E J Brook

List of Publications by Year in descending order

83 papers	9,027 citations	71102 41 h-index	60623 81 g-index
117 all docs	117 docs citations	117 times ranked	6854 citing authors

#	Article	IF	Citations
1	Timing of Millennial-Scale Climate Change in Antarctica and Greenland During the Last Glacial Period. Science, 2001, 291, 109-112.	12.6	1,019
2	Transient Simulation of Last Deglaciation with a New Mechanism for BÃ¸lling-AllerÃ¸d Warming. Science, 2009, 325, 310-314.	12.6	843
3	Timing of abrupt climate change at the end of the Younger Dryas interval from thermally fractionated gases in polar ice. Nature, 1998, 391, 141-146.	27.8	639
4	Abrupt Climate Change at the End of the Last Glacial Period Inferred from Trapped Air in Polar Ice. Science, 1999, 286, 930-934.	12.6	506
5	Global climate evolution during the last deglaciation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1134-42.	7.1	422
6	Centennial-scale changes in the global carbon cycle during the last deglaciation. Nature, 2014, 514, 616-619.	27.8	380
7	Rapid Variations in Atmospheric Methane Concentration During the Past 110,000 Years. Science, 1996, 273, 1087-1091.	12.6	322
8	Synchronous Climate Changes in Antarctica and the North Atlantic. , 1998, 282, 92-95.		292
9	Consistently dated records from the Greenland GRIP, GISP2 and NGRIP ice cores for the past 104Âka reveal regional millennial-scale Î´18O gradients with possible Heinrich event imprint. Quaternary Science Reviews, 2014, 106, 29-46.	3.0	275
10	On the origin and timing of rapid changes in atmospheric methane during the Last Glacial Period. Global Biogeochemical Cycles, 2000, 14, 559-572.	4.9	270
11	Atmospheric CO ₂ and Climate on Millennial Time Scales During the Last Glacial Period. Science, 2008, 322, 83-85.	12.6	250
12	Greenland temperature response to climate forcing during the last deglaciation. Science, 2014, 345, 1177-1180.	12.6	226
13	Precise timing and characterization of abrupt climate change 8200 years ago from air trapped in polar ice. Quaternary Science Reviews, 2007, 26, 1212-1222.	3.0	213
14	The WAIS Divide deep ice core WD2014 chronology â€“ Part 1: Methane synchronization (68â€“31 ka BP) and the gas ageâ€“ice age difference. Climate of the Past, 2015, 11, 153-173.	3.4	172
15	Oxygen-18 of O ₂ Records the Impact of Abrupt Climate Change on the Terrestrial Biosphere. Science, 2009, 324, 1431-1434.	12.6	152
16	The WAIS Divide deep ice core WD2014 chronology â€“ Part 2: Annual-layer counting (0â€“31â€¯kaâ€¯BP). Climate of the Past, 2016, 12, 769-786.	3.4	137
17	A first chronology for the North Greenland Eemian Ice Drilling (NEEM) ice core. Climate of the Past, 2013, 9, 2713-2730.	3.4	133
18	Timing of millennial-scale climate change at Siple Dome, West Antarctica, during the last glacial period. Quaternary Science Reviews, 2005, 24, 1333-1343.	3.0	130

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19	Chronology of Taylor Glacier Advances in Arena Valley, Antarctica, Using in Situ Cosmogenic 3He and 10Be. Quaternary Research, 1993, 39, 11-23.	1.7	126
20	Where to find 1.5 million yr old ice for the IPICS "Oldest-Ice" ice core. Climate of the Past, 2013, 9, 2489-2505.	3.4	123
21	Enhanced tropical methane production in response to iceberg discharge in the North Atlantic. Science, 2015, 348, 1016-1019.	12.6	118
22	Carbon isotopes characterize rapid changes in atmospheric carbon dioxide during the last deglaciation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3465-3470.	7.1	109
23	Antarctic and global climate history viewed from ice cores. Nature, 2018, 558, 200-208.	27.8	96
24	¹⁴ CH ₄ Measurements in Greenland Ice: Investigating Last Glacial Termination CH ₄ Sources. Science, 2009, 324, 506-508.	12.6	88
25	Two-million-year-old snapshots of atmospheric gases from Antarctic ice. Nature, 2019, 574, 663-666.	27.8	88
26	Minimal geological methane emissions during the Younger Dryasâ€“Preboreal abrupt warming event. Nature, 2017, 548, 443-446.	27.8	86
27	Siple Dome ice reveals two modes of millennial CO2 change during the last ice age. Nature Communications, 2014, 5, 3723.	12.8	82
28	Ice Record of Â13C for Atmospheric CH4 Across the Younger Dryas-Preboreal Transition. Science, 2006, 313, 1109-1112.	12.6	80
29	Constraints on the Late Holocene Anthropogenic Contribution to the Atmospheric Methane Budget. Science, 2013, 342, 964-966.	12.6	80
30	Atmospheric methane during the last four glacial-interglacial cycles: Rapid changes and their link with Antarctic temperature. Journal of Geophysical Research, 2004, 109, .	3.3	79
31	Multidecadal variability of atmospheric methane, 1000â€“1800 C.E.. Journal of Geophysical Research, 2011, 116, .	3.3	78
32	Links between atmospheric carbon dioxide, theÂland carbon reservoir and climate over theÂpast millennium. Nature Geoscience, 2015, 8, 383-387.	12.9	66
33	Continuous methane measurements from a late Holocene Greenland ice core: Atmospheric and in-situ signals. Earth and Planetary Science Letters, 2013, 368, 9-19.	4.4	65
34	Antarctic surface temperature and elevation during the Last Glacial Maximum. Science, 2021, 372, 1097-1101.	12.6	61
35	Gas records from the West Greenland ice margin covering the Last Glacial Termination: a horizontal ice core. Quaternary Science Reviews, 2006, 25, 865-875.	3.0	60
36	Synchronous volcanic eruptions and abrupt climate change â¼17.7 ka plausibly linked by stratospheric ozone depletion. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10035-10040.	7.1	58

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37	Radiometric ⁸¹ Kr dating identifies 120,000-year-old ice at Taylor Glacier, Antarctica. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6876-6881.	7.1	57
38	Abrupt changes in the global carbon cycle during the last glacial period. Nature Geoscience, 2021, 14, 91-96.	12.9	53
39	Earliest Holocene south Greenland ice sheet retreat within its late Holocene extent. Geophysical Research Letters, 2014, 41, 5514-5521.	4.0	50
40	Old carbon reservoirs were not important in the deglacial methane budget. Science, 2020, 367, 907-910.	12.6	50
41	High-resolution glacial and deglacial record of atmospheric methane by continuous-flow and laser spectrometer analysis along the NEEM ice core. Climate of the Past, 2013, 9, 2579-2593.	3.4	49
42	An ice core record of near-synchronous global climate changes at the BÃ¸lling transition. Nature Geoscience, 2014, 7, 459-463.	12.9	48
43	Reconstructing the last interglacial at Summit, Greenland: Insights from GISP2. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9710-9715.	7.1	40
44	Observing and modeling the influence of layering on bubble trapping in polar firn. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2558-2574.	3.3	39
45	Isotopic constraints on marine and terrestrial N2O emissions during the last deglaciation. Nature, 2014, 516, 234-237.	27.8	38
46	The SP19 chronology for the South Pole Ice Core â€“ Part 1: volcanic matching and annual layer counting. Climate of the Past, 2019, 15, 1793-1808.	3.4	38
47	A high-precision method for measurement of paleoatmospheric CO2 in small polar ice samples. Journal of Glaciology, 2009, 55, 499-506.	2.2	33
48	Accretion of interplanetary dust in polar ice. Geophysical Research Letters, 2000, 27, 3145-3148.	4.0	31
49	Global ocean heat content in the Last Interglacial. Nature Geoscience, 2020, 13, 77-81.	12.9	31
50	Abrupt changes in atmospheric methane at the MIS 5bâ€“5a transition. Geophysical Research Letters, 2007, 34, .	4.0	30
51	Controls on Millennialâ€Scale Atmospheric CO₂ Variability During the Last Glacial Period. Geophysical Research Letters, 2018, 45, 7731-7740.	4.0	29
52	Abrupt change in atmospheric CO₂ during the last ice age. Geophysical Research Letters, 2012, 39, .	4.0	28
53	Does Î´¹⁸O of O₂ record meridional shifts in tropical rainfall?. Climate of the Past, 2017, 13, 1323-1338.	3.4	26
54	High resolution measurements of carbon monoxide along a late Holocene Greenland ice core: evidence for in situ production. Climate of the Past, 2014, 10, 987-1000.	3.4	25

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55	Local artifacts in ice core methane records caused by layered bubble trapping and in situ production: a multi-site investigation. Climate of the Past, 2016, 12, 1061-1077.	3.4	23
56	Antarctic temperature and CO₂: near-synchrony yet variable phasing during the last deglaciation. Climate of the Past, 2019, 15, 913-926.	3.4	20
57	Excess methane in Greenland ice cores associated with high dust concentrations. Geochimica Et Cosmochimica Acta, 2020, 270, 409-430.	3.9	20
58	Relative timing and variability of atmospheric methane and GISP2 oxygen isotopes between 68 and 86 ka. Global Biogeochemical Cycles, 2009, 23, .	4.9	19
59	A New Method for Analyzing ¹⁴C of Methane in Ancient Air Extracted from Glacial Ice. Radiocarbon, 2008, 50, 53-73.	1.8	18
60	Measurements of 14C in ancient ice from Taylor Glacier, Antarctica constrain in situ cosmogenic 14CH4 and 14CO production rates. Geochimica Et Cosmochimica Acta, 2016, 177, 62-77.	3.9	18
61	A novel method for obtaining very large ancient air samples from ablating glacial ice for analyses of methane radiocarbon. Journal of Glaciology, 2008, 54, 233-244.	2.2	16
62	Atmospheric methane control mechanisms during the early Holocene. Climate of the Past, 2017, 13, 1227-1242.	3.4	16
63	Is the Noble Gasâ€Based Rate of Ocean Warming During the Younger Dryas Overestimated?. Geophysical Research Letters, 2019, 46, 5928-5936.	4.0	16
64	The SP19 chronology for the South Pole Ice Core â€“ Part 2: gas chronology, Î”age, and smoothing of atmospheric records. Climate of the Past, 2020, 16, 2431-2444.	3.4	16
65	Response of atmospheric CO₂ to the abrupt cooling event 8200â€‰years ago. Geophysical Research Letters, 2014, 41, 604-609.	4.0	15
66	Atmospheric methane variability: Centennialâ€scale signals in the Last Glacial Period. Global Biogeochemical Cycles, 2017, 31, 575-590.	4.9	15
67	Atmospheric gas records from Taylor Glacier, Antarctica, reveal ancient ice with ages spanning the entire last glacial cycle. Climate of the Past, 2017, 13, 943-958.	3.4	15
68	Changes in the Isotopic Signature of Atmospheric Nitrous Oxide and Its Global Average Source During the Last Three Millennia. Journal of Geophysical Research D: Atmospheres, 2018, 123, 10,757.	3.3	15
69	Early to Late Holocene Surface Exposure Ages From Two Marineâ€Terminating Outlet Glaciers in Northwest Greenland. Geophysical Research Letters, 2018, 45, 7028-7039.	4.0	14
70	Spatial pattern of accumulation at Taylor Dome during Marine Isotope Stage 4: stratigraphic constraints from Taylor Glacier. Climate of the Past, 2019, 15, 1537-1556.	3.4	14
71	An 83â€‰000-year-old ice core from Roosevelt Island, Ross Sea, Antarctica. Climate of the Past, 2020, 16, 1691-1713.	3.4	14
72	Ice stratigraphy at the PÃ¢kitsoq ice margin, West Greenland, derived from gas records. Journal of Glaciology, 2009, 55, 411-421.	2.2	12

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73	N₂O changes from the Last Glacial Maximum to the preindustrial â€“ Part 1: Quantitative reconstruction of terrestrial and marine emissions using N₂O stable isotopes in ice cores. Biogeosciences, 2019, 16, 3997-4021.	3.3	12
74	High-precision dual-inlet IRMS measurements of the stable isotopes of CO₂ and the N₂O / CO₂ ratio from polar ice core samples. Atmospheric Measurement Techniques, 2014, 7, 3825-3837.	3.1	11
75	Widespread early Holocene deglaciation, Washington Land, northwest Greenland. Quaternary Science Reviews, 2020, 231, 106181.	3.0	10
76	Evolution of mean ocean temperature in Marine Isotope Stage 4. Climate of the Past, 2021, 17, 2273-2289.	3.4	10
77	In situ cosmogenic radiocarbon production and 2â€Ð ice flow line modeling for an Antarctic blue ice area. Journal of Geophysical Research, 2012, 117, .	3.3	6
78	Atmospheric Nitrous Oxide Variations on Centennial Time Scales During the Past Two Millennia. Global Biogeochemical Cycles, 2020, 34, e2020GB006568.	4.9	6
79	Ice core evidence for atmospheric oxygen decline since the Mid-Pleistocene transition. Science Advances, 2021, 7, eabj9341.	10.3	6
80	Enhanced moisture delivery into Victoria Land, East Antarctica, during the early Last Interglacial: implications for West Antarctic Ice Sheet stability. Climate of the Past, 2021, 17, 1841-1855.	3.4	5
81	Northern Hemisphere atmospheric history of carbon monoxide since preindustrial times reconstructed from multiple Greenland ice cores. Climate of the Past, 2022, 18, 631-647.	3.4	4
82	Carbon cycle dynamics during episodes of rapid climate change. Environmental Research Letters, 2021, 16, 040201.	5.2	1
83	Millennialâ€Scale Changes in Terrestrial and Marine Nitrous Oxide Emissions at the Onset and Termination of Marine Isotope Stage 4. Geophysical Research Letters, 2020, 47, e2020GL089110.	4.0	0