Kerstin Stahl

List of Publications by Year
in descending order

95 papers	8,382 citations	43973 48 h-index	49773 87 g-index
165 all docs	165 docs citations	165 times ranked	7435 citing authors

#	Article	IF	Citations
1	Drought in the Anthropocene. Nature Geoscience, 2016, 9, 89-91.	5.4	537
2	Candidate Distributions for Climatological Drought Indices (<scp>SPI</scp> and <scp>SPEI</scp>). International Journal of Climatology, 2015, 35, 4027-4040.	1.5	483
3	Streamflow trends in Europe: evidence from a dataset of near-natural catchments. Hydrology and Earth System Sciences, 2010, 14, 2367-2382.	1.9	370
4	Have streamflow droughts in Europe become more severe or frequent?. International Journal of Climatology, 2001, 21, 317-333.	1.5	302
5	Comparison of approaches for spatial interpolation of daily air temperature in a large region with complex topography and highly variable station density. Agricultural and Forest Meteorology, 2006, 139, 224-236.	1.9	301
6	Drought in a human-modified world: reframing drought definitions, understanding, and analysis approaches. Hydrology and Earth System Sciences, 2016, 20, 3631-3650.	1.9	289
7	Glacier change in western North America: influences on hydrology, geomorphic hazards and water quality. Hydrological Processes, 2009, 23, 42-61.	1.1	278
8	Largeâ€scale river flow archives: importance, current status and future needs. Hydrological Processes, 2011, 25, 1191-1200.	1.1	274
9	Flash droughts present a new challenge for subseasonal-to-seasonal prediction. Nature Climate Change, 2020, 10, 191-199.	8.1	210
10	Coupled modelling of glacier and streamflow response to future climate scenarios. Water Resources Research, 2008, 44, .	1.7	199
11	Impacts of European drought events: insights from an international database of text-based reports. Natural Hazards and Earth System Sciences, 2016, 16, 801-819.	1.5	187
12	Modeling drought impact occurrence based on meteorological drought indices in Europe. Journal of Hydrology, 2015, 530, 37-50.	2.3	169
13	Movement of outbreak populations of mountain pine beetle: influences of spatiotemporal patterns and climate. Ecography, 2008, 31, 348-358.	2.1	166
14	Drought indicators revisited: the need for a wider consideration of environment and society. Wiley Interdisciplinary Reviews: Water, 2016, 3, 516-536.	2.8	161
15	Hydrology needed to manage droughts: the 2015 European case. Hydrological Processes, 2016, 30, 3097-3104.	1.1	152
16	Influence of watershed glacier coverage on summer streamflow in British Columbia, Canada. Water Resources Research, 2006, 42, .	1.7	150
17	Climate change and the institutional resilience of international river basins. Journal of Peace Research, 2012, 49, 193-209.	1.5	147
18	Comparing Large-Scale Hydrological Model Simulations to Observed Runoff Percentiles in Europe. Journal of Hydrometeorology, 2012, 13, 604-620.	0.7	135

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19	Filling the white space on maps of European runoff trends: estimates from a multi-model ensemble. Hydrology and Earth System Sciences, 2012, 16, 2035-2047.	1.9	134
20	The EuropeanÂ2015 drought from a hydrological perspective. Hydrology and Earth System Sciences, 2017, 21, 3001-3024.	1.9	132
21	Estimating drought risk across Europe from reported drought impacts, drought indices, and vulnerability factors. Hydrology and Earth System Sciences, 2016, 20, 2779-2800.	1.9	126
22	Climate change could alter the distribution of mountain pine beetle outbreaks in western Canada. Ecography, 2012, 35, 211-223.	2.1	122
23	Climate-driven variability in the occurrence of major floods across North America and Europe. Journal of Hydrology, 2017, 552, 704-717.	2.3	122
24	Detection of runoff timing changes in pluvial, nival, and glacial rivers of western Canada. Water Resources Research, 2009, 45, .	1.7	117
25	Towards pan-European drought risk maps: quantifying the link between drought indices and reported drought impacts. Environmental Research Letters, 2015, 10, 014008.	2.2	116
26	Comparison of approaches for spatial interpolation of daily air temperature in a large region with complex topography and highly variable station density. Agricultural and Forest Meteorology, 2006, 139, 224-236.	1.9	115
27	The influence of decadal-scale variability on trends in long European streamflow records. Hydrology and Earth System Sciences, 2013, 17, 2717-2733.	1.9	113
28	How well do meteorological indicators represent agricultural and forest drought across Europe?. Environmental Research Letters, 2018, 13, 034042.	2.2	107
29	Comparison of hydrological model structures based on recession and low flow simulations. Hydrology and Earth System Sciences, 2011, 15, 3447-3459.	1.9	104
30	Catchment water storage variation with elevation. Hydrological Processes, 2017, 31, 2000-2015.	1.1	103
31	The role of synoptic-scale circulation in the linkage between large-scale oceanâ€“atmosphere indices and winter surface climate in British Columbia, Canada. International Journal of Climatology, 2006, 26, 541-560.	1.5	96
32	Are streamflow recession characteristics really characteristic?. Hydrology and Earth System Sciences, 2013, 17, 817-828.	1.9	94
33	A quantitative analysis to objectively appraise drought indicators and model drought impacts. Hydrology and Earth System Sciences, 2016, 20, 2589-2609.	1.9	94
34	Exploring the link between drought indicators and impacts. Natural Hazards and Earth System Sciences, 2015, 15, 1381-1397.	1.5	90
35	Large-scale analysis of changing frequencies of rain-on-snow events with flood-generation potential. Hydrology and Earth System Sciences, 2014, 18, 2695-2709.	1.9	89
36	Geography of international water conflict and cooperation: Data sets and applications. Water Resources Research, 2004, 40, .	1.7	84

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37	Streamflow sensitivity to drought scenarios in catchments with different geology. Geophysical Research Letters, 2014, 41, 6174-6183.	1.5	82
38	Linking streamflow drought to the occurrence of atmospheric circulation patterns. Hydrological Sciences Journal, 1999, 44, 467-482.	1.2	79
39	A drought index accounting for snow. Water Resources Research, 2014, 50, 7861-7872.	1.7	78
40	Human influences on streamflow drought characteristics in England and Wales. Hydrology and Earth System Sciences, 2018, 22, 1051-1064.	1.9	65
41	Spatial and temporal patterns of largeâ€scale droughts in Europe: Model dispersion and performance. Geophysical Research Letters, 2014, 41, 429-434.	1.5	63
42	Snow redistribution for the hydrological modeling of alpine catchments. Wiley Interdisciplinary Reviews: Water, 2017, 4, e1232.	2.8	63
43	Effects of univariate and multivariate bias correction on hydrological impact projections in alpine catchments. Hydrology and Earth System Sciences, 2019, 23, 1339-1354.	1.9	63
44	Climatology of winter cold spells in relation to mountain pine beetle mortality in British Columbia, Canada. Climate Research, 2006, 32, 13-23.	0.4	62
45	Largeâ€Scale Assessment of Delayed Groundwater Responses to Drought. Water Resources Research, 2020, 56, e2019WR025441.	1.7	60
46	Comparison of different threshold level methods for drought propagation analysis in Germany. Hydrology Research, 2017, 48, 1311-1326.	1.1	58
47	Developing drought impact functions for drought risk management. Natural Hazards and Earth System Sciences, 2017, 17, 1947-1960.	1.5	51
48	Natural and Human Influences on the Link Between Meteorological and Hydrological Drought Indices for a Large Set of Catchments in the Contiguous United States. Water Resources Research, 2018, 54, 6005-6023.	1.7	51
49	The Processes, Patterns and Impacts of Low Flows Across Canada. Canadian Water Resources Journal, 2008, 33, 107-124.	0.5	50
50	Attribution of European precipitation and temperature trends to changes in synoptic circulation. Hydrology and Earth System Sciences, 2015, 19, 3093-3107.	1.9	49
51	Inter-comparison of weather and circulation type classifications for hydrological drought development. Physics and Chemistry of the Earth, 2010, 35, 507-515.	1.2	46
52	Low-frequency variability of European runoff. Hydrology and Earth System Sciences, 2011, 15, 2853-2869.	1.9	46
53	Derivation of melt factors from glacier mass-balance records in western Canada. Journal of Glaciology, 2009, 55, 123-130.	1.1	43
54	Response to comment on â€˜Candidate Distributions for Climatological Drought Indices () Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td (	1.5	42

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55	Streamflow Data from Small Basins: A Challenging Test to High-Resolution Regional Climate Modeling. Journal of Hydrometeorology, 2011, 12, 900-912.	0.7	41
56	An assessment of trends and potential future changes in groundwater-baseflow drought based on catchment response times. Hydrology and Earth System Sciences, 2018, 22, 6209-6224.	1.9	40
57	Drought Characteristics Derived Based on the Standardized Streamflow Index: A Large Sample Comparison for Parametric and Nonparametric Methods. Water Resources Research, 2020, 56, e2019WR026315.	1.7	37
58	Spatial crossâ€correlation patterns of European low, mean and high flows. Hydrological Processes, 2011, 25, 1034-1045.	1.1	36
59	Beyond binary baseflow separation: a delayed-flow index for multiple streamflow contributions. Hydrology and Earth System Sciences, 2020, 24, 849-867.	1.9	36
60	The role of glacier changes and threshold definition in the characterisation of future streamflow droughts in glacierised catchments. Hydrology and Earth System Sciences, 2018, 22, 463-485.	1.9	33
61	Indexâ€Based Characterization and Quantification of Groundwater Dynamics. Water Resources Research, 2019, 55, 5575-5592.	1.7	33
62	Magic componentsâ€"why quantifying rain, snowmelt, and icemelt in river discharge is not easy. Hydrological Processes, 2018, 32, 160-166.	1.1	31
63	Technical note: Representing glacier geometry changes in a semi-distributed hydrological model. Hydrology and Earth System Sciences, 2018, 22, 2211-2224.	1.9	31
64	An inventory of Alpine drought impact reports to explore past droughts in a mountain region. Natural Hazards and Earth System Sciences, 2021, 21, 2485-2501.	1.5	30
65	Synoptic sea-level pressure patterns generated by a general circulation model: comparison with types derived from NCEP/NCAR re-analysis and implications for downscaling. International Journal of Climatology, 2006, 26, 1727-1736.	1.5	29
66	Glacioâ€hydrological model calibration and evaluation. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1483.	2.8	28
67	Is there a superior conceptual groundwater model structure for baseflow simulation?. Hydrological Processes, 2015, 29, 1301-1313.	1.1	26
68	Sensitivity of a data-driven soil water balance model to estimate summer evapotranspiration along a forest chronosequence. Hydrology and Earth System Sciences, 2011, 15, 3461-3473.	1.9	24
69	Influence of Hydroclimatology and Socioeconomic Conditions on Water-Related International Relations. Water International, 2005, 30, 270-282.	0.4	21
70	The compensating effect of glaciers: Characterizing the relation between interannual streamflow variability and glacier cover. Hydrological Processes, 2020, 34, 553-568.	1.1	20
71	The challenges of hydrological drought definition, quantification and communication: an interdisciplinary perspective. Proceedings of the International Association of Hydrological Sciences, 0, 383, 291-295.	1.0	20
72	Hydrological response to warm and dry weather: do glaciers compensate?. Hydrology and Earth System Sciences, 2021, 25, 3245-3265.	1.9	19

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73	Different drought types and the spatial variability in their hazard, impact, and propagation characteristics. Natural Hazards and Earth System Sciences, 2022, 22, 2099-2116.	1.5	17
74	A multidisciplinary drought catalogue for southwestern Germany dating back toÂ1801. Natural Hazards and Earth System Sciences, 2020, 20, 2979-2995.	1.5	16
75	Physiographic and Climatic Controls on Regional Groundwater Dynamics. Water Resources Research, 2020, 56, e2019WR026545.	1.7	15
76	Groundwater and baseflow drought responses to synthetic recharge stress tests. Hydrology and Earth System Sciences, 2021, 25, 1053-1068.	1.9	14
77	A prototype platform for water resources monitoring and early recognition of critical droughts in Switzerland. Proceedings of the International Association of Hydrological Sciences, 0, 364, 492-498.	1.0	14
78	Trends in groundwater levels in British Columbia. Canadian Water Resources Journal, 2014, 39, 15-31.	0.5	13
79	Evapotranspiration and land cover transitions: longâ€term watershed response in recovering forested ecosystems. Ecohydrology, 2012, 5, 721-732.	1.1	12
80	Patterns in the linkage of water quantity and quality during lowâ€flows. Hydrological Processes, 2017, 31, 4195-4205.	1.1	12
81	A model comparison assessing the importance of lateral groundwater flows at the global scale. Environmental Research Letters, 2022, 17, 044020.	2.2	12
82	Recent evidence for warmer and drier growing seasons in climate sensitive regions of Central America from multiple global datasets. International Journal of Climatology, 2022, 42, 1399-1417.	1.5	11
83	Groundwater extraction reduces tree vitality, growth and xylem hydraulic capacity in Quercus robur during and after drought events. Scientific Reports, 2021, 11, 5149.	1.6	10
84	Stakeholder Coinquiries on Drought Impacts, Monitoring, and Early Warning Systems. Bulletin of the American Meteorological Society, 2016, 97, ES217-ES220.	1.7	8
85	Similarity-based approaches in hydrogeology: proposal of a new concept for data-scarce groundwater resource characterization and prediction. Hydrogeology Journal, 2021, 29, 1693.	0.9	8
86	Repository of Drought Event Impacts Across the Danube Catchment Countries Between 1981 and 2016 Using Publicly Available Sources. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 2019, 67, 925-938.	0.2	8
87	Controls on hydrologic drought duration in near-natural streamflow in Europe and the USA. Hydrology and Earth System Sciences, 2016, 20, 4043-4059.	1.9	7
88	Stress testing as complement to climate scenarios: recharge scenarios to quantify streamflow drought sensitivity. Proceedings of the International Association of Hydrological Sciences, 0, 383, 43-50.	1.0	7
89	Evaluating tropical drought risk by combining open access gridded vulnerability and hazard data products. Science of the Total Environment, 2022, 822, 153493.	3.9	7
90	The impact of the resolution of meteorological data sets on catchmentâ€scale precipitation and drought studies. International Journal of Climatology, 2018, 38, 3069-3081.	1.5	6

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91	Revisiting Major Dry Periods by Rolling Time Series Analysis for Human-Water Relevance in Drought. Water Resources Management, 2022, 36, 2725-2739.	1.9	5
92	Assessment of the Vulnerability of a River System to Drought. Advances in Natural and Technological Hazards Research, 2000, , 209-219.	1.1	2
93	Fostering drought research and science-policy interfacing: Achievements of the DROUGHT-R&SPI project. , 2015, , 3-12.		1
94	Movement of outbreak populations of mountain pine beetle: influences of spatiotemporal patterns and climate. Ecography, 2008, .	2.1	0
95	The CH-IRP data set: a decade of fortnightly data on <i>Î´</i>²H and <i>Î´</i>¹⁸O in streamflow and precipitation in Switzerland. Earth System Science Data, 2020, 12, 3057-3066.	3.7	0