in Titan's tholins? Implications for Titan's aerosols. <i>Planetary and Space Science</i> , 2007, 55, 2010-2014.	1.7	19

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91	Major Volatiles Evolved From Eolian Materials in Gale Crater. <i>Geophysical Research Letters</i> , 2018, 45, 10,240.	4.0	19
92	Identification of organic molecules with a laboratory prototype based on the Laser Ablation-CosmOrbitrap. <i>Planetary and Space Science</i> , 2019, 170, 42-51.	1.7	18
93	The search for organic compounds with TMAH thermochemolysis: From Earth analyses to space exploration experiments. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 127, 115896.	11.4	18
94	Detection of martian amino acids by chemical derivatization coupled to gas chromatography: In situ and laboratory analysis. <i>Advances in Space Research</i> , 2001, 27, 195-199.	2.6	17
95	Evaluating the robustness of the enantioselective stationary phases on the Rosetta mission against space vacuum vaporization. <i>Advances in Space Research</i> , 2013, 52, 2080-2084.	2.6	17
96	Search for past life on Mars: Physical and chemical characterization of minerals of biotic and abiotic origin: 2. Aragonite. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	16
97	Search for organic molecules at the Mars surface: The "Martian Organic Material Irradiation and Evolution" (MOMIE) project. <i>Advances in Space Research</i> , 2008, 42, 2014-2018.	2.6	16
98	Titan's organic aerosols: Molecular composition and structure of laboratory analogues inferred from pyrolysis gas chromatography mass spectrometry analysis. <i>Icarus</i> , 2016, 277, 442-454.	2.5	16
99	The Photochemistry on Space Station (PSS) Experiment: Organic Matter under Mars-like Surface UV Radiation Conditions in Low Earth Orbit. <i>Astrobiology</i> , 2019, 19, 1037-1052.	3.0	16
100	Bidirectional reflectance of laboratory cometary analogues to interpret the spectrophotometric properties of the nucleus of comet 67P/Churyumov-Gerasimenko. <i>Planetary and Space Science</i> , 2017, 148, 1-11.	1.7	15
101	Decoding of complex isothermal chromatograms: Application to chromatograms recovered from space missions. <i>Journal of Separation Science</i> , 2003, 26, 569-577.	2.5	14
102	Complex organic matter in Titan's aerosols? (Reply). <i>Nature</i> , 2006, 444, E6-E7.	27.8	14
103	Bidirectional reflectance and VIS-NIR spectroscopy of cometary analogues under simulated space conditions. <i>Planetary and Space Science</i> , 2017, 145, 14-27.	1.7	14
104	Application of TMAH thermochemolysis to the detection of nucleobases: Application to the MOMA and SAM space experiment. <i>Talanta</i> , 2019, 204, 802-811.	5.5	14
105	Chirality and the origin of life: In situ enantiomeric separation for future space missions. <i>Chirality</i> , 2002, 14, 527-532.	2.6	13
106	Decoding of complex isothermal chromatograms recovered from space missions. <i>Journal of Chromatography A</i> , 2003, 1002, 179-192.	3.7	13
107	From Titan's tholins to Titan's aerosols: Isotopic study and chemical evolution at Titan's surface. <i>Advances in Space Research</i> , 2008, 42, 48-53.	2.6	13
108	Characterization of aromaticity in analogues of titan's atmospheric aerosols with two-step laser desorption ionization mass spectrometry. <i>Planetary and Space Science</i> , 2016, 131, 1-13.	1.7	13

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109	Role of the Tenax® Adsorbent in the Interpretation of the EGA and GC-MS Analyses Performed With the Sample Analysis at Mars in Gale Crater. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 2819-2851.	3.6	13
110	Search for organics in extraterrestrial environments by in situ gas chromatography analysis. <i>Advances in Space Research</i> , 2005, 36, 195-200.	2.6	12
111	Benzoic Acid as the Preferred Precursor for the Chlorobenzene Detected on Mars: Insights from the Unique Cumberland Analog Investigation. <i>Planetary Science Journal</i> , 2020, 1, 41.	3.6	12
112	Investigating the effects of gamma radiation on selected chemicals for use in biosignature detection instruments on the surface of Jupiter's moon Europa. <i>Planetary and Space Science</i> , 2019, 175, 1-12.	1.7	11
113	Influence of Calcium Perchlorate on Organics Under SAM-Like Pyrolysis Conditions: Constraints on the Nature of Martian Organics. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006359.	3.6	11
114	In-situ chemical investigation of a comet nucleus by gas chromatography: Porous layer open tubular columns for the separation of light, volatile compounds. <i>Chromatographia</i> , 2001, 54, 369-376.	1.3	10
115	Peer Reviewed: Analyzing a Comet Nucleus by Capillary GC. <i>Analytical Chemistry</i> , 2002, 74, 481 A-487 A.	6.5	10
116	Dual column capillary gas chromatographic system for the in situ analysis of volatile organic compounds on a cometary nucleus. <i>Journal of Separation Science</i> , 2004, 27, 495-503.	2.5	10
117	Interpretation of COSAC mass spectrometer data acquired during Rosetta's Lutetia fly-by 10 July 2010. <i>Planetary and Space Science</i> , 2012, 66, 187-191.	1.7	10
118	Influence of Calcium Perchlorate on the Search for Organics on Mars with Tetramethylammonium Hydroxide Thermochemistry. <i>Astrobiology</i> , 2021, 21, 279-297.	3.0	10
119	Performances under representative pressure and temperature conditions of the gas chromatography-mass spectrometry space experiment to investigate Titan's atmospheric composition. <i>Journal of Chromatography A</i> , 2006, 1131, 215-226.	3.7	9
120	Testing the capabilities of the Mars Organic Molecule Analyser (MOMA) chromatographic columns for the separation of organic compounds on Mars. <i>Planetary and Space Science</i> , 2020, 186, 104903.	1.7	9
121	The COSAC experiment of the Rosetta mission: Performance under representative conditions and expected scientific return. <i>Advances in Space Research</i> , 2007, 40, 180-186.	2.6	8
122	UVolution, a photochemistry experiment in low earth orbit: Investigation of the photostability of carbonates exposed to martian-like UV radiation conditions. <i>Planetary and Space Science</i> , 2010, 58, 1617-1624.	1.7	8
123	The AMINO experiment: a laboratory for astrochemistry and astrobiology on the EXPOSE-R facility of the International Space Station. <i>International Journal of Astrobiology</i> , 2015, 14, 67-77.	1.6	8
124	Thermal degradation of organics for pyrolysis in space: Titan's atmospheric aerosol case study. <i>Icarus</i> , 2015, 248, 205-212.	2.5	8
125	Organic chemistry in a CO <sub>2</sub> rich early Earth atmosphere. <i>Earth and Planetary Science Letters</i> , 2017, 479, 34-42.	4.4	8
126	ESA's Cometary Mission Rosetta's Characterization of the COSAC Mass Spectrometry Results. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	8



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127	The AMINO experiment: methane photolysis under Solar VUV irradiation on the EXPOSE-R facility of the International Space Station. <i>International Journal of Astrobiology</i> , 2015, 14, 79-87.	1.6	7
128	Performance of the SAM gas chromatographic columns under simulated flight operating conditions for the analysis of chlorohydrocarbons on Mars. <i>Journal of Chromatography A</i> , 2019, 1598, 183-195.	3.7	7
129	Dimerization of Uracil in a Simulated Mars-like UV Radiation Environment. <i>Astrobiology</i> , 2020, 20, 1363-1376.	3.0	7
130	European Molecular Indicators of Life Investigation (EMILI) for a Future Europa Lander Mission. <i>Frontiers in Space Technologies</i> , 2022, 2, .	1.4	7
131	Interpretation of chromatographic data recovered from space missions: decoding of complex chromatograms by Fourier analysis. <i>Planetary and Space Science</i> , 2003, 51, 581-590.	1.7	6
132	Optical properties of analogs of Titan's aerosols produced by dusty plasma. <i>Earth, Planets and Space</i> , 2013, 65, 1175-1184.	2.5	6
133	Influence of Calcium Perchlorate on the Search for Martian Organic Compounds with MTBSTFA/DMF Derivatization. <i>Astrobiology</i> , 2021, 21, 1137-1156.	3.0	6
134	Evidence for perchlorates and the origin of chlorinated hydrocarbons detected by SAM at the rocknest aeolian deposit in gale crater. <i>Journal of Geophysical Research E: Planets</i> , 2013, , n/a-n/a.	3.6	6
135	Decay of COSAC and Ptolemy mass spectra at comet 67P/Churyumov-Gerasimenko. <i>Astronomy and Astrophysics</i> , 2017, 600, A56.	5.1	5
136	Electrical Properties of Tholins and Derived Constraints on the Huygens Landing Site Composition at the Surface of Titan. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 807-822.	3.6	5
137	The Sample Analysis at Mars Investigation and Instrument Suite. , 2012, , 401-478.		5
138	Enceladus as a potential oasis for life: Science goals and investigations for future explorations. <i>Experimental Astronomy</i> , 2022, 54, 809-847.	3.7	5
139	Science goals and new mission concepts for future exploration of Titan's atmosphere, geology and habitability: titan POLar scout/orbitEr and in situ lake lander and DrONE explorer (POSEIDON). <i>Experimental Astronomy</i> , 2022, 54, 911-973.	3.7	5
140	Tholins and their relevance for astrophysical issues. <i>Proceedings of the International Astronomical Union</i> , 2008, 4, 409-416.	0.0	4
141	Gas chromatography for in situ analysis of a cometary nucleus V. Study of capillary columns' robustness submitted to long-term reduced environmental pressure conditions. <i>Journal of Chromatography A</i> , 2014, 1368, 211-216.	3.7	4
142	Complex organic matter in Titan's aerosols? (Reply). <i>Nature</i> , 2006, 444, E6-E7.	27.8	3
143	Miniaturized gas chromatography for space exploration: A 50 years history. , 2017, , .		3
144	Thermal stability of adsorbents used for gas chromatography in space exploration. <i>Journal of Chromatography A</i> , 2021, 1644, 462087.	3.7	3

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145	GAS CHROMATOGRAPHY   Gas Chromatography in Space Exploration. , 2007, , 1-13.		3
146	COSAC's Only Gas Chromatogram Taken on Comet 67P/Churyumovâ€Gerasimenko. ChemPlusChem, 2022, 87, .	2.8	3
147	Rosetta Lander (â€œPhilaeâ€) Investigations. , 2009, , 1-171.		2
148	ESAs Kometenâ€Mission Rosetta â€ Neuâ€Analyse der Daten des COSAC Massenspektrometers. Angewandte Chemie, 2022, 134, .	2.0	2
149	Optical emission spectroscopy of a RF plasma for laboratory simulation of Titanâ€™s aerosols. AIP Conference Proceedings, 2005, , .	0.4	1
150	Plasma laboratory simulations of Titanâ€™s aerosols. AIP Conference Proceedings, 2005, , .	0.4	1
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