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List of Publications by Year in descending order

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97 papers	9,756 citations	41344 49 h-index	38395 95 g-index
104 all docs	104 docs citations	104 times ranked	6073 citing authors

#	Article	IF	Citations
1	Modification and preservation of environmental signals in speleothems. Earth-Science Reviews, 2006, 75, 105-153.	9.1	669
2	When did the Anthropocene begin? A mid-twentieth century boundary level is stratigraphically optimal. Quaternary International, 2015, 383, 196-203.	1.5	546
3	Controls on trace element (Srâ€“Mg) compositions of carbonate cave waters: implications for speleothem climatic records. Chemical Geology, 2000, 166, 255-269.	3.3	470
4	Snowball Earth climate dynamics and Cryogenian geology-geobiology. Science Advances, 2017, 3, e1600983.	10.3	424
5	Trace elements in speleothems as recorders of environmental change. Quaternary Science Reviews, 2009, 28, 449-468.	3.0	422
6	Cave air control on dripwater geochemistry, Obir Caves (Austria): Implications for speleothem deposition in dynamically ventilated caves. Geochimica Et Cosmochimica Acta, 2005, 69, 2451-2468.	3.9	345
7	The Working Group on the Anthropocene: Summary of evidence and interim recommendations. Anthropocene, 2017, 19, 55-60.	3.3	310
8	Partitioning of Sr2+ and Mg2+ into calcite under karst-analogue experimental conditions. Geochimica Et Cosmochimica Acta, 2001, 65, 47-62.	3.9	265
9	Widespread bacterial populations at glacier beds and their relationship to rock weathering and carbon cycling. Geology, 1999, 27, 107.	4.4	236
10	Soil and karst aquifer hydrological controls on the geochemical evolution of speleothem-forming drip waters, Crag Cave, southwest Ireland. Journal of Hydrology, 2003, 273, 51-68.	5.4	232
11	Trace element distribution in annual stalagmite laminae mapped by micrometer-resolution X-ray fluorescence: Implications for incorporation of environmentally significant species. Geochimica Et Cosmochimica Acta, 2007, 71, 1494-1512.	3.9	205
12	Holocene climate variability in Europe: Evidence from Î´18O, textural and extension-rate variations in three speleothems. Quaternary Science Reviews, 1999, 18, 1021-1038.	3.0	200
13	Neoproterozoic glaciation in the Earth System. Journal of the Geological Society, 2007, 164, 895-921.	2.1	196
14	Seasonal variations in Sr, Mg and P in modern speleothems (Grotta di Ernesto, Italy). Chemical Geology, 2001, 175, 429-448.	3.3	186
15	Structure of the 8200-Year Cold Event Revealed by a Speleothem Trace Element Record. Science, 2002, 296, 2203-2206.	12.6	179
16	Spatial variability and temporal trends in waterâ€use efficiency of European forests. Global Change Biology, 2014, 20, 3700-3712.	9.5	175
17	Carbon mass-balance modelling and carbon isotope exchange processes in dynamic caves. Geochimica Et Cosmochimica Acta, 2011, 75, 380-400.	3.9	173
18	Stratigraphic and Earth System approaches to defining the Anthropocene. Earth's Future, 2016, 4, 324-345.	6.3	162

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19	Global Boundary Stratotype Section and Point (GSSP) for the Anthropocene Series: Where and how to look for potential candidates. Earth-Science Reviews, 2018, 178, 379-429.	9.1	153
20	Annual to sub-annual resolution of multiple trace-element trends in speleothems. Journal of the Geological Society, 2001, 158, 831-841.	2.1	148
21	Relative contributions of silicate and carbonate rocks to riverine Sr fluxes in the headwaters of the Ganges. Geochimica Et Cosmochimica Acta, 2005, 69, 2221-2240.	3.9	142
22	From soil to cave: Transport of trace metals by natural organic matter in karst dripwaters. Chemical Geology, 2012, 304-305, 68-82.	3.3	122
23	Annual trace element cycles in calcite-aragonite speleothems: evidence of drought in the western Mediterranean 1200-1100 yr BP. Journal of Quaternary Science, 2005, 20, 423-433.	2.1	110
24	Calcified Microbes in Neoproterozoic Carbonates: Implications for Our Understanding of the Proterozoic/Cambrian Transition. Palaios, 1993, 8, 512.	1.3	108
25	Variations in atmospheric sulphate recorded in stalagmites by synchrotron micro-XRF and XANES analyses. Earth and Planetary Science Letters, 2005, 235, 729-740.	4.4	108
26	The Vendian succession of northeastern Spitsbergen: Petrogenesis of a dolomite-tillite association. Precambrian Research, 1984, 26, 111-167.	2.7	105
27	Mg, Sr and Sr isotope geochemistry of a Belgian Holocene speleothem: implications for paleoclimate reconstructions. Chemical Geology, 2000, 169, 131-144.	3.3	103
28	Modelling of dripwater hydrology and hydrogeochemistry in a weakly karstified aquifer (Bath, UK): Implications for climate change studies. Journal of Hydrology, 2006, 321, 213-231.	5.4	100
29	Making the case for a formal Anthropocene Epoch: an analysis of ongoing critiques. Newsletters on Stratigraphy, 2017, 50, 205-226.	1.2	100
30	Petrological and isotopic implications of some contrasting Late Precambrian carbonates, NE Spitsbergen. Sedimentology, 1987, 34, 973-989.	3.1	92
31	Fluxes of Sr into the headwaters of the Ganges. Geochimica Et Cosmochimica Acta, 2003, 67, 2567-2584.	3.9	91
32	Chemical controls of cathodoluminescence of natural dolomites and calcites: new data and review. Sedimentology, 1983, 30, 579-583.	3.1	90
33	Stretching the Envelope of Past Surface Environments: Neoproterozoic Glacial Lakes from Svalbard. Science, 2009, 323, 119-122.	12.6	90
34	Hydrochemistry of carbonate terrains in alpine glacial settings. Earth Surface Processes and Landforms, 1994, 19, 33-54.	2.5	77
35	Chronology building using objective identification of annual signals in trace element profiles of stalagmites. Quaternary Geochronology, 2009, 4, 11-21.	1.4	75
36	Regional temperature, atmospheric circulation, and sea-ice variability within the Younger Dryas Event constrained using a speleothem from northern Iberia. Earth and Planetary Science Letters, 2015, 419, 101-110.	4.4	75

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37	Sedimentological perspectives on climatic, atmospheric and environmental change in the Neoproterozoic Era. Sedimentology, 2016, 63, 253-306.	3.1	75
38	Cave aerosols: distribution and contribution to speleothem geochemistry. Quaternary Science Reviews, 2013, 63, 23-41.	3.0	73
39	Analysis of the climate signal contained within Î´18O and growth rate parameters in two Ethiopian stalagmites. Geochimica Et Cosmochimica Acta, 2007, 71, 2975-2988.	3.9	69
40	Seasonal microclimate control of calcite fabrics, stable isotopes and trace elements in modern speleothem from St Michaels Cave, Gibraltar. Geological Society Special Publication, 2010, 336, 323-344.	1.3	66
41	Epikarst hydrology and implications for stalagmite capture of climate changes at Grotta di Ernesto (NE Italy): results from longâ€term monitoring. Hydrological Processes, 2010, 24, 3101-3114.	2.6	63
42	The Anthropocene: Comparing Its Meaning in Geology (Chronostratigraphy) with Conceptual Approaches Arising in Other Disciplines. Earth's Future, 2021, 9, e2020EF001896.	6.3	61
43	Solute generation and transfer from a chemically reactive alpine glacial-proglacial system. Earth Surface Processes and Landforms, 1999, 24, 1189-1211.	2.5	60
44	Orbitally forced ice sheet fluctuations during the Marinoan Snowball Earth glaciation. Nature Geoscience, 2015, 8, 704-707.	12.9	59
45	High-resolution sulphur isotope analysis of speleothem carbonate by secondary ionisation mass spectrometry. Chemical Geology, 2010, 271, 101-107.	3.3	58
46	An isotopic and modelling study of flow paths and storage in Quaternary calcarenite, SW Australia: implications for speleothem paleoclimate records. Quaternary Science Reviews, 2013, 64, 90-103.	3.0	58
47	Origins of carbonate in Neoproterozoic stromatolites and the identification of modern analogues. Precambrian Research, 1991, 53, 281-299.	2.7	54
48	Isotopic archives of sulphate in speleothems. Geochimica Et Cosmochimica Acta, 2008, 72, 2465-2477.	3.9	54
49	Possible seismic origin of molar tooth structures in Neoproterozoic carbonate ramp deposits, north China. Sedimentology, 1997, 44, 611-636.	3.1	53
50	Impacts of cave air ventilation and in-cave prior calcite precipitation on Golgotha Cave dripwater chemistry, southwest Australia. Quaternary Science Reviews, 2015, 127, 61-72.	3.0	52
51	Sulfur Fixation in Wood Mapped by Synchrotron X-ray Studies: Implications for Environmental Archives. Environmental Science & Technology, 2009, 43, 1310-1315.	10.0	51
52	Size, speciation and lability of NOMâ€“metal complexes in hyperalkaline cave dripwater. Geochimica Et Cosmochimica Acta, 2011, 75, 7533-7551.	3.9	50
53	Is global warming affecting cave temperatures? Experimental and model data from a paradigmatic case study. Climate Dynamics, 2015, 45, 569-581.	3.8	49
54	High resolution Î´18O and Î´13C records from an annually laminated Scottish stalagmite and relationship with last millennium climate. Global and Planetary Change, 2011, 79, 303-311.	3.5	45

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55	Interactions of calcareous suspended sediment with glacial meltwater: a field test of dissolution behaviour. Chemical Geology, 1999, 155, 243-263.	3.3	44
56	Calibration of speleothem Î´18O with instrumental climate records from Turkey. Global and Planetary Change, 2010, 71, 207-217.	3.5	44
57	Biogeochemical cycling of sulphur in karst and transfer into speleothem archives at Grotta di Ernesto, Italy. Biogeochemistry, 2013, 114, 255-267.	3.5	43
58	A tempestite-stromatolite-evaporite association (late Vendian, East Greenland): a shoreface-lagoon model. Precambrian Research, 1989, 43, 101-127.	2.7	41
59	Petrology and geochemistry of annually laminated stalagmites from an Alpine cave (Obir, Austria): seasonal cave physiology. Geological Society Special Publication, 2010, 336, 295-321.	1.3	41
60	Coastal lithofacies and biofacies associated with syndepositional dolomitization and silicification (Draken Formation, Upper Riphean, Svalbard). Precambrian Research, 1991, 53, 165-197.	2.7	37
61	Reconstructing hemispheric-scale climates from multiple stalagmite records. International Journal of Climatology, 2006, 26, 1417-1424.	3.5	37
62	Continental carbonate facies of a Neoproterozoic panglaciation, northâ€east Svalbard. Sedimentology, 2016, 63, 443-497.	3.1	37
63	North Iberian temperature and rainfall seasonality over the Younger Dryas and Holocene. Quaternary Science Reviews, 2019, 226, 105998.	3.0	34
64	An experimental study of incongruent dissolution of CaCO₃ under analogue glacial conditions. Journal of Glaciology, 2005, 51, 383-390.	2.2	33
65	Preservation of NOM-metal complexes in a modern hyperalkaline stalagmite: Implications for speleothem trace element geochemistry. Geochimica Et Cosmochimica Acta, 2014, 128, 29-43.	3.9	33
66	Tonian-Cryogenian boundary sections of Argyll, Scotland. Precambrian Research, 2018, 319, 37-64.	2.7	32
67	Reconstruction of cave air temperature based on surface atmosphere temperature and vegetation changes: Implications for speleothem palaeoclimate records. Earth and Planetary Science Letters, 2013, 369-370, 158-168.	4.4	31
68	Effects of glacial transport and neomorphism on Precambrian dolomite crystal sizes. Nature, 1983, 304, 714-716.	27.8	29
69	The Late Cryogenian Warm Interval, NE Svalbard: Chemostratigraphy and genesis. Precambrian Research, 2016, 281, 128-154.	2.7	29
70	CONTROLS ON Sr AND C ISOTOPE COMPOSITIONS OF NEOPROTEROZOIC Sr-RICH LIMESTONES OF EAST GREENLAND AND NORTH CHINA. , 2000, , 297-313.		29
71	Hydrogeological implications of glacial landscape evolution at SkeiÃ°arÃ¡rsandur, SE Iceland. Geomorphology, 2008, 97, 218-236.	2.6	28
72	A formal Anthropocene is compatible with but distinct from its diachronous anthropogenic counterparts: a response to W.F. Ruddimanâ€™s â€˜three flaws in defining a formal Anthropoceneâ€™. Progress in Physical Geography, 2019, 43, 319-333.	3.2	28

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73	Geochemistry of speleothems affected by aragonite to calcite recrystallization â€“ Potential inheritance from the precursor mineral. Geochimica Et Cosmochimica Acta, 2017, 200, 310-329.	3.9	26
74	A method to anchor floating chronologies in annually laminated speleothems with Uâ€“Th dates. Quaternary Geochronology, 2012, 14, 57-66.	1.4	24
75	Synchrotron X-ray distinction of seasonal hydrological and temperature patterns in speleothem carbonate. Environmental Chemistry, 2014, 11, 28.	1.5	24
76	Stages in a Precambrian dolomitization, Scotland: cementing versus replacement textures. Sedimentology, 1980, 27, 631-650.	3.1	23
77	A 500 yr speleothem-derived reconstruction of late autumnâ€“winter precipitation, northeast Turkey. Quaternary Research, 2011, 75, 399-405.	1.7	23
78	A post-wildfire response in cave dripwater chemistry. Hydrology and Earth System Sciences, 2016, 20, 2745-2758.	4.9	23
79	Sulphate partitioning into calcite: Experimental verification of pH control and application to seasonality in speleothems. Geochimica Et Cosmochimica Acta, 2018, 226, 69-83.	3.9	22
80	The sulphur isotope and hydrochemical characteristics of SkeiÃ°arÃ¡rsandur, Iceland: identification of solute sources and implications for weathering processes. Hydrological Processes, 2009, 23, 2212-2224.	2.6	19
81	Sulphate concentration in cave dripwater and speleothems: long-term trends and overview of its significance as proxy for environmental processes and climate changes. Quaternary Science Reviews, 2015, 127, 48-60.	3.0	19
82	Glacitectonism, subglacial and glacilacustrine processes during a Neoproterozoic panglaciation, northâ€east Svalbard. Sedimentology, 2016, 63, 411-442.	3.1	19
83	Carbonate minerals in glacial sediments: geochemical clues to palaeoenvironment. Geological Society Special Publication, 1990, 53, 201-216.	1.3	18
84	Assessing acid rain and climate effects on the temporal variation of dissolved organic matter in the unsaturated zone of a karstic system from southern China. Journal of Hydrology, 2018, 556, 475-487.	5.4	17
85	Effects of wildfire on long-term soil CO2 concentration: implications for karst processes. Environmental Earth Sciences, 2016, 75, 1.	2.7	15
86	Microstructures in metasedimentary rocks from the Neoproterozoic Bonahaven Formation, Scotland: Microconcretions, impact spherules, or microfossils?. Precambrian Research, 2013, 233, 59-72.	2.7	14
87	How to date natural archives of the Anthropocene. Geology Today, 2018, 34, 182-187.	0.9	14
88	Hydrological and geochemical responses of fire in a shallow cave system. Science of the Total Environment, 2019, 662, 180-191.	8.0	12
89	Carbonate shelf and slope fades evolution prior to Vendian glaciation, central East Greenland. , 1989, , 263-273.		11
90	Definition of the Anthropocene: a view from the underworld. Geological Society Special Publication, 2014, 395, 239-254.	1.3	9

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91	The impact of fire on the geochemistry of speleothem-forming drip water in a sub-alpine cave. Science of the Total Environment, 2018, 642, 408-420.	8.0	9
92	Mixing zone dolomitization of Devonian carbonates, Guangxi, South China. Geological Society Special Publication, 1987, 36, 157-170.	1.3	7
93	Dolomitic stromatolite-bearing units with storm deposits from the Vendian of East Greenland and Scotland: a case of facies equivalence. , 1989, , 275-283.		7
94	Neoproterozoic glass-bleeding. Nature Geoscience, 2016, 9, 192-193.	12.9	4
95	Chapter 62 The Port Askaig Formation, Dalradian Supergroup, Scotland. Geological Society Memoir, 2011, 36, 635-642.	1.7	3
96	ISODRIP, a model to transfer the Î´18O signal of precipitation to drip water â€" Implementation of the model for Eagle Cave (central Spain). Science of the Total Environment, 2021, 797, 149188.	8.0	2
97	Stable isotopes of oxygen and hydrogen in meteoric water during the Cryogenian Period. Precambrian Research, 2019, 320, 253-260.	2.7	1