Christopher H House

List of Publications by Year
in descending order

65 papers	7,554 citations	126907 33 h-index	114465 63 g-index
66 all docs	66 docs citations	66 times ranked	6556 citing authors

#	Article	IF	Citations
1	Methane-Consuming Archaea Revealed by Directly Coupled Isotopic and Phylogenetic Analysis. Science, 2001, 293, 484-487.	12.6	957
2	Manganese- and Iron-Dependent Marine Methane Oxidation. Science, 2009, 325, 184-187.	12.6	873
3	Distributions of Microbial Activities in Deep Subseafloor Sediments. Science, 2004, 306, 2216-2221.	12.6	681
4	Heterotrophic Archaea dominate sedimentary subsurface ecosystems off Peru. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3846-3851.	7.1	654
5	Multiple archaeal groups mediate methane oxidation in anoxic cold seep sediments. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7663-7668.	7.1	604
6	Metagenomic signatures of the Peru Margin subseafloor biosphere show a genetically distinct environment. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10583-10588.	7.1	484
7	Carbonaceous meteorites contain a wide range of extraterrestrial nucleobases. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13995-13998.	7.1	460
8	Whole genome-based phylogenetic analysis of free-living microorganisms. Nucleic Acids Research, 1999, 27, 4218-4222.	14.5	293
9	Background levels of methane in Marsâ€™ atmosphere show strong seasonal variations. Science, 2018, 360, 1093-1096.	12.6	224
10	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.	3.6	168
11	Carbon isotopic composition of individual Precambrian microfossils. Geology, 2000, 28, 707.	4.4	157
12	Consumption of Methane and CO2 by Methanotrophic Microbial Mats from Gas Seeps of the Anoxic Black Sea. Applied and Environmental Microbiology, 2007, 73, 2271-2283.	3.1	157
13	Using Homolog Groups to Create a Whole-Genomic Tree of Free-Living Organisms: An Update. Journal of Molecular Evolution, 2002, 54, 539-547.	1.8	118
14	Methyl sulfides as intermediates in the anaerobic oxidation of methane. Environmental Microbiology, 2008, 10, 162-173.	3.8	118
15	Metal limitation of cyanobacterial N2fixation and implications for the Precambrian nitrogen cycle. Geobiology, 2006, 4, 285-297.	2.4	115
16	The Stepwise Evolution of Early Life Driven by Energy Conservation. Molecular Biology and Evolution, 2006, 23, 1286-1292.	8.9	109
17	Patterns of ¹⁵N assimilation and growth of methanotrophic ANMEâ€2 archaea and sulfateâ€reducing bacteria within structured syntrophic consortia revealed by FISHâ€SIMS. Environmental Microbiology, 2009, 11, 1777-1791.	3.8	85
18	Evidence for a Diagenetic Origin of Vera Rubin Ridge, Gale Crater, Mars: Summary and Synthesis of <i>Curiosity</i>'s Exploration Campaign. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006527.	3.6	69

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19	A Lacustrine Paleoenvironment Recorded at Vera RubinRidge, Gale Crater: Overview of the Sedimentology and Stratigraphy Observed by the Mars ScienceLaboratory Curiosity Rover. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006307.	3.6	69
20	Geobiological investigations using secondary ion mass spectrometry: microanalysis of extant and paleoâ€microbial processes. Geobiology, 2009, 7, 360-372.	2.4	64
21	Geobiological analysis using whole genome-based tree building applied to the Bacteria, Archaea, and Eukarya. Geobiology, 2003, 1, 15-26.	2.4	63
22	High rates of anaerobic methanotrophy at low sulfate concentrations with implications for past and present methane levels. Geobiology, 2011, 9, 131-139.	2.4	58
23	Microbial stratification in deeply buried marine sediment reflects changes in sulfate/methane profiles. Geobiology, 2005, 3, 287-295.	2.4	54
24	Large sulfur isotope fractionations in Martian sediments at Gale crater. Nature Geoscience, 2017, 10, 658-662.	12.9	53
25	The Emergence of Life. Space Science Reviews, 2019, 215, 1.	8.1	53
26	Extensive carbon isotopic heterogeneity among methane seep microbiota. Environmental Microbiology, 2009, 11, 2207-2215.	3.8	51
27	Late-stage diagenetic concretions in the Murray formation, Gale crater, Mars. Icarus, 2019, 321, 866-890.	2.5	50
28	Investigation of pyridine carboxylic acids in CM2 carbonaceous chondrites: Potential precursor molecules for ancient coenzymes. Geochimica Et Cosmochimica Acta, 2014, 136, 1-12.	3.9	47
29	Amino acid signatures of salinity on an environmental scale with a focus on the Dead Sea. Environmental Microbiology, 2010, 12, 2613-2623.	3.8	45
30	Ceres: Astrobiological Target and Possible Ocean World. Astrobiology, 2020, 20, 269-291.	3.0	43
31	The Chemostratigraphy of the Murray Formation and Role of Diagenesis at Vera Rubin Ridge in Gale Crater, Mars, as Observed by the ChemCam Instrument. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006320.	3.6	41
32	Indigenous and exogenous organics and surfaceâ€"atmosphere cycling inferred from carbon and oxygen isotopes at Gale crater. Nature Astronomy, 2020, 4, 526-532.	10.1	41
33	The first microbiological contamination assessment by deep-sea drilling and coring by the D/V Chikyu at the Iheya North hydrothermal field in the Mid-Okinawa Trough (IODP Expedition 331). Frontiers in Microbiology, 2013, 4, 327.	3.5	40
34	Large and robust lenticular microorganisms on the young Earth. Precambrian Research, 2017, 296, 112-119.	2.7	38
35	Depleted carbon isotope compositions observed at Gale crater, Mars. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	33
36	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.	3.6	32

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37	Iron Mobility During Diagenesis at Vera Rubin Ridge, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006299.	3.6	30
38	Organometallic compounds as carriers of extraterrestrial cyanide in primitive meteorites. Nature Communications, 2019, 10, 2777.	12.8	28
39	Nitrogen heterocycles form peptide nucleic acid precursors in complex prebiotic mixtures. Scientific Reports, 2019, 9, 9281.	3.3	26
40	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.	3.6	25
41	Dynamics and Persistence of Dead Sea Microbial Populations as Shown by High-Throughput Sequencing of rRNA. Applied and Environmental Microbiology, 2012, 78, 2489-2492.	3.1	22
42	Extraformational sediment recycling on Mars. , 2020, 16, 1508-1537.		20
43	Origin of Life on Mars: Suitability and Opportunities. Life, 2021, 11, 539.	2.4	18
44	Orbital and Inâ€Situ Investigation of Periodic Bedrock Ridges in Glen Torridon, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	18
45	The Tree of Life Viewed Through the Contents of Genomes. Methods in Molecular Biology, 2009, 532, 141-161.	0.9	16
46	Coupling of anaerobic waste treatment to produce protein- and lipid-rich bacterial biomass. Life Sciences in Space Research, 2017, 15, 32-42.	2.3	16
47	Marine Subsurface Microbial Community Shifts Across a Hydrothermal Gradient in Okinawa Trough Sediments. Archaea, 2016, 2016, 1-12.	2.3	15
48	The Apparent Involvement of ANMEs in Mineral Dependent Methane Oxidation, as an Analog for Possible Martian Methanotrophy. Life, 2011, 1, 19-33.	2.4	14
49	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, .	7.1	14
50	Early Archean planktonic mode of life: Implications from fluid dynamics of lenticular microfossils. Geobiology, 2019, 17, 113-126.	2.4	12
51	Evolved Gas Analyses of Sedimentary Rocks From the Glen Torridon Clayâ€Bearing Unit, Gale Crater, Mars: Results From the Mars Science Laboratory Sample Analysis at Mars Instrument Suite. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	12
52	Microbial Diversity in Sub-Seafloor Sediments from the Costa Rica Margin. Geosciences (Switzerland), 2019, 9, 218.	2.2	11
53	The Grayness of the Origin of Life. Life, 2021, 11, 498.	2.4	10
54	Linking taxonomy with environmental geochemistry and why it matters to the field of geobiology. Geobiology, 2007, 5, 1-3.	2.4	8

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55	Penciling in details of the Hadean. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14410-14411.	7.1	6
56	Oxidized and Reduced Sulfur Observed by the Sample Analysis at Mars (SAM) Instrument Suite on the Curiosity Rover Within the Glen Torridon Region at Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	6
57	Vesicles Protect Activated Acetic Acid. Astrobiology, 2014, 14, 859-865.	3.0	5
58	In Situ Growth of Halophilic Bacteria in Saline Fracture Fluids from 2.4 km below Surface in the Deep Canadian Shield. Life, 2020, 10, 307.	2.4	5
59	Biogeography of thermophiles and predominance of Thermus scotoductus in domestic water heaters. Extremophiles, 2019, 23, 119-132.	2.3	4
60	THINGS ARE NOT ALWAYS AS THEY SEEM: DETANGLING INTERSECTING PLANAR AND CURVI-PLANAR VEINS AND FRACTURES FROM PRIMARY BEDDING IN THE VERA RUBIN RIDGE MEMBER, MURRAY FORMATION, MARS. , 2018, , .		3
61	Reply to Schoell: Implications of a temperature trend in methane evolved from Cumberland during Mars evolved gas analyses experiments. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	3
62	Genome-wide gene order distances support clustering the gram-positive bacteria. Frontiers in Microbiology, 2015, 5, 785.	3.5	2
63	Spontaneous Oligomerization of Nucleotide Alternatives in Aqueous Solutions. Origins of Life and Evolution of Biospheres, 2017, 47, 3-11.	1.9	2
64	To Build a Pre-RNA. Astrobiology, 2003, 3, 245-247.	3.0	1
65	Convergent Microbial Community Formation in Replicate Anaerobic Reactors Inoculated from Different Sources and Treating Ersatz Crew Waste. Life, 2021, 11, 1374.	2.4	1