Francis A Macdonald

List of Publications by Year
in descending order

99 papers	7,021 citations	66250 44 h-index	66518 82 g-index
101 all docs	101 docs citations	101 times ranked	4182 citing authors

#	Article	IF	Citations
1	A template for an improved rock-based subdivision of the pre-Cryogenian timescale. Journal of the Geological Society, 2022, 179, .	0.9	18
2	Global and local drivers of the Ediacaran Shuram carbon isotope excursion. Earth and Planetary Science Letters, 2022, 579, 117368.	1.8	37
3	A robust age model for the Cryogenian Pocatello Formation of southeastern Idaho (northwestern) Tj ETQq1 1 0.784314 rgBT /Overlock zircons. , 2022, 18, 825-849.		6
4	Cannibalization of a late Cambrian backarc in southern Peru: New insights into the assembly of southwestern Gondwana. Gondwana Research, 2021, 92, 202-227.	3.0	7
5	A Consistently Highâ€Latitude South China From 820 to 780ÂMa: Implications for Exclusion From Rodinia and the Feasibility of Largeâ€Scale True Polar Wander. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021541.	1.4	16
6	Stratigraphy of the Khuvsgul Group, Mongolia. Mongolian Geoscientist, 2021, 26, 2-15.	0.3	3
7	The Late Great Unconformity of the Central Canadian Shield. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009567.	1.0	21
8	A lithium-isotope perspective on the evolution of carbon and silicon cycles. Nature, 2021, 595, 394-398.	13.7	56
9	Reply to Rugenstein et al.: Marine Sr and Os records do not preclude Neogene cooling through emergence of the Southeast Asian islands. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	2
10	The Sedimentary Geochemistry and Paleoenvironments Project. Geobiology, 2021, 19, 545-556.	1.1	26
11	Fingerprinting local controls on the Neoproterozoic carbon cycle with the isotopic record of Cryogenian carbonates in the Panamint Range, California. Earth and Planetary Science Letters, 2021, 566, 116956.	1.8	11
12	The Ca and Mg isotope record of the Cryogenian Trezona carbon isotope excursion. Earth and Planetary Science Letters, 2021, 568, 117002.	1.8	19
13	Snowballs in Africa: sectioning a long-lived Neoproterozoic carbonate platform and its bathyal foreslope (NW Namibia). Earth-Science Reviews, 2021, 219, 103616.	4.0	30
14	A Laurentian cratonic reference from the distal Proterozoic basement of Western Newfoundland using tandem in situ and isotope dilution U-pb zircon and titanite geochronology. Numerische Mathematik, 2021, 321, 1045-1079.	0.7	4
15	The tempo of Ediacaran evolution. Science Advances, 2021, 7, eabi9643.	4.7	80
16	Emergence of the Southeast Asian islands as a driver for Neogene cooling. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25319-25326.	3.3	42
17	Geochronological constraints on Neoproterozoic rifting and onset of the Marinoan glaciation from the Kingston Peak Formation in Death Valley, California (USA). Geology, 2020, 48, 1083-1087.	2.0	29
18	Deepâ€Time Paleoclimate Proxies. AGU Advances, 2020, 1, e2020AV000244.	2.3	3

#	Article	IF	Citations
19	Effect of dolomitization on isotopic records from Neoproterozoic carbonates in southwestern Mongolia. Precambrian Research, 2020, 350, 105902.	1.2	9
20	Volcanic controls on seawater sulfate over the past 120 million years. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21118-21124.	3.3	8
21	Isotopically anomalous organic carbon in the aftermath of the Marinoan snowball Earth. Geobiology, 2020, 18, 476-485.	1.1	3
22	The triple oxygen isotope composition of Precambrian chert. Earth and Planetary Science Letters, 2020, 537, 116167.	1.8	30
23	Diachronous development of Great Unconformities before Neoproterozoic Snowball Earth. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10172-10180.	3.3	41
24	U-Pb and Re-Os geochronology tracks stratigraphic condensation in the Sturtian snowball Earth aftermath. Geology, 2020, 48, 625-629.	2.0	57
25	The geologic history of seawater oxygen isotopes from marine iron oxides. Science, 2019, 365, 469-473.	6.0	81
26	Arc-continent collisions in the tropics set Earthâ€™s climate state. Science, 2019, 364, 181-184.	6.0	171
27	An early diagenetic deglacial origin for basal Ediacaran â€œcap dolostonesâ€• Earth and Planetary Science Letters, 2019, 506, 292-307.	1.8	66
28	Phosphatized early Cambrian archaeocyaths and small shelly fossils (SSFs) of southwestern Mongolia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 513, 166-177.	1.0	13
29	Palaeobiology of latest Ediacaran phosphorites from the upper Khesen Formation, Khuvsgul Group, northern Mongolia. Journal of Systematic Palaeontology, 2019, 17, 501-532.	0.6	24
30	One diamictite and two rifts: Stratigraphy and geochronology of the Gataga Mountain of northern British Columbia. Numerische Mathematik, 2018, 318, 167-207.	0.7	28
31	Cryogenian magmatism along the north-western margin of Laurentia: Plume or rift?. Precambrian Research, 2018, 319, 144-157.	1.2	15
32	Cryogenian of Yukon. Precambrian Research, 2018, 319, 114-143.	1.2	68
33	Calcium isotope evidence that the earliest metazoan biomineralizers formed aragonite shells. Geology, 2018, 46, 763-766.	2.0	25
34	Tropical weathering of the Taconic orogeny as a driver for Ordovician cooling: REPLY. Geology, 2018, 46, e437-e437.	2.0	0
35	Coupled Re-Os and U-Pb geochronology of the Tonian Chuar Group, Grand Canyon. Bulletin of the Geological Society of America, 2018, 130, 1085-1098.	1.6	30
36	Sr and Mg isotope geochemistry of the basal Ediacaran cap limestone sequence of Mongolia: Implications for carbonate diagenesis, mixing of glacial meltwaters, and seawater chemistry in the aftermath of Snowball Earth. Chemical Geology, 2018, 491, 1-13.	1.4	18

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37	Biologically agglutinated eukaryotic microfossil from Cryogenian cap carbonates. Geobiology, 2017, 15, 499-515.	1.1	20
38	Initiation of Snowball Earth with volcanic sulfur aerosol emissions. Geophysical Research Letters, 2017, 44, 1938-1946.	1.5	71
39	Tracking the onset of Phanerozoic-style redox-sensitive trace metal enrichments: New results from basal Ediacaran post-glacial strata in NW Canada. Chemical Geology, 2017, 457, 24-37.	1.4	35
40	Persistence of a freshwater surface ocean after a snowball Earth. Geology, 2017, 45, 615-618.	2.0	63
41	Palaeobiology of the early Ediacaran Shuurgat Formation, Zavkhan Terrane, south-western Mongolia. Journal of Systematic Palaeontology, 2017, 15, 947-968.	0.6	10
42	Snowball Earth climate dynamics and Cryogenian geology-geobiology. Science Advances, 2017, 3, e1600983.	4.7	424
43	Bridging the gap between the foreland and hinterland II: Geochronology and tectonic setting of Ordovician magmatism and basin formation on the Laurentian margin of New England and Newfoundland. Numerische Mathematik, 2017, 317, 555-596.	0.7	55
44	Bridging the gap between the foreland and hinterland I: Geochronology and plate tectonic geometry of Ordovician magmatism and terrane accretion on the Laurentian margin of New England. Numerische Mathematik, 2017, 317, 515-554.	0.7	57
45	Uranium isotope evidence for temporary ocean oxygenation in the aftermath of the Sturtian Snowball Earth. Earth and Planetary Science Letters, 2017, 458, 282-292.	1.8	101
46	PYRITIZED CRYOGENIAN CYANOBACTERIAL FOSSILS FROM ARCTIC ALASKA. Palaios, 2017, 32, 769-778.	0.6	7
47	Doushantuo-type microfossils from latest Ediacaran phosphorites of northern Mongolia. Geology, 2017, 45, 1079-1082.	2.0	35
48	Low-latitude arcâ€“continent collision as a driver for global cooling. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4935-4940.	3.3	81
49	Continental flood basalt weathering as a trigger for Neoproterozoic Snowball Earth. Earth and Planetary Science Letters, 2016, 446, 89-99.	1.8	215
50	The end of the Ediacaran: Two new exceptionally preserved body fossil assemblages from Mount Dunfee, Nevada, USA. Geology, 2016, 44, 911-914.	2.0	66
51	Dodging snowballs: Geochronology of the Gaskiers glaciation and the first appearance of the Ediacaran biota. Geology, 2016, 44, 955-958.	2.0	241
52	Neoproterozoic to early Paleozoic tectonic evolution of the Zavkhan terrane of Mongolia: Implications for continental growth in the Central Asian orogenic belt. Lithosphere, 2016, 8, 729-750.	0.6	64
53	Triple oxygen and multiple sulfur isotope constraints on the evolution of the post-Marinoan sulfur cycle. Earth and Planetary Science Letters, 2016, 435, 74-83.	1.8	52
54	Neoproterozoic stratigraphy of the Zavkhan terrane of Mongolia: The backbone for Cryogenian and early Ediacaran chemostratigraphic records. Numerische Mathematik, 2016, 316, 1-63.	0.7	90

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55	Tectonostratigraphic evolution of the c. 780â€“730 Ma Beck Spring Dolomite: Basin Formation in the core of Rodinia. Geological Society Special Publication, 2016, 424, 213-239.	0.8	17
56	Integrated stratigraphic, geochemical, and paleontological late Ediacaran to early Cambrian records from southwestern Mongolia. Bulletin of the Geological Society of America, 2016, 128, 442-468.	1.6	71
57	New Ediacaran fossils from the uppermost Blueflower Formation, northwest Canada: disentangling biostratigraphy and paleoecology. Journal of Paleontology, 2015, 89, 281-291.	0.5	19
58	Kikiktat volcanics of Arctic Alaskaâ€”Melting of harzburgitic mantle associated with the Franklin large igneous province. Lithosphere, 2015, 7, 275-295.	0.6	50
59	Stratigraphic evolution of the Neoproterozoic Callison Lake Formation: Linking the break-up of Rodinia to the Islay carbon isotope excursion. Numerische Mathematik, 2015, 315, 881-944.	0.7	43
60	Statistical analysis of iron geochemical data suggests limited late Proterozoic oxygenation. Nature, 2015, 523, 451-454.	13.7	484
61	FOSSILS OF PUTATIVE MARINE ALGAE FROM THE CRYOGENIAN GLACIAL INTERLUDE OF MONGOLIA. Palaios, 2015, 30, 238-247.	0.6	27
62	A Cryogenian chronology: Two long-lasting synchronous Neoproterozoic glaciations. Geology, 2015, 43, 459-462.	2.0	346
63	The Proterozoic Record of Eukaryotes. Paleobiology, 2015, 41, 610-632.	1.3	139
64	Re-Os geochronology and coupled Os-Sr isotope constraints on the Sturtian snowball Earth. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 51-56.	3.3	219
65	Trace Fossils with Spreiten from the Late Ediacaran Nama Group, Namibia: Complex Feeding Patterns Five Million Years Before the Precambrianâ€“Cambrian Boundary. Journal of Paleontology, 2014, 88, 299-308.	0.5	41
66	740 Ma vase-shaped microfossils from Yukon, Canada: Implications for Neoproterozoic chronology and biostratigraphy. Geology, 2014, 42, 659-662.	2.0	100
67	Neoproterozoic cap-dolostone deposition in stratified glacial meltwater plume. Earth and Planetary Science Letters, 2014, 404, 22-32.	1.8	71
68	Neoproterozoic iron formation: An evaluation of its temporal, environmental and tectonic significance. Chemical Geology, 2013, 362, 232-249.	1.4	134
69	A basin redox transect at the dawn of animal life. Earth and Planetary Science Letters, 2013, 371-372, 143-155.	1.8	117
70	PRESERVATIONAL AND MORPHOLOGICAL VARIABILITY OF ASSEMBLAGES OF AGGLUTINATED EUKARYOTES IN CRYOGENIAN CAP CARBONATES OF NORTHERN NAMIBIA. Palaios, 2013, 28, 67-79.	0.6	36
71	Dynamics of a Snowball Earth ocean. Nature, 2013, 495, 90-93.	13.7	58
72	The Laurentian record of Neoproterozoic glaciation, tectonism, and eukaryotic evolution in Death Valley, California. Bulletin of the Geological Society of America, 2013, 125, 1203-1223.	1.6	60

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73	The stratigraphic relationship between the Shuram carbon isotope excursion, the oxygenation of Neoproterozoic oceans, and the first appearance of the Ediacara biota and bilaterian trace fossils in northwestern Canada. Chemical Geology, 2013, 362, 250-272.	1.4	148
74	Authigenic Carbonate and the History of the Global Carbon Cycle. Science, 2013, 339, 540-543.	6.0	398
75	Microbial Sedimentology of Stromatolites in Neoproterozoic Cap Carbonates. The Paleontological Society Papers, 2013, 19, 51-76.	0.8	17
76	Uncovering the Neoproterozoic carbon cycle. Nature, 2012, 483, 320-323.	13.7	155
77	Possible early foraminiferans in post-Sturtian (716â^'635 Ma) cap carbonates. Geology, 2012, 40, 67-70.	2.0	66
78	Phosphate biomineralization in mid-Neoproterozoic protists. Geology, 2011, 39, 539-542.	2.0	62
79	Sedimentary talc in Neoproterozoic carbonate successions. Earth and Planetary Science Letters, 2011, 306, 11-22.	1.8	97
80	Chapter 30 The Khubsugul Group, Northern Mongolia. Geological Society Memoir, 2011, 36, 339-345.	0.9	10
81	Chapter 29 The Tsagaan Oloom Formation, southwestern Mongolia. Geological Society Memoir, 2011, 36, 331-337.	0.9	7
82	Chapter 34 The Hula Hula Diamictite and Katakturuk Dolomite, Arctic Alaska. Geological Society Memoir, 2011, 36, 379-388.	0.9	5
83	Chapter 5 Chemical sediments associated with Neoproterozoic glaciation: iron formation, cap carbonate, barite and phosphorite. Geological Society Memoir, 2011, 36, 67-80.	0.9	42
84	Chapter 35 The Tatonduk inlier, Alaskaâ€"Yukon border. Geological Society Memoir, 2011, 36, 389-396.	0.9	2
85	Stratigraphy of the Port Nolloth Group of Namibia and South Africa and implications for the age of Neoproterozoic iron formations. Numerische Mathematik, 2010, 310, 862-888.	0.7	51
86	Early Neoproterozoic scale microfossils in the Lower Tindir Group of Alaska and the Yukon Territory. Geology, 2010, 38, 143-146.	2.0	36
87	Sheet-crack cements and early regression in Marinoan (635Ma) cap dolostones: Regional benchmarks of vanishing ice-sheets?. Earth and Planetary Science Letters, 2010, 300, 374-384.	1.8	57
88	Microbial facies in a Sturtian cap carbonate, the Rasthof Formation, Otavi Group, northern Namibia. Precambrian Research, 2010, 181, 187-198.	1.2	43
89	Calibrating the Cryogenian. Science, 2010, 327, 1241-1243.	6.0	488
90	Neoproterozoic glaciation on a carbonate platform margin in Arctic Alaska and the origin of the North Slope subterrane. Bulletin of the Geological Society of America, 2009, 121, 448-473.	1.6	68

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91	Stratigraphic and tectonic implications of a newly discovered glacial diamictiteâ€“cap carbonate couplet in southwestern Mongolia. Geology, 2009, 37, 123-126.	2.0	112
92	Amelia Creek: a Proterozoic impact structure in the Davenport Ranges, Northern Territory. Australian Journal of Earth Sciences, 2005, 52, 631-640.	0.4	12
93	Goat Paddock, Western Australia: an impact crater near the simpleâ€‰â€“â€‰complex transition. Australian Journal of Earth Sciences, 2005, 52, 689-697.	0.4	16
94	Geology and age of the Glikson impact structure, Western Australia. Australian Journal of Earth Sciences, 2005, 52, 641-651.	0.4	21
95	The Shoemaker legacy to the Australian impact record. Australian Journal of Earth Sciences, 2005, 52, 477-479.	0.4	4
96	Geology of five small Australian impact craters. Australian Journal of Earth Sciences, 2005, 52, 529-544.	0.4	32
97	Yarrabubba - a large, deeply eroded impact structure in the Yilgarn Craton, Western Australia. Earth and Planetary Science Letters, 2003, 213, 235-247.	1.8	31
98	A Low Temperature Transfer of ALH84001 from Mars to Earth. Science, 2000, 290, 791-795.	6.0	205
99	Tropical weathering of the Taconic orogeny as a driver for Ordovician cooling. Geology, 0, , G38985.1.	2.0	13