Jamie E Elsila

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2398349/publications.pdf

Version: 2024-02-01

65 papers	3,992 citations	117625 34 h-index	144013 57 g-index
66 all docs	66 docs citations	66 times ranked	3057 citing authors

#	Article	IF	Citations
1	Cometary glycine detected in samples returned by Stardust. Meteoritics and Planetary Science, 2009, 44, 1323-1330.	1.6	397
2	Understanding prebiotic chemistry through the analysis of extraterrestrial amino acids and nucleobases in meteorites. Chemical Society Reviews, 2012, 41, 5459.	38.1	301
3	Laboratory experiments of Titan tholin formed in cold plasma at various pressures: implications for nitrogen-containing polycyclic aromatic compounds in Titan haze. Icarus, 2004, 168, 344-366.	2.5	284
4	The effects of parent body processes on amino acids in carbonaceous chondrites. Meteoritics and Planetary Science, 2010, 45, 1948-1972.	1.6	218
5	Mechanisms of Amino Acid Formation in Interstellar Ice Analogs. Astrophysical Journal, 2007, 660, 911-918.	4.5	192
6	Radar-Enabled Recovery of the Sutterâ€™s Mill Meteorite, a Carbonaceous Chondrite Regolith Breccia. Science, 2012, 338, 1583-1587.	12.6	191
7	Origin and Evolution of Prebiotic Organic Matter As Inferred from the Tagish Lake Meteorite. Science, 2011, 332, 1304-1307.	12.6	189
8	The Search for Chiral Asymmetry as a Potential Biosignature in our Solar System. Chemical Reviews, 2020, 120, 4660-4689.	47.7	156
9	Meteoritic Amino Acids: Diversity in Compositions Reflects Parent Body Histories. ACS Central Science, 2016, 2, 370-379.	11.3	126
10	Unusual nonterrestrial <scp>l</scp>â€proteinogenic amino acid excesses in the Tagish Lake meteorite. Meteoritics and Planetary Science, 2012, 47, 1347-1364.	1.6	106
11	Formation of Uracil from the Ultraviolet Photo-Irradiation of Pyrimidine in Pure H₂O Ices. Astrobiology, 2009, 9, 683-695.	3.0	99
12	Side Group Addition to the Polycyclic Aromatic Hydrocarbon Coronene by Ultraviolet Photolysis in Cosmic Ice Analogs. Astrophysical Journal, 2002, 576, 1115-1120.	4.5	97
13	The 2140 cmâˆ'1(4.673 Microns) Solid CO Band: The Case for Interstellar O2and N2and the Photochemistry of Nonpolar Interstellar Ice Analogs. Astrophysical Journal, 1997, 479, 818-838.	4.5	91
14	Compoundâ€specific carbon, nitrogen, and hydrogen isotopic ratios for amino acids in CM and CR chondrites and their use in evaluating potential formation pathways. Meteoritics and Planetary Science, 2012, 47, 1517-1536.	1.6	77
15	Side Group Addition to the Polycyclic Aromatic Hydrocarbon Coronene by Proton Irradiation in Cosmic Ice Analogs. Astrophysical Journal, 2003, 582, L25-L29.	4.5	73
16	A propensity for <i>n</i>â€ï‰â€amino acids in thermally altered Antarctic meteorites. Meteoritics and Planetary Science, 2012, 47, 374-386.	1.6	66
17	The Origin and Evolution of Organic Matter in Carbonaceous Chondrites and Links to Their Parent Bodies. , 2018, , 205-271.		60
18	Alkylation of polycyclic aromatic hydrocarbons in carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 2005, 69, 1349-1357.	3.9	58

#	Article	IF	Citations
19	Evidence that polycyclic aromatic hydrocarbons in two carbonaceous chondrites predate parent-body formation. Geochimica Et Cosmochimica Acta, 2003, 67, 1429-1436.	3.9	57
20	The amino acid composition of the Sutter's Mill <scp>CM</scp>2 carbonaceous chondrite. Meteoritics and Planetary Science, 2014, 49, 2074-2086.	1.6	57
21	Assessment and control of organic and other contaminants associated with the Stardust sample return from comet 81P/Wild 2. Meteoritics and Planetary Science, 2010, 45, 406-433.	1.6	55
22	Does aspartic acid racemization constrain the depth limit of the subsurface biosphere?. Geobiology, 2014, 12, 1-19.	2.4	52
23	Extraterrestrial amino acids in the Almahata Sitta meteorite. Meteoritics and Planetary Science, 2010, 45, 1695-1709.	1.6	50
24	Extraterrestrial amino acids identified in metalâ€rich <scp>CH</scp> and <scp>CB</scp> carbonaceous chondrites from Antarctica. Meteoritics and Planetary Science, 2013, 48, 390-402.	1.6	48
25	Ultraviolet photolysis of anthracene in H₂O interstellar ice analogs: Potential connection to meteoritic organics. Meteoritics and Planetary Science, 2007, 42, 2035-2041.	1.6	46
26	The effects of parent-body hydrothermal heating on amino acid abundances in CI-like chondrites. Polar Science, 2014, 8, 255-263.	1.2	46
27	Pathways to Meteoritic Glycine and Methylamine. ACS Earth and Space Chemistry, 2017, 1, 3-13.	2.7	46
28	Assessing the origins of aliphatic amines in the Murchison meteorite from their compound-specific carbon isotopic ratios and enantiomeric composition. Geochimica Et Cosmochimica Acta, 2014, 141, 331-345.	3.9	45
29	A search for amino acids and nucleobases in the Martian meteorite Roberts Massif 04262 using liquid chromatographyâ€mass spectrometry. Meteoritics and Planetary Science, 2013, 48, 786-795.	1.6	43
30	Factors Affecting Quantitative Analysis in Laser Desorption/Laser Ionization Mass Spectrometry. Analytical Chemistry, 2004, 76, 2430-2437.	6.5	42
31	Extraterrestrial amino acids and Lâ€enantiomeric excesses in the <scp>CM</scp>2 carbonaceous chondrites Aguas Zarcas and Murchison. Meteoritics and Planetary Science, 2021, 56, 148-173.	1.6	42
32	Abundant extraterrestrial amino acids in the primitive CM carbonaceous chondrite Asuka 12236. Meteoritics and Planetary Science, 2020, 55, 1979-2006.	1.6	38
33	UV photolysis of quinoline in interstellar ice analogs. Meteoritics and Planetary Science, 2006, 41, 785-796.	1.6	37
34	Hydrothermal Decomposition of Amino Acids and Origins of Prebiotic Meteoritic Organic Compounds. ACS Earth and Space Chemistry, 2018, 2, 588-598.	2.7	37
35	Distribution and Stable Isotopic Composition of Amino Acids from Fungal Peptaibiotics: Assessing the Potential for Meteoritic Contamination. Astrobiology, 2011, 11, 123-133.	3.0	36
36	Amino acid analyses of R and CK chondrites. Meteoritics and Planetary Science, 2015, 50, 470-482.	1.6	36

#	Article	IF	Citations
37	Methodologies for Analyzing Soluble Organic Compounds in Extraterrestrial Samples: Amino Acids, Amines, Monocarboxylic Acids, Aldehydes, and Ketones. Life, 2019, 9, 47.	2.4	31
38	Indigenous aliphatic amines in the aqueously altered Orgueil meteorite. Meteoritics and Planetary Science, 2015, 50, 1733-1749.	1.6	30
39	The SariÃ§iÃ§ek howardite fall in Turkey: Source crater of <scp>HED</scp> meteorites on Vesta and impact risk of Vestoids. Meteoritics and Planetary Science, 2019, 54, 953-1008.	1.6	30
40	Analyses of Aliphatic Aldehydes and Ketones in Carbonaceous Chondrites. ACS Earth and Space Chemistry, 2019, 3, 463-472.	2.7	30
41	Aliphatic amines in Antarctic CR2, CM2, and CM1/2 carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 2016, 189, 296-311.	3.9	29
42	Analysis of amino acids, hydroxy acids, and amines in CR chondrites. Meteoritics and Planetary Science, 2020, 55, 2422-2439.	1.6	25
43	An evolutionary connection between interstellar ices and IDPs? Clues from mass spectroscopy measurements of laboratory simulations. Advances in Space Research, 2004, 33, 67-71.	2.6	24
44	Compoundâ€specific carbon isotope compositions of aldehydes and ketones in the Murchison meteorite. Meteoritics and Planetary Science, 2019, 54, 142-156.	1.6	24
45	Formation of carbon-carbon bonds in the photochemical alkylation of polycyclic aromatic hydrocarbons. Origins of Life and Evolution of Biospheres, 2003, 33, 17-35.	1.9	22
46	Rapid Radiolytic Degradation of Amino Acids in the Martian Shallow Subsurface: Implications for the Search for Extinct Life. Astrobiology, 2022, 22, 1099-1115.	3.0	17
47	Inconclusive evidence for nonterrestrial isoleucine enantiomeric excesses in primitive meteorites. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3288-E3288.	7.1	16
48	New insights into the heterogeneity of the Tagish Lake meteorite: Soluble organic compositions of variously altered specimens. Meteoritics and Planetary Science, 2019, 54, 1283-1302.	1.6	16
49	The origin of amino acids in lunar regolith samples. Geochimica Et Cosmochimica Acta, 2016, 172, 357-369.	3.9	15
50	Molecular distribution, ¹³Câ€isotope, and enantiomeric compositions of carbonaceous chondrite monocarboxylic acids. Meteoritics and Planetary Science, 2019, 54, 415-430.	1.6	15
51	Extracts of impact breccia samples from Sudbury, Gardnos, and Ries impact craters and the effects of aggregation on C60 detection. Geochimica Et Cosmochimica Acta, 2005, 69, 2891-2899.	3.9	13
52	Extraterrestrial organic compounds and cyanide in the CM2 carbonaceous chondrites Aguas Zarcas and Murchison. Meteoritics and Planetary Science, 2020, 55, 1509-1524.	1.6	11
53	Distribution of aliphatic amines in <scp>CO</scp>,<scp> CV</scp>, and <scp>CK</scp> carbonaceous chondrites and relation to mineralogy and processing history. Meteoritics and Planetary Science, 2017, 52, 2632-2646.	1.6	10
54	Amino acid abundances and compositions in iron and stonyâ€iron meteorites. Meteoritics and Planetary Science, 2021, 56, 586-600.	1.6	10

#	Article	IF	Citations
55	Carbon isotopic fractionation in Fischerâ€Tropschâ€type reactions and relevance to meteorite organics. Meteoritics and Planetary Science, 2012, 47, 1029-1034.	1.6	8
56	A compact tandem two-step laser time-of-flight mass spectrometer for in situ analysis of non-volatile organics on planetary surfaces. , 2014, , .		6
57	Molecular analyzer for Complex Refractory Organic-rich Surfaces (MACROS). , 2017, , .		5
58	Extraterrestrial hydroxy amino acids in CM and CR carbonaceous chondrites. Meteoritics and Planetary Science, 2021, 56, 1005-1023.	1.6	4
59	Liquid chromatography-mass spectrometry interface for detection of extraterrestrial organics. , 2014, , .		3
60	Low total abundances and a predominance of n â€Ï‰â€amino acids in enstatite chondrites: Implications for thermal stability of amino acids in the inner solar system. Meteoritics and Planetary Science, 2021, 56, 2118.	1.6	1
61	Experimental and Theoretical Constraints on Amino Acid Formation from PAHs in Asteroidal Settings. ACS Earth and Space Chemistry, 2022, 6, 468-481.	2.7	1
62	Frontiers in Prebiotic Chemistry and Early Earth Environments. Origins of Life and Evolution of Biospheres, 0, , .	1.9	1
63	Cosmic Heritage of Solar System Organic Matter. , 2006, , .		0
64	Correlating Mineralogy and Amino Acid Contents of Milligram-Scale Murchison Carbonaceous Chondrite Samples. Microscopy and Microanalysis, 2015, 21, 2263-2264.	0.4	0
65	Future planetary instrument capabilities made possible by micro- and nanotechnology. , 2019, , .		0