Rafael Navarro-GonzÃ¡lez

List of Publications by Year
in descending order

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178 papers	12,676 citations	36203 51 h-index	24915 109 g-index
182 all docs	182 docs citations	182 times ranked	6770 citing authors

#	Article	IF	Citations
1	Organic molecules revealed in Marsâ€™s Bagnold Dunes by Curiosityâ€™s derivatization experiment. Nature Astronomy, 2022, 6, 129-140.	4.2	29
2	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
3	Influence of Calcium Perchlorate on the Search for Organics on Mars with Tetramethylammonium Hydroxide Thermochemolysis. Astrobiology, 2021, 21, 279-297.	1.5	10
4	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
5	Radiolytic Degradation of Soil Carbon from the Mojave Desert by⁶⁰Co Gamma Rays: Implications for the Survival of Martian Organic Compounds Due to Cosmic Radiation. Astrobiology, 2021, 21, 381-393.	1.5	5
6	Influence of Calcium Perchlorate on the Search for Martian Organic Compounds with MTBSTFA/DMF Derivatization. Astrobiology, 2021, 21, 1137-1156.	1.5	6
7	Physical characterization of a simulated impact-vapor plume using laser ablation of Chicxulub sediments. Planetary and Space Science, 2021, 206, 105311.	0.9	0
8	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
9	Highâ€Temperature HCl Evolutions From Mixtures of Perchlorates and Chlorides With Waterâ€Bearing Phases: Implications for the SAM Instrument in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006173.	1.5	6
10	Constraints on the Mineralogy and Geochemistry of Vera Rubin Ridge, Gale Crater, Mars, From Mars Science Laboratory Sample Analysis at Mars Evolved Gas Analyses. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006309.	1.5	32
11	Influence of Calcium Perchlorate on Organics Under SAMâ€Like Pyrolysis Conditions: Constraints on the Nature of Martian Organics. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006359.	1.5	11
12	Detection of Reduced Sulfur on Vera Rubin Ridge by Quadratic Discriminant Analysis of Volatiles Observed During Evolved Gas Analysis. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006304.	1.5	25
13	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
14	Emission spectra of a simulated Chicxulub impact-vapor plume at the Cretaceousâ€“Paleogene boundary. Icarus, 2020, 346, 113813.	1.1	4
15	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
16	Seasonal Variations in Atmospheric Composition as Measured in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2019, 124, 3000-3024.	1.5	71
17	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
18	A method for monitoring glacial loss and temperature variation using satellite observations: Case study of Pico de Orizaba and IztaccÃhuatl (Mexico). Arctic, Antarctic, and Alpine Research, 2019, 51, 379-396.	0.4	3

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19	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
20	Production of nitrates and perchlorates by laser ablation of sodium chloride in simulated Martian atmospheres. Implications for their formation by electric discharges in dust devils. Life Sciences in Space Research, 2019, 22, 125-136.	1.2	9
21	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
22	Chlorate/Feâ€Bearing Phase Mixtures as a Possible Source of Oxygen and Chlorine Detected by the Sample Analysis at Mars Instrument in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 2920-2938.	1.5	26
23	Identification of Chlorobenzene in the Viking Gas Chromatographâ€Mass Spectrometer Data Sets: Reanalysis of Viking Mission Data Consistent With Aromatic Organic Compounds on Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1674-1683.	1.5	31
24	Major Volatiles Evolved From Eolian Materials in Gale Crater. Geophysical Research Letters, 2018, 45, 10,240.	1.5	19
25	Background levels of methane in Marsâ€™ atmosphere show strong seasonal variations. Science, 2018, 360, 1093-1096.	6.0	224
26	Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars. Science, 2018, 360, 1096-1101.	6.0	369
27	The nitrate/(per)chlorate relationship on Mars. Geophysical Research Letters, 2017, 44, 2643-2651.	1.5	49
28	Large sulfur isotope fractionations in Martian sediments at Gale crater. Nature Geoscience, 2017, 10, 658-662.	5.4	53
29	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
30	A Twoâ€Step Kâ€Ar Experiment on Mars: Dating the Diagenetic Formation of Jarosite from Amazonian Groundwaters. Journal of Geophysical Research E: Planets, 2017, 122, 2803-2818.	1.5	72
31	Detection of trace organics in Martian soil analogs using fluorescence-free surface enhanced 1064-nm Raman Spectroscopy. Optics Express, 2016, 24, 22104.	1.7	2
32	Chemical and Biological Sensing Using Diatom Photonic Crystal Biosilica With In-Situ Growth Plasmonic Nanoparticles. IEEE Transactions on Nanobioscience, 2016, 15, 828-834.	2.2	42
33	Oxidants at the Surface of Mars: A Review in Light of Recent Exploration Results. Astrobiology, 2016, 16, 977-996.	1.5	83
34	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
35	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
36	Optimisation and analysis of the synthesis of a cellular glass-ceramic produced from water purification sludge and clay. Applied Clay Science, 2016, 123, 232-238.	2.6	7

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37	Atmospheric tides in Gale Crater, Mars. Icarus, 2016, 268, 37-49.	1.1	45
38	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
39	MICROORGANISMS, ORGANIC CARBON, AND THEIR RELATIONSHIP WITH OXIDANT ACTIVITY IN HYPER-ARID MARS-LIKE SOILS: IMPLICATIONS FOR SOIL HABITABILITY. Palaios, 2016, 31, 1-9.	0.6	10
40	Organic molecules in the Sheepbed Mudstone, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2015, 120, 495-514.	1.5	375
41	Images from Curiosity: A New Look at Mars. Elements, 2015, 11, 27-32.	0.5	13
42	Curiosity's Mission of Exploration at Gale Crater, Mars. Elements, 2015, 11, 19-26.	0.5	55
43	In Situ Compositional Measurements of Rocks and Soils with the Alpha Particle X-ray Spectrometer on NASA's Mars Rovers. Elements, 2015, 11, 39-44.	0.5	91
44	Determining Mineralogy on Mars with the CheMin X-Ray Diffractometer. Elements, 2015, 11, 45-50.	0.5	39
45	Volatile and Isotopic Imprints of Ancient Mars. Elements, 2015, 11, 51-56.	0.5	12
46	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
47	Transient liquid water and water activity at Gale crater on Mars. Nature Geoscience, 2015, 8, 357-361.	5.4	277
48	Mars methane detection and variability at Gale crater. Science, 2015, 347, 415-417.	6.0	373
49	The imprint of atmospheric evolution in the D/H of Hesperian clay minerals on Mars. Science, 2015, 347, 412-414.	6.0	113
50	Gale crater and impact processes â€“ Curiosityâ€™s first 364 Sols on Mars. Icarus, 2015, 249, 108-128.	1.1	37
51	Compositions of coarse and fine particles in martian soils at gale: A window into the production of soils. Icarus, 2015, 249, 22-42.	1.1	64
52	ChemCam passive reflectance spectroscopy of surface materials at the Curiosity landing site, Mars. Icarus, 2015, 249, 74-92.	1.1	70
53	Comparison of Martian surface ionizing radiation measurements from MSLâ€RAD with Badhwarâ€O'Neill 2011/HZETRN model calculations. Journal of Geophysical Research E: Planets, 2014, 119, 1311-1321.	1.5	42
54	Field method for rapid quantification of labile organic carbon in hyper-arid desert soils validated by two thermal methods. International Journal of Astrobiology, 2014, 13, 182-189.	0.9	2

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55	Trace element geochemistry (Li, Ba, Sr, and Rb) using Curiosity's ChemCam: Early results for Gale crater from Bradbury Landing Site to Rocknest. Journal of Geophysical Research E: Planets, 2014, 119, 255-285.	1.5	86
56	Diurnal variations of energetic particle radiation at the surface of Mars as observed by the Mars Science Laboratory Radiation Assessment Detector. Journal of Geophysical Research E: Planets, 2014, 119, 1345-1358.	1.5	44
57	Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.	6.0	323
58	A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.	6.0	687
59	Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.	6.0	508
60	Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797.	6.0	475
61	In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166.	6.0	224
62	Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.	6.0	246
63	Local variations of bulk hydrogen and chlorineâ€equivalent neutron absorption content measured at the contact between the Sheepbed and Gillespie Lake units in Yellowknife Bay, Gale Crater, using the DAN instrument onboard Curiosity. Journal of Geophysical Research E: Planets, 2014, 119, 1259-1275.	1.5	33
64	Preliminary interpretation of the REMS pressure data from the first 100 sols of the MSL mission. Journal of Geophysical Research E: Planets, 2014, 119, 440-453.	1.5	80
65	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
66	Pressure observations by the Curiosity rover: Initial results. Journal of Geophysical Research E: Planets, 2014, 119, 82-92.	1.5	84
67	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
68	Primordial argon isotope fractionation in the atmosphere of Mars measured by the SAM instrument on Curiosity and implications for atmospheric loss. Geophysical Research Letters, 2013, 40, 5605-5609.	1.5	101
69	X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.	6.0	327
70	Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.	6.0	280
71	Can laboratory tholins mimic the chemistry producing Titan's aerosols? A review in light of ACP experimental results. Planetary and Space Science, 2013, 77, 91-103.	0.9	51
72	Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.	6.0	327

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73	Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.	6.0	367
74	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
75	H2S emissions from Cerro Prieto geothermal power plant, Mexico, and air pollutants measurements in the area. Geothermics, 2013, 46, 55-65.	1.5	21
76	Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.	6.0	326
77	The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.	6.0	134
78	Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.	6.0	215
79	Low Upper Limit to Methane Abundance on Mars. Science, 2013, 342, 355-357.	6.0	103
80	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
81	Isotopes of nitrogen on Mars: Atmospheric measurements byâ€‰Curiosity's mass spectrometer. Geophysical Research Letters, 2013, 40, 6033-6037.	1.5	72
82	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
83	Climatological characteristics in the extreme hyper-arid region of Pampas de La Joya, Peru. Astrobiological approach in four years of observation: 2004â€“2008. International Journal of Astrobiology, 2012, 11, 25-35.	0.9	10
84	The Sample Analysis at Mars Investigation and Instrument Suite. Space Science Reviews, 2012, 170, 401-478.	3.7	435
85	Decomposition of sodium formate and L- and D-alanine in the Pampas de La Joya soils: Implications as a new geochemical analogue to Martian regolith. Advances in Space Research, 2012, 49, 821-833.	1.2	4
86	Soil carbon distribution and site characteristics in hyper-arid soils of the Atacama Desert: A site with Mars-like soils. Advances in Space Research, 2012, 50, 108-122.	1.2	29
87	The Sample Analysis at Mars Investigation and Instrument Suite. , 2012, , 401-478.		5
88	Correction to â€œReanalysis of the Viking results suggests perchlorate and organics at midlatitudes on Marsâ€• Journal of Geophysical Research, 2011, 116, .	3.3	14
89	Reply to comment by Biemann and Bada on â€œReanalysis of the Viking results suggests perchlorate and organics at midlatitudes on Marsâ€• Journal of Geophysical Research, 2011, 116, .	3.3	20
90	Multidisciplinary approach of the hyperarid desert of Pampas de La Joya in southern Peru as a new Mars-like soil analog. Geochimica Et Cosmochimica Acta, 2011, 75, 1975-1991.	1.6	21

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91	Reanalysis of the Viking results suggests perchlorate and organics at midlatitudes on Mars. Journal of Geophysical Research, 2010, 115, .	3.3	289
92	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
93	Thermally evolved gas analysis (TEGA) of hyperarid soils doped with microorganisms from the Atacama Desert in southern Peru: Implications for the Phoenix mission. Advances in Space Research, 2009, 44, 254-266.	1.2	11
94	On the oxidation ability of the NASA Marsâ€1 soil simulant during the thermal volatilization step: Implications for the search of organics on Mars. Geophysical Research Letters, 2009, 36, .	1.5	9
95	Characterization of Organics, Microorganisms, Desert Soils, and Mars-like Soils by Thermal Volatilization Coupled to Mass Spectrometry and Their Implications for the Search for Organics on Mars by Phoenix and Future Space Missions. Astrobiology, 2009, 9, 703-715.	1.5	37
96	Atacama Desert Soil Microbiology. Soil Biology, 2008, , 117-132.	0.6	32
97	Description of four novel psychrophilic, ionizing radiation-sensitive Deinococcus species from alpine environments. International Journal of Systematic and Evolutionary Microbiology, 2008, 58, 1252-1258.	0.8	83
98	Paleoecology reconstruction from trapped gases in a fulgurite from the late Pleistocene of the Libyan Desert. Geology, 2007, 35, 171.	2.0	27
99	Search for past life on Mars: Physical and chemical characterization of minerals of biotic and abiotic origin: 2. Aragonite. Geophysical Research Letters, 2007, 34, .	1.5	16
100	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
101	A comparative radiation degradation of some aromatic polyesters. Polymer Bulletin, 2006, 57, 499-504.	1.7	14
102	The limitations on organic detection in Mars-like soils by thermal volatilization-gas chromatography-MS and their implications for the Viking results. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16089-16094.	3.3	161
103	Titan before Cassini/Huygens: Exo/astrobiology aspects. Advances in Space Research, 2005, 36, 237-240.	1.2	1
104	Organic chemistry induced by corona discharges in Titanâ€™s troposphere: Laboratory simulations. Advances in Space Research, 2005, 36, 274-280.	1.2	26
105	Nitrogen Fixation By Corona Discharge On The Early Precambrian Earth. Origins of Life and Evolution of Biospheres, 2005, 35, 401-409.	0.8	27
106	Production Of Low Molecular Weight Hydrocarbons By Volcanic Eruptions On Early Mars. Origins of Life and Evolution of Biospheres, 2005, 35, 477-487.	0.8	10
107	Prebiotic Chemistry: Laboratory Experiments and Planetary Observation. Advances in Astrobiology and Biogeophysics, 2005, , 449-471.	0.6	2
108	Nitrogen fixation on early Mars by volcanic lightning and other sources. Geophysical Research Letters, 2005, 32, .	1.5	37

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109	Search for past life on Mars: Physical and chemical characterization of minerals of biotic and abiotic origin: part 1 - Calcite. Geophysical Research Letters, 2005, 32, .	1.5	29
110	Did life exist on Mars? Search for organic and inorganic signatures, one of the goals for â€œSAMâ€• (sample analysis at Mars). Advances in Space Research, 2004, 33, 2240-2245.	1.2	32
111	Time resolved study of simulated volcanic lightning by laser induced plasma in a plume of ablated basalt. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	5
112	The Possible Role of Volcanic Lightning in Chemical Evolution. , 2004, , 139-152.		2
113	Some Statistical Aspects Related to the Study of Treeline in Pico de Orizaba. Cellular Origin and Life in Extreme Habitats, 2004, , 223-224.	0.3	0
114	Gaseous Products formed by ?-Irradiation of Poly(l,4-Butylene Terephthalate), Poly(Ethy1ene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542	1.7	1
115	Interpretation of chromatographic data recovered from space missions: decoding of complex chromatograms by Fourier analysis. Planetary and Space Science, 2003, 51, 581-590.	0.9	6
116	Mars-Like Soils in the Atacama Desert, Chile, and the Dry Limit of Microbial Life. Science, 2003, 302, 1018-1021.	6.0	545
117	Experimental simulation of a double return-stroke lightning flash by lasers. Geophysical Research Letters, 2002, 29, 1-1-1-4.	1.5	9
118	Complex Refractive Index of Titan's Aerosol Analogues in the 200â€“900 nm Domain. Icarus, 2002, 156, 515-529.	1.1	84
119	Pyrolysis of Î³-irradiated bisphenol-A polycarbonate. Polymer Bulletin, 2002, 48, 43-51.	1.7	16
120	Formation of prebiotic organics in space: Its simulation on ground and conceptual design of space experiment in earth orbit. Advances in Space Research, 2002, 30, 1495-1500.	1.2	5
121	The physical mechanism of nitric oxide formation in simulated lightning. Geophysical Research Letters, 2001, 28, 3867-3870.	1.5	37
122	Experimental simulation of early martian volcanic lightning. Advances in Space Research, 2001, 27, 201-206.	1.2	16
123	Production of nitrogen oxides by lightning and coronae discharges in simulated early earth, venus and mars environments. Advances in Space Research, 2001, 27, 217-223.	1.2	44
124	Possible contribution of different energy sources to the production of organics in Titan's atmosphere. Advances in Space Research, 2001, 27, 261-270.	1.2	34
125	Production of hydrocarbons and nitriles by electrical processes in Titan's atmosphere. Advances in Space Research, 2001, 27, 271-282.	1.2	32
126	Chemical and optical behaviour of tholins, laboratory analogues of Titan aerosols. Advances in Space Research, 2001, 27, 289-297.	1.2	18

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127	A numerical and experimental study of the time-evolution of a low Mach number jet. Monthly Notices of the Royal Astronomical Society, 2001, 324, 206-212.	1.6	22
128	PM3, AM1, MNDO and MINDO3 semi-empirical IR spectra simulations for compounds of interest for Titan's chemistry: diazomethane, methyl azide, methyl isocyanide, diacetylene and triacetylene. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2001, 57, 505-511.	2.0	10
129	Analysis of complex mixtures recovered from space missions. Journal of Chromatography A, 2001, 939, 69-77.	1.8	32
130	A possible nitrogen crisis for Archaean life due to reduced nitrogen fixation by lightning. Nature, 2001, 412, 61-64.	13.7	234
131	Mexico City air quality: a qualitative review of gas and aerosol measurements (1960â€“2000). Atmospheric Environment, 2001, 35, 4041-4058.	1.9	86
132	Volcanic Lightning and the Availability of Reactive Nitrogen and Phosphorus for Chemical Evolution. , 2001, , 201-210.		3
133	Spatial and Temporary Patterns of Some Climate Parameters Around the Timberline of Pico De Orizaba. , 2001, , 293-301.		2
134	ASTROPHYSICAL JETS. , 2001, , .		1
135	PM3, AM1, MINDO3 semi-empirical IR spectra simulations for some nitriles of interest for Titanâ€™s chemistry. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2000, 56, 1157-1165.	2.0	9
136	Gaseous products formed by Î³-irradiation of bisphenol-A polycarbonate. Polymer Bulletin, 2000, 45, 419-424.	1.7	4
137	Temporal evolution of the shock wave and hot core air in laser induced plasma. Applied Physics Letters, 2000, 77, 3158-3160.	1.5	162
138	Experimental Simulation of Volcanic Lightning on Early Mars. , 2000, , 293-296.		3
139	Tropical Alpine Environments: A Plausible Analog for Ancient and Future Life on Mars. , 2000, , 297-302.		4
140	Nitrogen Fixation in Planetary Environments: A Comparison Between Mildly Reducing and Neutral Atmospheres. , 2000, , 85-96.		0
141	Transport of extraterrestrial biomolecules to the Earth: Problem of thermal stability. Advances in Space Research, 1999, 24, 505-514.	1.2	14
142	In memoriam Cyril Andrew Ponnamperuma 1923-1994. , 1998, 28, 105-108.		1
143	Cyril Ponnamperuma and the origin of life: a bibliography. , 1998, 28, 109-121.		0
144	Power measurements of spark discharge experiments. Origins of Life and Evolution of Biospheres, 1998, 28, 131-153.	0.8	10

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145	Behavior of amino acids when volatilized in the presence of silica gel and pulverized basaltic lava. Origins of Life and Evolution of Biospheres, 1998, 28, 167-193.	0.8	25
146	Pyrolytic Behavior of Amino Acids and Nucleic Acid Bases: Implications for Their Survival during Extraterrestrial Delivery. Icarus, 1998, 134, 269-278.	1.1	27
147	Pyrolysis of alanine and Î±-aminoisobutyric acid: identification of less-volatile products using gas chromatography/Fourier transform infrared spectroscopy/mass spectrometry. Journal of Analytical and Applied Pyrolysis, 1998, 45, 89-102.	2.6	46
148	Nitrogen fixation by volcanic lightning in the early Earth. Geophysical Research Letters, 1998, 25, 3123-3126.	1.5	92
149	A Conceptual Design for Cosmo-biology Experiments in Earth's Orbit.. Uchu Seibutsu Kagaku, 1998, 12, 106-111.	1.0	3
150	Corona Chemistry in Titan.. Uchu Seibutsu Kagaku, 1998, 12, 81-91.	1.0	5
151	Prebiotic Synthesis by Lightning in Martian Volcanic Plumes. , 1998, , 255-260.		5
152	Extraterrestrial Delivery of Simple Biomolecules to the Earth: Survival of Amino Acids and Nucleic Acid Bases. , 1998, , 295-298.		0
153	Computer simulation of IR spectra as a useful tool for GC/FTIR/MS identification of unusual amidine products of amino acid condensation. , 1997, 3090, 372.		5
154	Corona discharge of Titan's troposphere. Advances in Space Research, 1997, 19, 1121-1133.	1.2	36
155	Identification of hexahydroimidazo[1,2-a]pyrazine-3,6-diones and hexahydroimidazo[1,2-a]imidazo[1,2-d]pyrazine-3,8-diones, unusual products of silica-catalyzed amino acid thermal condensation and products of their thermal decomposition using coupled high-performance liquid chromatographyâ€“particle beam mass spectrometry and gas chromatographyâ€“Fourier transform infrared spectroscopyâ€“mass spectrometry. Journal of Chromatography A, 1997, 776, 255-273.	1.8	41
156	Possible role of volcanic ash-gas clouds in the Earth's prebiotic chemistry. Origins of Life and Evolution of Biospheres, 1996, 26, 173-194.	0.8	37
157	On the survivability of an enantiomeric excess of amino acids in comet nuclei during the decay of26Al and other radionuclides. Astrophysics and Space Science, 1996, 236, 49-60.	0.5	7
158	Dust particles in the atmospheres of terrestrial planets and their roles for prebiotic chemistry: An overview. Astrophysics and Space Science, 1996, 236, 61-75.	0.5	3
159	An inquiry into the selective protection of glycine during the radiolysis of glycine-alanine mixtures in aqueous solutions and its implications to the preservation of optically active amino acids in the early earth. Journal of Biological Physics, 1996, 22, 87-100.	0.7	2
160	Lightning Associated to Archean Volcanic Ash-Gas Clouds. , 1996, , 123-142.		11
161	Dust in the universe: Implications for terrestrial prebiotic chemistry. Origins of Life and Evolution of Biospheres, 1995, 25, 457-493.	0.8	11
162	Chemical studies on the possible existence of life on Mars. Advances in Space Research, 1995, 15, 177-184.	1.2	2

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163	Role of trace metal ions in chemical evolution. The case of free-radical reactions. Advances in Space Research, 1995, 15, 357-364.	1.2	5
164	An extended cellular space method for simulating autocatalytic oligonucleotides. Computers & Chemistry, 1994, 18, 33-43.	1.2	7
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