Martin Werner

List of Publications by Citations

121 papers	7,690 citations	38 h-index	87 g-index
195 ext. papers	8,727 ext. citations	7.3 avg, IF	5.58 L-index

#	Paper	IF	Citations
121	Orbital and millennial Antarctic climate variability over the past 800,000 years. *Science*, **2007**, 317, 793-6	33.3	1535
120	The aerosol-climate model ECHAM5-HAM. *Atmospheric Chemistry and Physics*, **2005**, 5, 1125-1156	6.8	839
119	A review of climatic controls on δ18O in precipitation over the Tibetan Plateau: Observations and simulations. *Reviews of Geophysics*, **2013**, 51, 525-548	23.1	449
118	Water isotope module of the ECHAM atmospheric general circulation model: A study on timescales from days to several years. *Journal of Geophysical Research*, **1998**, 103, 16871-16896		286
117	GRIP deuterium excess reveals rapid and orbital-scale changes in Greenland moisture origin. *Science* , **2005**, 309, 118-21	33.3	249
116	Relative importance of climate and land use in determining present and future global soil dust emission. *Geophysical Research Letters*, **2004**, 31, n/a-n/a	4.9	246
115	Orbitally driven east–west antiphasing of South American precipitation. *Nature Geoscience*, **2009**, 2, 210-214	10.3	230
114	20th Century Climate Change in the Tropical Andes: Observations and Model Results. *Climatic Change*, **2003**, 59, 75-99	4.5	227
113	Modeling δ18O in precipitation over the tropical Americas: 1. Interannual variability and climatic controls. *Journal of Geophysical Research*, **2003**, 108,		188
112	Stable water isotopes in the ECHAM5 general circulation model: Toward high-resolution isotope modeling on a global scale. *Journal of Geophysical Research*, **2011**, 116,		187
111	Stable isotopes in precipitation in the Asian monsoon region. *Journal of Geophysical Research*, **2005**, 110,		184
110	Stable isotopes in precipitation recording South American summer monsoon and ENSO variability: observations and model results. *Climate Dynamics*, **2005**, 25, 401-413	4.2	175
109	Borehole versus isotope temperatures on Greenland: Seasonality does matter. *Geophysical Research Letters*, **2000**, 27, 723-726	4.9	157
108	Effect of lake evaporation on δD values of lacustrine n-alkanes: A comparison of Nam Co (Tibetan Plateau) and Holzmaar (Germany). *Organic Geochemistry*, **2008**, 39, 711-729	3.1	118
107	Seasonal and interannual variability of the mineral dust cycle under present and glacial climate conditions. *Journal of Geophysical Research*, **2002**, 107, AAC 2-1		116
106	. *Tellus, Series B: Chemical and Physical Meteorology*, **2001**, 53, 53-71	3.3	100
105	Coherent isotope history of Andean ice cores over the last century. *Geophysical Research Letters*, **2003**, 30,	4.9	99

104	Little Ice Age clearly recorded in northern Greenland ice cores. *Geophysical Research Letters*, **1998**, 25, 1749-1752	4.9	97
103	Antarctic climate variability on regional and continental scales over the last 2000 years. *Climate of the Past*, **2017**, 13, 1609-1634	3.9	92
102	Modeling δ18O in precipitation over the tropical Americas: 2. Simulation of the stable isotope signal in Andean ice cores. *Journal of Geophysical Research*, **2003**, 108,		92
101	An analysis of present and future ECHAM5 pressure fields using a classification of circulation patterns. *International Journal of Climatology*, **2009**, 29, 1796-1810	3.5	89
100	Isotopic composition and origin of polar precipitation in present and glacial climate simulations. *Tellus, Series B: Chemical and Physical Meteorology*, **2001**, 53, 53-71	3.3	85
99	Long-term winter warming trend in the Siberian Arctic during the mid- to late Holocene. *Nature Geoscience*, **2015**, 8, 122-125	18.3	77
98	Synchronous and proportional deglacial changes in Atlantic meridional overturning and northeast Brazilian precipitation. *Paleoceanography*, **2017**, 32, 622-633		70
97	Stable water isotopes in the coupled atmosphere–land surface model ECHAM5-JSBACH. *Geoscientific Model Development*, **2013**, 6, 1463-1480	6.3	70
96	Estimating the hydrogen isotopic composition of past precipitation using leaf-waxes from western Africa. *Quaternary Science Reviews*, **2013**, 65, 88-101	3.9	68
95	The summer 2012 Greenland heat wave: In situ and remote sensing observations of water vapor isotopic composition during an atmospheric river event. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 2970-2989	4.4	66
94	Synchronicity of Antarctic temperatures and local solar insolation on orbital timescales. *Nature*, **2011**, 471, 91-4	50.4	65
93	Modeling interannual variability of water isotopes in Greenland and Antarctica. *Journal of Geophysical Research*, **2002**, 107, ACL 1-1		61
92	Impact of precipitation seasonality changes on isotopic signals in polar ice cores: a multi-model analysis. *Earth and Planetary Science Letters*, **2003**, 216, 525-538	5.3	51
91	Climate information imprinted in oxygen-isotopic composition of precipitation in Europe. *Earth and Planetary Science Letters*, **2011**, 311, 144-154	5.3	50
90	Glacial–interglacial changes in H₂¹⁸O, HDO and deuterium excess – results from the fully coupled ECHAM5/MPI-OM Earth system model. *Geoscientific Model Development*, **2016**, 9, 647-670	6.3	47
89	20th Century Climate Change in the Tropical Andes: Observations and Model Results. *Advances in Global Change Research*, **2003**, 75-99	1.2	46
88	Global analysis reveals climatic controls on the oxygen isotope composition of cave drip water. *Nature Communications*, **2019**, 10, 2984	17.4	45
87	Late-glacial to late-Holocene shifts in global precipitation δ¹⁸O. *Climate of the Past*, **2015**, 11, 1375-1393	3.9	45

86	Modeling the isotopic composition of Antarctic snow using backward trajectories: Simulation of snow pit records. *Journal of Geophysical Research*, **2006**, 111,		45
85	Isotopic exchange on the diurnal scale between near-surface snow and lower atmospheric water vapor at Kohnen station, East Antarctica. *Cryosphere*, **2016**, 10, 1647-1663	5.5	40
84	Atmospheric response to the extreme Arctic sea ice conditions in 2007. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	40
83	Recent changes in north-west Greenland climate documented by NEEM shallow ice core data and simulations, and implications for past-temperature reconstructions. *Cryosphere*, **2015**, 9, 1481-1504	5.5	36
82	Evaluating the skills of isotope-enabled general circulation models against in situ atmospheric water vapor isotope observations. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 246-263	4.4	35
81	Coherency of late Holocene European speleothem δ18O records linked to North Atlantic Ocean circulation. *Climate Dynamics*, **2017**, 49, 595-618	4.2	35
80	The effect of the East Atlantic pattern on the precipitation δ18O-NAO relationship in Europe. *Climate Dynamics*, **2016**, 47, 2059-2069	4.2	34
79	North Pacific freshwater events linked to changes in glacial ocean circulation. *Nature*, **2018**, 559, 241-245	50.4	33
78	Early Cenozoic evolution of topography, climate, and stable isotopes in precipitation in the North American Cordillera. *Numerische Mathematik*, **2013**, 313, 613-648	5.3	33
77	Stable isotopes in East African precipitation record Indian Ocean zonal mode. *Geophysical Research Letters*, **2005**, 32,	4.9	32
76	Resolving the controls of water vapour isotopes in the Atlantic sector. *Nature Communications*, **2019**, 10, 1632	17.4	31
75	Reconciling glacial Antarctic water stable isotopes with ice sheet topography and the isotopic paleothermometer. *Nature Communications*, **2018**, 9, 3537	17.4	31
74	Water isotope variations in the global ocean model MPI-OM. *Geoscientific Model Development*, **2012** , 5, 809-818	6.3	30
73	Simulated oxygen isotopes in cave drip water and speleothem calcite in European caves. *Climate of the Past*, **2012**, 8, 1781-1799	3.9	28
72	Variations of oxygen-18 in West Siberian precipitation during the last 50 years. *Atmospheric Chemistry and Physics*, **2014**, 14, 5853-5869	6.8	27
71	Enriching the isotopic toolbox for migratory connectivity analysis: a new approach for migratory species breeding in remote or unexplored areas. *Diversity and Distributions*, **2015**, 21, 416-427	5	23
70	Evaluating model outputs using integrated global speleothem records of climate change since the last glacial. *Climate of the Past*, **2019**, 15, 1557-1579	3.9	22
69	Solar and volcanic forcing of North Atlantic climate inferred from a process-based reconstruction. *Climate of the Past*, **2018**, 14, 1179-1194	3.9	22

68	North Atlantic Oscillation controls on oxygen and hydrogen isotope gradients in winter precipitation across Europe; implications for palaeoclimate studies. *Climate of the Past*, **2016**, 12, 2127-2143	3.9	18
67	Estimates of late Cenozoic climate change relevant to Earth surface processes in tectonically active orogens. *Earth Surface Dynamics*, **2018**, 6, 271-301	3.8	18
66	Precipitation regime and stable isotopes at Dome Fuji, East Antarctica. *Atmospheric Chemistry and Physics*, **2016**, 16, 6883-6900	6.8	17
65	Late quaternary climate, precipitation δ18O, and Indian monsoon variations over the Tibetan Plateau. *Earth and Planetary Science Letters*, **2017**, 457, 412-422	5.3	17
64	Simulating climate and stable water isotopes during the Last Interglacial using a coupled climate-isotope model. *Journal of Advances in Modeling Earth Systems*, **2017**, 9, 2027-2045	7.1	17
63	Water isotopes–climate relationships for the mid-Holocene and preindustrial period simulated with an isotope-enabled version of MPI-ESM. *Climate of the Past*, **2019**, 15, 1913-1937	3.9	17
62	Stable isotopes in surface snow along a traverse route from Zhongshan station to Dome A, East Antarctica. *Climate Dynamics*, **2013**, 41, 2427-2438	4.2	16
61	An Experimental Investigation of Kinetic Fractionation of Open-Water Evaporation Over a Large Lake. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 11,651-11,663	4.4	16
60	Hydroclimate in the Pamirs Was Driven by Changes in Precipitation-Evaporation Seasonality Since the Last Glacial Period. *Geophysical Research Letters*, **2019**, 46, 13972-13983	4.9	16
59	Moisture origin and stable isotope characteristics of precipitation in southeast Siberia. *Hydrological Processes*, **2020**, 34, 51-67	3.3	16
58	Assessing the robustness of Antarctic temperature reconstructions over the past 2´millennia using pseudoproxy and data assimilation experiments. *Climate of the Past*, **2019**, 15, 661-684	3.9	15
57	Water stable isotope spatio-temporal variability in Antarctica in 1960–2013: observations and simulations from the ECHAM5-wiso atmospheric general circulation model. *Climate of the Past*, **2018**, 14, 923-946	3.9	15
56	A posteriori calculation of δ¹⁸O and δD in atmospheric water vapour from ground-based near-infrared FTIR retrievals of H₂¹⁶O, H₂¹⁸O, and HD¹⁶O. *Atmospheric Measurement Techniques*, **2014**, 7, 2567-2580	4	15
55	Overview of the MOSAiC expedition–Atmosphere. *Elementa*, **2022**, 10,	3.6	15
54	A 60-year ice-core record of regional climate from Admiralty Bay, coastal Antarctica. *Cryosphere*, **2017**, 11, 343-362	5.5	14
53	The Climatological Impacts of Continental Surface Evaporation, Rainout, and Subcloud Processes on δD of Water Vapor and Precipitation in Europe. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 4390-4409	4.4	14
52	MUSICA MetOp/IASI {H₂O,<i>δ</i>D} pair retrieval simulations for validating tropospheric moisture pathways in atmospheric models. *Atmospheric Measurement Techniques*, **2017**, 10, 507-525	4	13
51	Possible changes of δ18O in precipitation caused by a meltwater event in the North Atlantic. *Journal of Geophysical Research*, **2000**, 105, 10161-10167		13

50	Comparing past accumulation rate reconstructions in East Antarctic ice cores using ¹⁰Be, water isotopes and CMIP5-PMIP3 models. *Climate of the Past*, **2015**, 11, 355-367	3.9	13
49	A one-dimensional simulation of the water vapor isotope HDO in the tropical stratosphere. *Journal of Geophysical Research*, **2001**, 106, 32283-32294		12
48	How Much Climatic Information Do Water Isotopes Contain? **2005**, 303-320		11
47	Simulation of the isotopic composition of stratospheric water vapour Part 1: Description and evaluation of the EMAC model. *Atmospheric Chemistry and Physics*, **2015**, 15, 5537-5555	6.8	10
46	Influence of orbital forcing and solar activity on water isotopes in precipitation during the mid- and late Holocene. *Climate of the Past*, **2013**, 9, 13-26	3.9	10
45	Moisture origin as a driver of temporal variabilities of the water vapour isotopic composition in the Lena River Delta, Siberia. *Atmospheric Chemistry and Physics*, **2020**, 20, 10493-10511	6.8	10
44	Precipitation 18O over the Himalaya-Tibet orogen from ECHAM5-wiso simulations: Statistical analysis of temperature, topography and precipitation. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 9278-9300	4.4	10
43	Challenges associated with the climatic interpretation of water stable isotope records from a highly resolved firn core from Ad e Land, coastal Antarctica. *Cryosphere*, **2019**, 13, 1297-1324	5.5	9
42	Last Interglacial Hydroclimate Seasonality Reconstructed From Tropical Atlantic Corals. *Paleoceanography and Paleoclimatology*, **2018**, 33, 198-213	3.3	9
41	Simulated European stalagmite record and its relation to a quasi-decadal climate mode. *Climate of the Past*, **2013**, 9, 89-98	3.9	9
40	Tropical circulation intensification and tectonic extension recorded by Neogene terrestrial 18O records of the western United States. *Geology*, **2016**, 44, 971-974	5	9
39	Modern precipitation 18O and trajectory analysis over the Himalaya-Tibet Orogen from ECHAM5-wiso simulations. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 10,432-10,452	4.4	8
38	Developing a western Siberia reference site for tropospheric water vapour isotopologue observations obtained by different techniques (in situ and remote sensing). *Atmospheric Chemistry and Physics*, **2014**, 14, 5943-5957	6.8	8
37	Reply to comment by N. M. Mahowald et al. on Relative importance of climate and land use in determining present and future global soil dust emission *Geophysical Research Letters*, **2004**, 31,	4.9	8
36	ECHAM5-wiso water vapour isotopologues simulation and its comparison with WS-CRDS measurements and retrievals from GOSAT and ground-based FTIR spectra in the atmosphere of Western Siberia		7
35	Limited Retreat of the Wilkes Basin Ice Sheet During the Last Interglacial. *Geophysical Research Letters*, **2020**, 47, e2020GL088131	4.9	6
34	Isotopic exchange on the diurnal scale between near-surface snow and lower atmospheric water vapor at Kohnen station, East Antarctica		6
33	Snowfall and Water Stable Isotope Variability in East Antarctica Controlled by Warm Synoptic Events. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2020JD032863	4.4	6

32	Links between central Greenland stable isotopes, blocking and extreme climate variability over Europe at decadal to multidecadal time scales. *Climate Dynamics*, **2017**, 49, 649-663	4.2	5
31	Seasonal reconstructions coupling ice core data and an isotope-enabled climate model □ methodological implications of seasonality, climate modes and selection of proxy data. *Climate of the Past*, **2020**, 16, 1737-1758	3.9	5
30	Glacial□interglacial shifts in global and regional precipitation δ¹⁸O		5
29	A global climatology of the ocean surface during the Last Glacial Maximum mapped on a regular grid (GLOMAP). *Climate of the Past*, **2021**, 17, 805-824	3.9	4
28	Oxygen and hydrogen isotopic composition of tap waters in France. *Geological Society Special Publication*,SP507-2020-207	1.7	4
27	The influence of volcanic eruptions on weather regimes over the North Atlantic simulated by ECHAM5/MPI-OM ensemble runs from 800 to 2000 CE. *Atmospheric Research*, **2018**, 213, 211-223	5.4	3
26	Glacial□interglacial changes of H₂¹⁸O, HDO and deuterium excess □results from the fully coupled Earth System Model ECHAM5/MPI-OM		3
25	The role of air□sea fluxes for the water vapour isotope signals in the cold and warm sectors of extratropical cyclones over the Southern Ocean. *Weather and Climate Dynamics*, **2021**, 2, 331-357	3.3	3
24	Precipitation regime and stable isotopes at Dome Fuji, East Antarctica **2016**,		2
23	Laepple et al. reply. *Nature*, **2011**, 479, E2-E4	50.4	2
22	High-resolution nudged isotope modelling with ECHAM6-wiso: Impacts of updated model physics and ERA5 reanalysis data. *Journal of Advances in Modeling Earth Systems*,	7.1	2
21	Variations of oxygen-18 in West Siberian precipitation during the last 50 yr		2
20	Retrieval of δ¹⁸O and □D in atmospheric water vapour from ground-based FTIR		2
19	The role of air□sea fluxes for the water vapour isotope signals in the cold and warm sectors of extratropical cyclones over the Southern Ocean		2
18	Continuous monitoring of surface water vapour isotopic compositions at Neumayer Station III, East Antarctica. *Cryosphere*, **2021**, 15, 4745-4767	5.5	2
17	Applying an isotope-enabled regional climate model over the Greenland ice sheet: effect of spatial resolution on model bias. *Climate of the Past*, **2021**, 17, 1685-1699	3.9	2
16	Climate modeling for Yamal territory using supercomputer atmospheric circulation model ECHAM5-wiso **2015**,		1
15	Water isotope variations in the global ocean model MPI-OM **2012**,		1

14	Simulating glacial dust changes in the Southern Hemisphere using ECHAM6.3-HAM2.3. *Climate of the Past*, **2022**, 18, 67-87	3.9	1
13	Modeling of water isotopes with model ECHAM6-wiso in nudging mode with reanalysis ERA5 **2018**,		1
12	Validation of ECHAM AGCMs Using Laser Spectrometer Data from Two Arctic Stations. *Atmospheric and Oceanic Optics*, **2020**, 33, 702-707	0.8	1
11	Disentangling different moisture transport pathways over the eastern subtropical North Atlantic using multi-platform isotope observations and high-resolution numerical modelling. *Atmospheric Chemistry and Physics*, **2021**, 21, 16319-16347	6.8	1
10	Simulated European stalagmite record and its relation to a quasi-decadal climate mode		1
9	Recent changes in north-west Greenland climate documented by NEEM shallow ice core data and simulations, and implications for past temperature reconstructions		1
8	Simulated oxygen isotopes in cave drip water and speleothem calcite in European caves		1
7	Eurasian Holocene climate trends in transient coupled climate simulations and stable oxygen isotope records. *Journal of Quaternary Science*,	2.3	1
6	Calendar effects on surface air temperature and precipitation based on model-ensemble equilibrium and transient simulations from PMIP4 and PACMEDY. *Climate of the Past*, **2022**, 18, 1047-1070	3.9	1
5	North Atlantic weather regimes in $\delta^{18}O$ of winter precipitation: isotopic fingerprint of the response in the atmospheric circulation after volcanic eruptions. *Tellus, Series B: Chemical and Physical Meteorology*, **2019**, 71, 1633848	3.3	0
4	Modelling stable water isotopes: Status and perspectives. *EPJ Web of Conferences*, **2010**, 9, 73-82	0.3	0
3	A data–model approach to interpreting speleothem oxygen isotope records from monsoon regions. *Climate of the Past*, **2021**, 17, 1119-1138	3.9	0
2	How precipitation intermittency sets an optimal sampling distance for temperature reconstructions from Antarctic ice cores. *Climate of the Past*, **2021**, 17, 1587-1605	3.9	0
1	North-West African Hydrologic Changes in the Holocene: A Combined Isotopic Data and Model Approach. *SpringerBriefs in Earth System Sciences*, **2015**, 109-114	1	