Pascale Ehrenfreund

List of Publications by Year
in descending order

69 papers	4,692 citations	145106 33 h-index	139680 61 g-index
69 all docs	69 docs citations	69 times ranked	4890 citing authors

#	Article	IF	Citations
1	Microbial Metabolism of Amino Acidsâ€”Biologically Induced Removal of Glycine and the Resulting Fingerprint as a Potential Biosignature. Frontiers in Astronomy and Space Sciences, 2022, 9, .	1.1	3
2	Taxonomic and functional analyses of intact microbial communities thriving in extreme, astrobiology-relevant, anoxic sites. Microbiome, 2021, 9, 50.	4.9	14
3	The Detection of Elemental Signatures of Microbes in Martian Mudstone Analogs Using High Spatial Resolution Laser Ablation Ionization Mass Spectrometry. Astrobiology, 2020, 20, 1224-1235.	1.5	15
4	Biosignature Analysis of Mars Soil Analogs from the Atacama Desert: Challenges and Implications for Future Missions to Mars. Astrobiology, 2020, 20, 766-784.	1.5	17
5	ORIGIN: a novel and compact Laser Desorption â€“ Mass Spectrometry system for sensitive in situ detection of amino acids on extraterrestrial surfaces. Scientific Reports, 2020, 10, 9641.	1.6	24
6	Detectability of biosignatures in a low-biomass simulation of martian sediments. Scientific Reports, 2019, 9, 9706.	1.6	19
7	Proteomic and Metabolomic Characteristics of Extremophilic Fungi Under Simulated Mars Conditions. Frontiers in Microbiology, 2019, 10, 1013.	1.5	36
8	Microbial Communities in Sediments From Four Mildly Acidic Ephemeral Salt Lakes in the Yilgarn Craton (Australia) â€“ Terrestrial Analogs to Ancient Mars. Frontiers in Microbiology, 2019, 10, 779.	1.5	15
9	Astrobiology and the Possibility of Life on Earth and Elsewhereâ€¦. Space Science Reviews, 2017, 209, 1-42.	3.7	66
10	Decay of COSAC and Ptolemy mass spectra at comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2017, 600, A56.	2.1	5
11	Earth as a Tool for Astrobiologyâ€”A European Perspective. Space Science Reviews, 2017, 209, 43-81.	3.7	68
12	Space as a Tool for Astrobiology: Review and Recommendations for Experimentations in Earth Orbit and Beyond. Space Science Reviews, 2017, 209, 83-181.	3.7	54
13	Organic compounds on comet 67P/Churyumov-Gerasimenko revealed by COSAC mass spectrometry. Science, 2015, 349, aab0689.	6.0	376
14	The Significance of Microbe-Mineral-Biomarker Interactions in the Detection of Life on Mars and Beyond. Astrobiology, 2015, 15, 492-507.	1.5	32
15	O/OREOS Nanosatellite. , 2015, , 1747-1749.		0
16	Biota and Biomolecules in Extreme Environments on Earth: Implications for Life Detection on Mars. Life, 2014, 4, 535-565.	1.1	34
17	Organics Exposure in Orbit (OREOcube): A Next-Generation Space Exposure Platform. Langmuir, 2014, 30, 13217-13227.	1.6	14
18	SEVO ON THE GROUND: DESIGN OF A LABORATORY SOLAR SIMULATION IN SUPPORT OF THE <i>O/OREOS</i> MISSION. Astrophysical Journal, Supplement Series, 2014, 210, 15.	3.0	17

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19	The Organism/Organic Exposure to Orbital Stresses (O/OREOS) Satellite: Radiation Exposure in Low-Earth Orbit and Supporting Laboratory Studies of Iron Tetraphenylporphyrin Chloride. Astrobiology, 2014, 14, 87-101.	1.5	15
20	Overview of current capabilities and research and technology developments for planetary protection. Advances in Space Research, 2014, 54, 221-240.	1.2	37
21	O/OREOS Nanosatellite. , 2014, , 1-3.		0
22	Responsible Space Exploration and Use: Balancing Stakeholder Interests. New Space, 2013, 1, 60-72.	0.4	21
23	Prebiotic Matter in Space. Proceedings of the International Astronomical Union, 2012, 10, 709-710.	0.0	0
24	Polycyclic Aromatic Hydrocarbons as Plausible Prebiotic Membrane Components. Origins of Life and Evolution of Biospheres, 2012, 42, 295-306.	0.8	55
25	Supporting Mars exploration: BIOMEX in Low Earth Orbit and further astrobiological studies on the Moon using Raman and PanCam technology. Planetary and Space Science, 2012, 74, 103-110.	0.9	77
26	The O/OREOS Mission: First Science Data from the Space Environment Viability of Organics (SEVO) Payload. Astrobiology, 2012, 12, 841-853.	1.5	32
27	Toward a global space exploration program: A stepping stone approach. Advances in Space Research, 2012, 49, 2-48.	1.2	50
28	The development of the Space Environment Viability of Organics (SEVO) experiment aboard the Organism/Organic Exposure to Orbital Stresses (O/OREOS) satellite. Planetary and Space Science, 2012, 60, 121-130.	0.9	22
29	PCR-based analysis of microbial communities during the EuroGeoMars campaign at Mars Desert Research Station, Utah. International Journal of Astrobiology, 2011, 10, 177-190.	0.9	17
30	Cubesats: Cost-effective science and technology platforms for emerging and developing nations. Advances in Space Research, 2011, 47, 663-684.	1.2	313
31	A Multiple-Choice Essay. Astrobiology, 2011, 11, 737-741.	1.5	1
32	The O/OREOS Mission: First Science Data from the Space Environment Survivability of Living Organisms (SESLO) Payload. Astrobiology, 2011, 11, 951-958.	1.5	64
33	A wide variety of putative extremophiles and large beta-diversity at the Mars Desert Research Station (Utah). International Journal of Astrobiology, 2011, 10, 191-207.	0.9	37
34	The evolution of organic matter in space. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 538-554.	1.6	36
35	Cosmic Carbon Chemistry: From the Interstellar Medium to the Early Earth. Cold Spring Harbor Perspectives in Biology, 2010, 2, a002097-a002097.	2.3	77
36	Fullerenes and Cosmic Carbon. Science, 2010, 329, 1159-1160.	6.0	52

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37	ESSC-ESF Position Paperâ€"Science-Driven Scenario for Space Exploration: Report from the European Space Sciences Committee (ESSC). Astrobiology, 2009, 9, 23-41.	1.5	13
38	Sample return of interstellar matter (SARIM). Experimental Astronomy, 2009, 23, 303-328.	1.6	13
39	Simulating Martian regolith in the laboratory. Planetary and Space Science, 2008, 56, 2009-2025.	0.9	61
40	Extraterrestrial nucleobases in the Murchison meteorite. Earth and Planetary Science Letters, 2008, 270, 130-136.	1.8	317
41	Polycyclic aromatic hydrocarbons and amino acids in meteorites and ice samples from LaPaz Icefield, Antarctica. Meteoritics and Planetary Science, 2008, 43, 1465-1480.	0.7	30
42	The Urey Instrument: An Advanced In Situ Organic and Oxidant Detector for Mars Exploration. Astrobiology, 2008, 8, 583-595.	1.5	40
43	Effect of Shadowing on Survival of Bacteria under Conditions Simulating the Martian Atmosphere and UV Radiation. Applied and Environmental Microbiology, 2008, 74, 959-970.	1.4	112
44	Amino acids in Antarctic CM1 meteorites and their relationship to other carbonaceous chondrites. Meteoritics and Planetary Science, 2007, 42, 81-92.	0.7	60
45	Organic amine biomarker detection in the Yungay region of the Atacama Desert with the Urey instrument. Journal of Geophysical Research, 2007, 112, .	3.3	49
46	Searching for Life on Mars: Selection of Molecular Targets for ESA's Aurora ExoMars Mission. Astrobiology, 2007, 7, 578-604.	1.5	172
47	The ORGANICS experiment on BIOPAN V: UV and space exposure of aromatic compounds. Planetary and Space Science, 2007, 55, 383-400.	0.9	34
48	Fullerenes and Related Carbon Compounds in Interstellar Environments. , 2006, , 53-69.		2
49	Analysis and survival of amino acids in Martian regolith analogs. Meteoritics and Planetary Science, 2006, 41, 391-405.	0.7	47
50	Carbon molecules in space: from astrochemistry to astrobiology. Faraday Discussions, 2006, 133, 277.	1.6	93
51	Experimentally Tracing the Key Steps in the Origin of Life: The Aromatic World. Astrobiology, 2006, 6, 490-520.	1.5	135
52	Diffuse interstellar bands and PAHs in the Galaxy and beyond. AIP Conference Proceedings, 2006, , .	0.3	3
53	The effects of Martian near surface conditions on the photochemistry of amino acids. Planetary and Space Science, 2006, 54, 296-302.	0.9	71
54	Sulfate minerals and organic compounds on Mars. Geology, 2006, 34, 357.	2.0	138

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55	Astronomical searches for nitrogen heterocycles. Advances in Space Research, 2005, 36, 137-145.	1.2	88
56	New strategies to detect life on Mars. Astronomy and Geophysics, 2005, 46, 6.26-6.27.	0.1	23
57	Development and evaluation of a microdevice for amino acid biomarker detection and analysis on Mars. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 1041-1046.	3.3	257
58	Amino acid photostability on the Martian surface. Meteoritics and Planetary Science, 2005, 40, 1185-1193.	0.7	130
59	Searches for interstellar molecules of potential prebiotic importance. Advances in Space Research, 2004, 33, 31-39.	1.2	55
60	Future Perspectives and Strategies in Astrobiology. , 2004, , 477-512.		0
61	A search for interstellar pyrimidine. Monthly Notices of the Royal Astronomical Society, 2003, 345, 650-656.	1.6	73
62	Ice Chemistry in Space. , 2003, , 317-356.		19
63	Molecules in space. Physics World, 2003, 16, 35-38.	0.0	11
64	Composition of Comets and Interstellar Dust. Highlights of Astronomy, 2002, 12, 229-232.	0.0	1
65	From Molecular Clouds to the Origin of Life. , 2002, , 7-23.		19
66	Organic Molecules in the Interstellar Medium, Comets, and Meteorites: A Voyage from Dark Clouds to the Early Earth. Annual Review of Astronomy and Astrophysics, 2000, 38, 427-483.	8.1	874
67	An ISO View on Interstellar and Cometary Ice Chemistry. , 1999, 90, 233-238.		10
68	The Interstellar Medium: A General Introduction. Astrophysics and Space Science Library, 1999, , 1-36.	1.0	6
69	Apolar ices. Faraday Discussions, 1998, 109, 463-474.	1.6	21