

# David J Des Marais

## List of Publications by Year in descending order

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Version: 2024-02-01

29  
papers

5,299  
citations

331670

21  
h-index

580821

25  
g-index

30  
all docs

30  
docs citations

30  
times ranked

4435  
citing authors

#	ARTICLE	IF	CITATIONS
1	Orbital Identification of Carbonate-Bearing Rocks on Mars. <i>Science</i> , 2008, 322, 1828-1832.	12.6	560
2	Latitudinal variations in plankton $\delta^{13}\text{C}$ : implications for $\text{CO}_2$ and productivity in past oceans. <i>Nature</i> , 1989, 341, 516-518.	27.8	519
3	Identification of hydrated silicate minerals on Mars using MRO's CRISM: Geologic context near Nili Fossae and implications for aqueous alteration. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	483
4	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	445
5	Remote Sensing of Planetary Properties and Biosignatures on Extrasolar Terrestrial Planets. <i>Astrobiology</i> , 2002, 2, 153-181.	3.0	433
6	Carbon isotope evidence for the stepwise oxidation of the Proterozoic environment. <i>Nature</i> , 1992, 359, 605-609.	27.8	415
7	Clay minerals in delta deposits and organic preservation potential on Mars. <i>Nature Geoscience</i> , 2008, 1, 355-358.	12.9	293
8	The NASA Astrobiology Roadmap. <i>Astrobiology</i> , 2008, 8, 715-730.	3.0	278
9	Preservation of Martian Organic and Environmental Records: Final Report of the Mars Biosignature Working Group. <i>Astrobiology</i> , 2011, 11, 157-181.	3.0	255
10	The role of microbial mats in the production of reduced gases on the early Earth. <i>Nature</i> , 2001, 412, 324-327.	27.8	245
11	Precambrian superplumes and supercontinents: a record in black shales, carbon isotopes, and paleoclimates?. <i>Precambrian Research</i> , 2001, 106, 239-260.	2.7	226
12	Stable isotopic compositions of carbonates from the Mesoproterozoic Bangemall group, northwestern Australia. <i>Chemical Geology</i> , 1995, 123, 153-171.	3.3	169
13	Biosignature Preservation and Detection in Mars Analog Environments. <i>Astrobiology</i> , 2017, 17, 363-400.	3.0	159
14	Biogeochemistry of Hypersaline Microbial Mats Illustrates the Dynamics of Modern Microbial Ecosystems and the Early Evolution of the Biosphere. <i>Biological Bulletin</i> , 2003, 204, 160-167.	1.8	154
15	The NASA Astrobiology Roadmap. <i>Astrobiology</i> , 2003, 3, 219-235.	3.0	125
16	Isotopic evolution of the biogeochemical carbon cycle during the Proterozoic Eon. <i>Organic Geochemistry</i> , 1997, 27, 185-193.	1.8	112
17	What the ancient phyllosilicates at Mawrth Vallis can tell us about possible habitability on early Mars. <i>Planetary and Space Science</i> , 2013, 86, 130-149.	1.7	99
18	Long-Term Manipulations of Intact Microbial Mat Communities in a Greenhouse Collaboratory: Simulating Earth's Present and Past Field Environments. <i>Astrobiology</i> , 2002, 2, 383-402.	3.0	78

#	ARTICLE	IF	CITATIONS
19	Deciphering Biosignatures in Planetary Contexts. <i>Astrobiology</i> , 2019, 19, 1075-1102.	3.0	66
20	Geologic evidence for a mantle superplume event at 1.9 Ga. <i>Geochemistry, Geophysics, Geosystems</i> , 2000, 1, n/a-n/a.	2.5	49
21	Stable isotopic biogeochemistry of carbon and nitrogen in a perennially ice-covered Antarctic lake. <i>Chemical Geology</i> , 1993, 107, 159-172.	3.3	40
22	The carbon isotope biogeochemistry of microbial mats. , 1994, , 289-298.		31
23	Microbial mats, stromatolites and the rise of oxygen in the Precambrian atmosphere. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 1991, 97, 93-96.	2.3	21
24	Chapter 12 The Archean Atmosphere: Its Composition and Fate. <i>Neoproterozoic-Cambrian Tectonics, Global Change and Evolution: A Focus on South Western Gondwana</i> , 1994, , 505-523.	0.2	20
25	Chapter 13. LONG-TERM EVOLUTION OF THE BIOGEOCHEMICAL CARBON CYCLE. , 1997, , 429-448.		8
26	Carbon isotopic composition of lipid biomarkers from an endoevaporitic gypsum crust microbial mat reveals cycling of mineralized organic carbon. <i>Geobiology</i> , 2019, 17, 643-659.	2.4	8
27	Stable Light Isotope Biogeochemistry of Hydrothermal Systems. <i>Novartis Foundation Symposium</i> , 1996, 202, 83-98.	1.1	4
28	Introduction: A Multidisciplinary Approach to Habitability. <i>Space Science Reviews</i> , 2007, 129, 1-5.	8.1	3
29	<i>Astrobiology Goals</i> . , 2018, , 15-25.		1