Graham A Shields-Zhou

List of Publications by Year
in descending order

101 papers	9,395 citations	31902 53 h-index	37111 96 g-index
106 all docs	106 docs citations	106 times ranked	5045 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	A short-lived oxidation event during the early Ediacaran and delayed oxygenation of the Proterozoic ocean. Earth and Planetary Science Letters, 2022, 577, 117274.	1.8	18
3	Progress towards an improved Precambrian seawater 87Sr/86Sr curve. Earth-Science Reviews, 2022, 224, 103869.	4.0	42
4	Calibrating the temporal and spatial dynamics of the Ediacaran - Cambrian radiation of animals. Earth-Science Reviews, 2022, 225, 103913.	4.0	39
5	The 1126 Ma volcanic event in the Dechang Area, SW Yangtze Block, and its significance. Geological Magazine, 2022, 159, 797-817.	0.9	1
6	Sedimentary Ce anomalies: Secular change and implications for paleoenvironmental evolution. Earth-Science Reviews, 2022, 229, 104015.	4.0	30
7	Decoupled oxygenation of the Ediacaran ocean and atmosphere during the rise of early animals. Earth and Planetary Science Letters, 2022, 591, 117619.	1.8	17
8	Evaporite weathering and deposition as a long-term climate forcing mechanism. Geology, 2021, 49, 299-303.	2.0	18
9	Revisiting stepwise ocean oxygenation with authigenic barium enrichments in marine mudrocks. Geology, 2021, 49, 1059-1063.	2.0	13
10	Highly dynamic marine redox state through the Cambrian explosion highlighted by authigenic Î´238U records. Earth and Planetary Science Letters, 2020, 544, 116361.	1.8	27
11	Phosphorus-limited conditions in the early Neoproterozoic ocean maintained low levels of atmospheric oxygen. Nature Geoscience, 2020, 13, 296-301.	5.4	63
12	Reconstructing Tonian seawater 87Sr/86Sr using calcite microspar. Geology, 2020, 48, 462-467.	2.0	45
13	Enhanced chemical weathering triggered an expansion of euxinic seawater in the aftermath of the Sturtian glaciation. Earth and Planetary Science Letters, 2020, 539, 116244.	1.8	45
14	Birdâ€™s-eye view of an Ediacaran subglacial landscape. Geology, 2019, 47, 705-709.	2.0	27
15	Calcium isotopes as a record of the marine calcium cycle versus carbonate diagenesis during the late Ediacaran. Chemical Geology, 2019, 529, 119319.	1.4	8
16	Unique Neoproterozoic carbon isotope excursions sustained by coupled evaporite dissolution and pyrite burial. Nature Geoscience, 2019, 12, 823-827.	5.4	87
17	Long-term evolution of terrestrial inputs from the Ediacaran to early Cambrian: Clues from Nd isotopes in shallow-marine carbonates, South China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 535, 109367.	1.0	23
18	Possible links between extreme oxygen perturbations and the Cambrian radiation of animals. Nature Geoscience, 2019, 12, 468-474.	5.4	96

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19	Uranium isotope evidence for an expansion of anoxia in terminal Ediacaran oceans. Earth and Planetary Science Letters, 2019, 506, 104-112.	1.8	86
20	Modelling the long-term carbon cycle, atmospheric CO2, and Earth surface temperature from late Neoproterozoic to present day. Gondwana Research, 2019, 67, 172-186.	3.0	107
21	A deep marine organic carbon reservoir in the non-glacial Cryogenian ocean (Nanhua Basin, South) Tj ETQq1 1 0.784314 rgBT /Overlo	1.2	25
22	Implications of Carbonate and Chert Isotope Records for the Early Earth. , 2019, , 901-912.		0
23	Desequilibrio del ciclo del azufre y cambio ambiental durante el PerÃodo EdiacÃ¡rico. Estudios Geologicos, 2019, 75, 114.	0.7	2
24	Tonian-Cryogenian boundary sections of Argyll, Scotland. Precambrian Research, 2018, 319, 37-64.	1.2	32
25	Coupling of ocean redox and animal evolution during the Ediacaran-Cambrian transition. Nature Communications, 2018, 9, 2575.	5.8	65
26	Carbon and carbon isotope mass balance in the Neoproterozoic Earth system. Emerging Topics in Life Sciences, 2018, 2, 257-265.	1.1	7
27	Descent into the Cryogenian. Precambrian Research, 2018, 319, 1-5.	1.2	13
28	Constraints on the late Ediacaran sulfur cycle from carbonate associated sulfate. Precambrian Research, 2017, 290, 113-125.	1.2	38
29	Tectonic controls on the long-term carbon isotope mass balance. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4318-4323.	3.3	57
30	Earth system transition during the Tonianâ€“Cambrian interval of biological innovation: nutrients, climate, oxygen and the marine organic carbon capacitor. Geological Society Special Publication, 2017, 448, 161-177.	0.8	19
31	Elevated CO2 degassing rates prevented the return of Snowball Earth during the Phanerozoic. Nature Communications, 2017, 8, 1110.	5.8	37
32	Martin Brasier's contribution to the palaeobiology of the Ediacaranâ€“Cambrian transition. Geological Society Special Publication, 2017, 448, 179-193.	0.8	3
33	Measuring the â€˜Great Unconformityâ€™ on the North China Craton using new detrital zircon age data. Geological Society Special Publication, 2017, 448, 145-159.	0.8	43
34	Palaeoceanographic controls on spatial redox distribution over the Yangtze Platform during the Ediacaranâ€“Cambrian transition. Sedimentology, 2016, 63, 378-410.	1.6	85
35	Effective use of cerium anomalies as a redox proxy in carbonate-dominated marine settings. Chemical Geology, 2016, 438, 146-162.	1.4	368
36	Ediacaranâ€“Cambrian phosphorites from the western margins of Gondwana and Baltica. Sedimentology, 2016, 63, 350-377.	1.6	38

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37	Low-oxygen waters limited habitable space for early animals. Nature Communications, 2016, 7, 12818.	5.8	125
38	A new rock-based definition for the Cryogenian Period (circa 720 â€“ 635 Ma). Episodes, 2016, 39, 3-8.	0.8	77
39	A global transition to ferruginous conditions in the early Neoproterozoic oceans. Nature Geoscience, 2015, 8, 466-470.	5.4	105
40	Rise to modern levels of ocean oxygenation coincided with the Cambrian radiation of animals. Nature Communications, 2015, 6, 7142.	5.8	250
41	Marine redox variations and nitrogen cycle of the early Cambrian southern margin of the Yangtze Platform, South China: Evidence from nitrogen and organic carbon isotopes. Precambrian Research, 2015, 267, 209-226.	1.2	63
42	Co-evolution of eukaryotes and ocean oxygenation in the Neoproterozoic era. Nature Geoscience, 2014, 7, 257-265.	5.4	305
43	Nitrogen and organic carbon isotope stratigraphy of the Yangtze Platform during the Ediacaranâ€“Cambrian transition in South China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 398, 165-186.	1.0	60
44	Carbon and strontium isotope evolution of seawater across the Ediacaranâ€“Cambrian transition: Evidence from the Xiaotan section, NE Yunnan, South China. Precambrian Research, 2013, 225, 128-147.	1.2	132
45	The DOUNCE event at the top of the Ediacaran Doushantuo Formation, South China: Broad stratigraphic occurrence and non-diagenetic origin. Precambrian Research, 2013, 225, 86-109.	1.2	97
46	Cerium anomaly variations in Ediacaranâ€“earliest Cambrian carbonates from the Yangtze Gorges area, South China: Implications for oxygenation of coeval shallow seawater. Precambrian Research, 2013, 225, 110-127.	1.2	241
47	Marine biogeochemical cycling during the early Cambrian constrained by a nitrogen and organic carbon isotope study of the Xiaotan section, South China. Precambrian Research, 2013, 225, 148-165.	1.2	90
48	Redox changes in Early Cambrian black shales at Xiaotan section, Yunnan Province, South China. Precambrian Research, 2013, 225, 166-189.	1.2	116
49	Biogeochemical changes across the Ediacaranâ€“Cambrian transition in South China. Precambrian Research, 2013, 225, 1-6.	1.2	31
50	Trace and rare earth element geochemistry of black shale and kerogen in the early Cambrian Niutitang Formation in Guizhou province, South China: Constraints for redox environments and origin of metal enrichments. Precambrian Research, 2013, 225, 218-229.	1.2	213
51	Carbonate-associated sulfate: Experimental comparisons of common extraction methods and recommendations toward a standard analytical protocol. Chemical Geology, 2012, 326-327, 132-144.	1.4	90
52	The Neoproterozoic oxygenation event: Environmental perturbations and biogeochemical cycling. Earth-Science Reviews, 2012, 110, 26-57.	4.0	436
53	Development of an inshore fringing coral reef using textural, compositional and stratigraphic data from Magnetic Island, Great Barrier Reef, Australia. Marine Geology, 2012, 299-302, 18-32.	0.9	23
54	Dissolution methods for strontium isotope stratigraphy: Guidelines for the use of bulk carbonate and phosphorite rocks. Chemical Geology, 2011, 290, 133-144.	1.4	91

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55	Toxic Cambrian oceans. Nature, 2011, 469, 42-43.	13.7	1
56	Analytical Constraints on the Measurement of the Sulfur Isotopic Composition and Concentration of Trace Sulfate in Phosphorites: Implications for Sulfur Isotope Studies of Carbonate and Phosphate Rocks. Geostandards and Geoanalytical Research, 2011, 35, 161-174.	1.7	6
57	Chapter 4 Chemostratigraphy and the Neoproterozoic glaciations. Geological Society Memoir, 2011, 36, 51-66.	0.9	27
58	The case for a Neoproterozoic Oxygenation Event: Geochemical evidence and biological consequences. GSA Today, 2011, 21, 4-11.	1.1	159
59	The geochemistry of primary and weathered oil shale and coquina across the Julia Creek vanadium deposit (Queensland, Australia). Mineralium Deposita, 2010, 45, 599-620.	1.7	15
60	High primary productivity and nitrogen cycling after the Paleoproterozoic phosphogenic event in the Aravalli Supergroup, India. Precambrian Research, 2009, 171, 37-56.	1.2	76
61	Marinoan meltdown. Nature Geoscience, 2008, 1, 351-353.	5.4	7
62	Midâ€late Holocene seaâ€level variability in eastern Australia. Terra Nova, 2008, 20, 74-81.	0.9	111
63	Compilation and time-series analysis of a marine carbonate Î´18O, Î´13C, 87Sr/86Sr and Î´34S database through Earth history. Earth-Science Reviews, 2008, 87, 113-133.	4.0	401
64	The SPICE carbon isotope excursion in Siberia: a combined study of the upper Middle Cambrianâ€“lowermost Ordovician Kulyumbe River section, northwestern Siberian Platform. Geological Magazine, 2008, 145, 609-622.	0.9	98
65	A multi-trace element coral record of land-use changes in the Burdekin River catchment, NE Australia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 246, 471-487.	1.0	122
66	Trace element chemostratigraphy of two Ediacaranâ€“Cambrian successions in South China: Implications for organosedimentary metal enrichment and silicification in the Early Cambrian. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 254, 194-216.	1.0	181
67	C-, O- and Sr-isotope stratigraphy across the Lowerâ€“Middle Cambrian transition of the Cantabrian Zone (Spain) and the Montagne Noire (France), West Gondwana. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 256, 47-70.	1.0	54
68	Barite-bearing cap dolostones of the TaoudÃ©ni Basin, northwest Africa: Sedimentary and isotopic evidence for methane seepage after a Neoproterozoic glaciation. Precambrian Research, 2007, 153, 209-235.	1.2	110
69	Neoproterozoic glaciomarine and cap dolostone facies of the southwestern TaoudÃ©ni Basin (Walidiala Valley, Senegal/Guinea, NW Africa). Comptes Rendus - Geoscience, 2007, 339, 186-199.	0.4	39
70	Evidence for hot early oceans?. Nature, 2007, 447, E1-E1.	13.7	37
71	The oxygen isotope evolution of seawater: A critical review of a long-standing controversy and an improved geological water cycle model for the past 3.4Âbillion years. Earth-Science Reviews, 2007, 83, 83-122.	4.0	295
72	Paleoclimates, ocean depth, and the oxygen isotopic composition of seawater. Earth and Planetary Science Letters, 2006, 252, 82-93.	1.8	205

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73	Insights from stable S and O isotopes into biogeochemical processes and genesis of Lower Cambrian bariteâ€“pyrite concretions of South China. Organic Geochemistry, 2006, 37, 1278-1288.	0.9	23
74	A major sulphur isotope event atc. 510â€ƒMa: a possible anoxia-extinction-volcanism connection during the Early-Middle Cambrian transition?. Terra Nova, 2006, 18, 257-263.	0.9	87
75	Snowball Earth is dead! Long live Snowball Earth!. Episodes, 2006, 29, 287-288.	0.8	6
76	Neoproterozoic cap carbonates: a critical appraisal of existing models and the plumeworld hypothesis. Terra Nova, 2005, 17, 299-310.	0.9	240
77	Has the REE composition of seawater changed over geological time?. Chemical Geology, 2004, 204, 103-107.	1.4	239
78	Sulphur isotopic evolution of Neoproterozoic-Cambrian seawater: new francolite-bound sulphate Î´34S data and a critical appraisal of the existing record. Chemical Geology, 2004, 204, 163-182.	1.4	78
79	Sr, C, and O isotope geochemistry of Ordovician brachiopods: a major isotopic event around the Middle-Late Ordovician transition. Geochimica Et Cosmochimica Acta, 2003, 67, 2005-2025.	1.6	207
80	Thermodynamic stability of waste glasses compared to leaching behaviour. Applied Geochemistry, 2003, 18, 1165-1184.	1.4	31
81	Factors contributing to high Î´13C values in Cryogenian limestones of western Mongolia. Earth and Planetary Science Letters, 2002, 196, 99-111.	1.8	46
82	Precambrian marine carbonate isotope database: Version 1.1. Geochemistry, Geophysics, Geosystems, 2002, 3, 1 of 12-12 of 12.	1.0	372
83	`Molar-tooth microspar': a chemical explanation for its disappearance â^¼â€ƒ750â€ƒMa. Terra Nova, 2002, 14, 108-113.	0.9	58
84	High-resolution strontium isotope stratigraphy across the Cambrian-Ordovician transition. Geochimica Et Cosmochimica Acta, 2001, 65, 2273-2292.	1.6	41
85	Diagenetic constraints on the use of cerium anomalies as palaeoseawater redox proxies: an isotopic and REE study of Cambrian phosphorites. Chemical Geology, 2001, 175, 29-48.	1.4	542
86	The use of external micro-PIXE to investigate the factors determining the Sr:Ca ratio in the shells of fossil aragonitic molluscs. Nuclear Instruments & Methods in Physics Research B, 2001, 181, 506-510.	0.6	7
87	Precambrian-Cambrian transition: Death Valley, United States: Comment and Reply. Geology, 2000, 28, 958.	2.0	2
88	Neoproterozoic chemostratigraphy and correlation of the Port Askaig glaciation, Dalradian Supergroup of Scotland. Journal of the Geological Society, 2000, 157, 909-914.	0.9	120
89	New U-Pb zircon dates for the Neoproterozoic Ghubrah glaciation and for the top of the Huqf Supergroup, Oman. Geology, 2000, 28, 175.	2.0	180
90	Variations in 87Sr/86Sr ratios of calcites in Chinese loess: a proxy for chemical weathering associated with the East Asian summer monsoon. Palaeogeography, Palaeoclimatology, Palaeoecology, 2000, 157, 151-159.	1.0	75

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91	New U-Pb zircon dates for the Neoproterozoic Ghubrah glaciation and for the top of the Huqf Supergroup, Oman. Geology, 2000, 28, 175-178.	2.0	6
92	Precambrian-Cambrian transition: Death Valley, United States: Comment and Reply. Geology, 2000, 28, 958-959.	2.0	1
93	ISOTOPIC RECORDS ACROSS TWO PHOSPHORITE GIANT EPISODES COMPARED: THE PRECAMBRIAN-CAMBRIAN AND THE LATE CRETACEOUS-RECENT. , 2000, , 103-115.		15
94	Sulphur isotope compositions of sedimentary phosphorites from the basal Cambrian of China: implications for Neoproterozoic-Cambrian biogeochemical cycling. Journal of the Geological Society, 1999, 156, 943-955.	0.9	68
95	Metabolism controls Sr/Ca ratios in fossil aragonitic mollusks. Geology, 1999, 27, 1083.	2.0	78
96	Ediacarian sponge spicule clusters from southwestern Mongolia and the origins of the Cambrian fauna. Geology, 1997, 25, 303.	2.0	180
97	Stratified oceans and oxygenation of the late Precambrian environment: a post glacial geochemical record from the Neoproterozoic of W. Mongolia. Terra Nova, 1997, 9, 218-222.	0.9	66
98	The Monterey Event in the Mediterranean: A record from shelf sediments of Malta. Paleoceanography, 1996, 11, 717-728.	3.0	57
99	Glacial facies associations in a Neoproterozoic back-arc setting, Zavkhan Basin, western Mongolia. Geological Magazine, 1996, 133, 391-402.	0.9	35
100	Integrated chemo- and biostratigraphic calibration of early animal evolution: Neoproterozoicâ€“early Cambrian of southwest Mongolia. Geological Magazine, 1996, 133, 445-485.	0.9	275
101	The Ediacaran â€˜Miaohe Memberâ€™ of South China: new insights from palaeoredox proxies and stable isotope data. Geological Magazine, 0, , 1-15.	0.9	3