

# Gunnar Lischeid

## List of Publications by Year in descending order

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Version: 2024-02-01

117  
papers

2,896  
citations

147566

31  
h-index

223531

46  
g-index

129  
all docs

129  
docs citations

129  
times ranked

3967  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rainfall trends in Nigeria, 1901–2000. <i>Journal of Hydrology</i> , 2011, 411, 207-218.	2.3	161
2	Effects of micro-topography on surface–subsurface exchange and runoff generation in a virtual riparian wetland – A modeling study. <i>Advances in Water Resources</i> , 2010, 33, 1388-1401.	1.7	129
3	Dynamics of redox processes in a minerotrophic fen exposed to a water table manipulation. <i>Geoderma</i> , 2009, 153, 379-392.	2.3	98
4	Gradients of microclimate, carbon and nitrogen in transition zones of fragmented landscapes – a review. <i>Agricultural and Forest Meteorology</i> , 2017, 232, 659-671.	1.9	95
5	Impact of altering the water table height of an acidic fen on N <sub>2</sub> O and NO fluxes and soil concentrations. <i>Global Change Biology</i> , 2010, 16, 220-233.	4.2	87
6	Drivers of water level fluctuations and hydrological exchange between groundwater and surface water at the lowland River Spree (Germany): field study and statistical analyses. <i>Hydrological Processes</i> , 2009, 23, 2117-2128.	1.1	76
7	Assessing resilience in long-term ecological data sets. <i>Ecological Indicators</i> , 2016, 65, 10-43.	2.6	70
8	Conceptualization in catchment modelling: simply learning?. <i>Hydrological Processes</i> , 2008, 22, 2389-2393.	1.1	65
9	Understanding processes governing water quality in catchments using principal component scores. <i>Journal of Hydrology</i> , 2013, 486, 31-38.	2.3	61
10	Impacts of climate change on hydro-meteorological drought over the Volta Basin, West Africa. <i>Global and Planetary Change</i> , 2017, 155, 121-132.	1.6	60
11	No perfect storm for crop yield failure in Germany. <i>Environmental Research Letters</i> , 2020, 15, 104012.	2.2	53
12	Grasping the heterogeneity of kettle hole water quality in Northeast Germany. <i>Hydrobiologia</i> , 2012, 689, 63-77.	1.0	50
13	Carbon and nutrient cycling in kettle hole sediments depending on hydrological dynamics: a review. <i>Hydrobiologia</i> , 2016, 775, 1-20.	1.0	50
14	Nonlinear dimensionality reduction: Alternative ordination approaches for extracting and visualizing biodiversity patterns in tropical montane forest vegetation data. <i>Ecological Informatics</i> , 2007, 2, 138-149.	2.3	49
15	Co-regulation of redox processes in freshwater wetlands as a function of organic matter availability?. <i>Science of the Total Environment</i> , 2008, 404, 335-342.	3.9	49
16	Acidification processes and soil leaching influenced by agricultural practices revealed by strontium isotopic ratios. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 4688-4704.	1.6	47
17	Responses of CO <sub>2</sub> Exchange and Primary Production of the Ecosystem Components to Environmental Changes in a Mountain Peatland. <i>Ecosystems</i> , 2009, 12, 590-603.	1.6	45
18	Natural ponds in an agricultural landscape: External drivers, internal processes, and the role of the terrestrial-aquatic interface. <i>Limnologia</i> , 2018, 68, 5-16.	0.7	43

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19	Machine learning in crop yield modelling: A powerful tool, but no surrogate for science. <i>Agricultural and Forest Meteorology</i> , 2022, 312, 108698.	1.9	43
20	Groundwater head controls nitrate export from an agricultural lowland catchment. <i>Advances in Water Resources</i> , 2016, 96, 95-107.	1.7	42
21	Impact of manipulated drought and heavy rainfall events on peat mineralization processes and source-sink functions of an acidic fen. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	40
22	Relationship between rice yield and climate variables in southwest Nigeria using multiple linear regression and support vector machine analysis. <i>International Journal of Biometeorology</i> , 2018, 62, 459-469.	1.3	40
23	A review on missing hydrological data processing. <i>Environmental Earth Sciences</i> , 2018, 77, 1.	1.3	39
24	The effects of climate and changing land use on the discharge regime of a small catchment in Tanzania. <i>Regional Environmental Change</i> , 2015, 15, 1269-1280.	1.4	38
25	Predominance of methanogens over methanotrophs in rewetted fens characterized by high methane emissions. <i>Biogeosciences</i> , 2018, 15, 6519-6536.	1.3	38
26	Apparent translatory flow in groundwater recharge and runoff generation. <i>Journal of Hydrology</i> , 2002, 265, 195-211.	2.3	37
27	Improving a distributed hydrological model using evapotranspiration-related boundary conditions as additional constraints in a data-scarce river basin. <i>Hydrological Processes</i> , 2018, 32, 759-775.	1.1	36
28	Impact of redox and transport processes in a riparian wetland on stream water quality in the Fichtelgebirge region, southern Germany. <i>Hydrological Processes</i> , 2007, 21, 123-132.	1.1	34
29	Differentiating between climate effects and forest growth dynamics effects on decreasing groundwater recharge in a lowland region in Northeast Germany. <i>Journal of Hydrology</i> , 2012, 448-449, 245-254.	2.3	34
30	Sulfate Pools in the Weathered Substrata of a Forested Catchment. <i>Soil Science Society of America Journal</i> , 2000, 64, 1078-1082.	1.2	33
31	Non-linear visualization and analysis of large water quality data sets: a model-free basis for efficient monitoring and risk assessment. <i>Stochastic Environmental Research and Risk Assessment</i> , 2009, 23, 977-990.	1.9	32
32	The importance of landscape diversity for carbon fluxes at the landscape level: small-scale heterogeneity matters. <i>Wiley Interdisciplinary Reviews: Water</i> , 2016, 3, 601-617.	2.8	32
33	Impacts of climate variability and change on drought characteristics in the Niger River Basin, West Africa. <i>Stochastic Environmental Research and Risk Assessment</i> , 2018, 32, 1017-1034.	1.9	32
34	Tracing biogeochemical processes in stream water and groundwater using non-linear statistics. <i>Journal of Hydrology</i> , 2008, 357, 11-28.	2.3	31
35	Sediment cores from kettle holes in NE Germany reveal recent impacts of agriculture. <i>Environmental Science and Pollution Research</i> , 2016, 23, 7409-7424.	2.7	31
36	Water flow paths and residence times in a small headwater catchment at Årdsjön, Sweden, during steady state storm flow conditions. <i>Water Resources Research</i> , 1996, 32, 1689-1698.	1.7	30

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37	Combining Hydrometric and Hydrochemical Data Sets for Investigating Runoff Generation Processes: Tautologies, Inconsistencies and Possible Explanations. <i>Geography Compass</i> , 2008, 2, 255-280.	1.5	30
38	Assessing coupling between lakes and layered aquifers in a complex Pleistocene landscape based on water level dynamics. <i>Advances in Water Resources</i> , 2010, 33, 1331-1339.	1.7	30
39	Spatial and temporal temperature trends in Nigeria, 1901–2000. <i>Meteorology and Atmospheric Physics</i> , 2012, 118, 95-105.	0.9	30
40	Investigating short-term dynamics and long-term trends of SO <sub>4</sub> in the runoff of a forested catchment using artificial neural networks. <i>Journal of Hydrology</i> , 2001, 243, 31-42.	2.3	29
41	Interdisciplinary Geo-ecological Research across Time Scales in the Northeast German Lowland Observatory (TERENO-NE). <i>Vadose Zone Journal</i> , 2018, 17, 1-25.	1.3	29
42	Land-use and hydroperiod affect kettle hole sediment carbon and nitrogen biogeochemistry. <i>Science of the Total Environment</i> , 2017, 574, 46-56.	3.9	28
43	Characterizing the Redox Status in Three Different Forested Wetlands with Geochemical Data. <i>Environmental Science &amp; Technology</i> , 2006, 40, 7609-7615.	4.6	27
44	Establishment of a hydrological monitoring network in a tropical African catchment: An integrated participatory approach. <i>Physics and Chemistry of the Earth</i> , 2010, 35, 648-656.	1.2	27
45	Analysis of spatial and temporal patterns in onset, cessation and length of growing season in Nigeria. <i>Agricultural and Forest Meteorology</i> , 2014, 194, 77-87.	1.9	27
46	Temporal variability of the optimal monitoring setup assessed using information theory. <i>Water Resources Research</i> , 2015, 51, 7723-7743.	1.7	27
47	Principal component analysis of time series for identifying indicator variables for riverine groundwater extraction management. <i>Journal of Hydrology</i> , 2012, 432-433, 137-144.	2.3	26
48	Measures to sustain seasonal minimum runoff in small catchments in the mid-latitudes: A review. <i>Journal of Hydrology</i> , 2011, 408, 296-307.	2.3	25
49	High temporal resolution of ion fluxes in semi-natural ecosystems – gain of information or waste of resources?. <i>Biogeochemistry</i> , 2004, 69, 19-35.	1.7	23
50	Trends in Deposition and Canopy Leaching of Mineral Elements as Indicated by Bulk Deposition and Throughfall Measurements. <i>Ecological Studies</i> , 2004, , 233-250.	0.4	22
51	Regional catchment classification with respect to low flow risk in a Pleistocene landscape. <i>Journal of Hydrology</i> , 2012, 475, 392-402.	2.3	21
52	Microclimate and matter dynamics in transition zones of forest to arable land. <i>Agricultural and Forest Meteorology</i> , 2019, 268, 1-10.	1.9	21
53	Dry-wet cycles of kettle hole sediments leave a microbial and biogeochemical legacy. <i>Science of the Total Environment</i> , 2018, 627, 985-996.	3.9	20
54	Catchments as heterogeneous and multi-species reactors: An integral approach for identifying biogeochemical hot-spots at the catchment scale. <i>Journal of Hydrology</i> , 2014, 519, 1560-1571.	2.3	19

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55	Modeling Yields Response to Shading in the Field-to-Forest Transition Zones in Heterogeneous Landscapes. <i>Agriculture (Switzerland)</i> , 2019, 9, 6.	1.4	18
56	Texture-depending performance of an in situ method assessing deep seepage. <i>Journal of Hydrology</i> , 2014, 511, 61-71.	2.3	17
57	Evaluation of Spatio-Temporal Patterns of Remotely Sensed Evapotranspiration to Infer Information about Hydrological Behaviour in a Data-Scarce Region. <i>Water (Switzerland)</i> , 2017, 9, 333.	1.2	17
58	Crop growth and soil water fluxes at erosion-affected arable sites: Using weighing lysimeter data for model intercomparison. <i>Vadose Zone Journal</i> , 2020, 19, e20058.	1.3	17
59	Which processes prevail?. <i>Geoderma</i> , 2010, 158, 412-420.	2.3	16
60	Modelling the impacts of reforestation on the projected hydroclimatology of Niger River Basin, West Africa. <i>Ecohydrology</i> , 2014, 7, 163-176.	1.1	16
61	Does textural heterogeneity matter? Quantifying transformation of hydrological signals in soils. <i>Journal of Hydrology</i> , 2015, 523, 725-738.	2.3	16
62	A novel method to evaluate the effect of a stream restoration on the spatial pattern of hydraulic connection of stream and groundwater. <i>Journal of Hydrology</i> , 2015, 527, 394-401.	2.3	16
63	Analysis of long-term dry and wet conditions over Nigeria. <i>International Journal of Climatology</i> , 2017, 37, 3577-3586.	1.5	15
64	Biogeochemistry of natural ponds in agricultural landscape: Lessons learned from modeling a kettle hole in Northeast Germany. <i>Science of the Total Environment</i> , 2018, 634, 1615-1630.	3.9	15
65	Monitoring the phase space of ecosystems: Concept and examples from the Quillow catchment, Uckermark. <i>Ecological Indicators</i> , 2016, 65, 55-65.	2.6	13
66	Key drivers structuring rotifer communities in ponds: insights into an agricultural landscape. <i>Journal of Plankton Research</i> , 2021, 43, 396-412.	0.8	13
67	Multi-decadal lake-level dynamics in north-eastern Germany as derived by a combination of gauging, proxy-data and modelling. <i>Journal of Hydrology</i> , 2015, 529, 584-599.	2.3	12
68	Cross-disciplinary links in environmental systems science: Current state and claimed needs identified in a meta-review of process models. <i>Science of the Total Environment</i> , 2018, 622-623, 954-973.	3.9	12
69	Efficient screening of groundwater head monitoring data for anthropogenic effects and measurement errors. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 501-513.	1.9	12
70	Title is missing!. <i>Nutrient Cycling in Agroecosystems</i> , 1998, 50, 109-118.	1.1	11
71	Forensic hydrology: what function tells about structure in complex settings. <i>Environmental Earth Sciences</i> , 2017, 76, 1.	1.3	11
72	Temporal and spatial scales of water temperature variability as an indicator for mixing in a polymictic lake. <i>Inland Waters</i> , 2018, 8, 82-95.	1.1	11

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73	Investigating trends of hydrochemical time series of small catchments by artificial neural networks. <i>Physics and Chemistry of the Earth</i> , 2001, 26, 15-18.	0.3	10
74	Effective modelling of percolation at the landscape scale using data-based approaches. <i>Computers and Geosciences</i> , 2008, 34, 699-713.	2.0	10
75	Mineralogical sources of the buffer capacity in a granite catchment determined by strontium isotopes. <i>Applied Geochemistry</i> , 2008, 23, 2888-2905.	1.4	10
76	Using Isomap to differentiate between anthropogenic and natural effects on groundwater dynamics in a complex geological setting. <i>Journal of Hydrology</i> , 2014, 519, 1634-1641.	2.3	10
77	Droughts projection over the Niger and Volta River basins of West Africa at specific global warming levels. <i>International Journal of Climatology</i> , 2020, 40, 5688-5699.	1.5	10
78	Characterizing hydrological processes within kettle holes using stable water isotopes in the Uckermark of northern Brandenburg, Germany. <i>Hydrological Processes</i> , 2020, 34, 1868-1887.	1.1	10
79	Co-Cultivation of <i>Fusarium</i> , <i>Alternaria</i> , and <i>Pseudomonas</i> on Wheat-Ears Affects Microbial Growth and Mycotoxin Production. <i>Microorganisms</i> , 2021, 9, 443.	1.6	10
80	Biogeochemistry of a Spruce Forest Catchment of the Fichtelgebirge in Response to Changing Atmospheric Deposition. <i>Ecological Studies</i> , 2001, , 463-503.	0.4	10
81	Response of Soil Solution Chemistry and Solute Fluxes to Changing Deposition Rates. <i>Ecological Studies</i> , 2004, , 339-360.	0.4	10
82	Disentangling the Effects of Land Management and Soil Heterogeneity on Soil Moisture Dynamics. <i>Vadose Zone Journal</i> , 2016, 15, 1-12.	1.3	9
83	Stream water quality affected by interacting hydrological and biogeochemical processes in a riparian wetland. <i>Journal of Hydrology</i> , 2018, 563, 260-272.	2.3	9
84	Checking a process-based catchment model by artificial neural networks. <i>Hydrological Processes</i> , 2003, 17, 265-277.	1.1	8
85	Multivariate analysis to assess the impact of irrigation on groundwater quality. <i>Environmental Earth Sciences</i> , 2019, 78, 1.	1.3	8
86	Disentangling limnological processes in the time-frequency domain. <i>Limnology and Oceanography</i> , 2019, 64, 423-440.	1.6	8
87	Hydraulic Performance of Horticultural Substrates <sup>3</sup> . Impact of Substrate Composition and Ingredients. <i>Horticulturae</i> , 2017, 3, 7.	1.2	7
88	Inconsistent hydrological trends do not necessarily imply spatially heterogeneous drivers. <i>Journal of Hydrology</i> , 2021, 596, 126096.	2.3	7
89	Long term shift of low flows predictors in small lowland catchments of Northeast Germany. <i>Journal of Hydrology</i> , 2015, 521, 508-519.	2.3	6
90	The curse of the past – What can tile drain effluent tell us about arable field management?. <i>Agriculture, Ecosystems and Environment</i> , 2022, 326, 107787.	2.5	6

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91	From microbes to mammals: Pond biodiversity homogenization across different land-use types in an agricultural landscape. <i>Ecological Monographs</i> , 2022, 92, .	2.4	6
92	Factors Controlling Total Concentration and Aqueous Speciation of Aluminium in an Acidic Headwater Stream of the Bavarian Forest National Park: a Modelling Approach. <i>Clean - Soil, Air, Water</i> , 2001, 29, 206.	0.8	5
93	A numerical modelling study of the hydroclimatology of the Niger River Basin, West Africa. <i>Hydrological Sciences Journal</i> , 2016, 61, 94-106.	1.2	5
94	Communicating landscape hydrology – the water cycle in a box. <i>Hydrological Processes</i> , 2017, 31, 750-752.	1.1	5
95	Mobilisation and transport of dissolved organic carbon and iron in peat catchments – Insights from the Lehstenbach stream in Germany using generalised additive models. <i>Hydrological Processes</i> , 2019, 33, 3213-3225.	1.1	5
96	Land-use type temporarily affects active pond community structure but not gene expression patterns. <i>Molecular Ecology</i> , 2022, 31, 1716-1734.	2.0	5
97	Comparative simulation of the nitrogen dynamics using the INCA model and a neural network analysis: implications for improved nitrogen modelling. <i>Hydrology and Earth System Sciences</i> , 2004, 8, 742-750.	1.9	4
98	Multivariate Analysis of Groundwater-Quality Time-Series Using Self-organizing Maps and Sammon's Mapping. <i>Water Resources Management</i> , 2015, 29, 3957-3970.	1.9	4
99	Succession Stages of Vegetation Regeneration: Secondary Tropical Mountain Forests. <i>Ecological Studies</i> , 2008, , 409-415.	0.4	4
100	Trends in the Input-Output Relations: The Catchment Budgets. <i>Ecological Studies</i> , 2004, , 437-454.	0.4	4
101	Biogeochemistry of Two Forested Catchments in a Changing Environment: A Synthesis. <i>Ecological Studies</i> , 2004, , 457-489.	0.4	4
102	Modelling of Fluxes in a Spruce Forest Catchment of the Fichtelgebirge. <i>Ecological Studies</i> , 2001, , 417-462.	0.4	4
103	Shallow water flow in a deeply weathered granite aquifer and implications for hydrochemical models. <i>Water, Air, and Soil Pollution</i> , 1995, 85, 1825-1830.	1.1	3
104	How much information do we gain from multiple-year sampling in natural pond research?. <i>Limnologia</i> , 2020, 80, 125728.	0.7	3
105	Dynamics of Runoff and Runoff Chemistry at the Lehstenbach and Steinkreuz Catchment. <i>Ecological Studies</i> , 2004, , 399-436.	0.4	3
106	Tracing Biogeochemical Processes in Small Catchments Using Non-linear Methods. , 2010, , 221-242.		3
107	A GUIDELINE FOR DEVELOPING AN INITIAL HYDROLOGICAL MONITORING NETWORK AS A BASIS FOR WATER MANAGEMENT IN ARTIFICIALLY DRAINED WETLANDS. <i>Irrigation and Drainage</i> , 2013, 62, 524-536.	0.8	2
108	Transit times of water under steady stormflow conditions in the Gårdsjöån G1 catchment. <i>Hydrological Processes</i> , 2015, 29, 4657-4665.	1.1	2

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109	Effects of Data and Model Simplification on the Results of a Wetland Water Resource Management Model. <i>Water (Switzerland)</i> , 2016, 8, 252.	1.2	1
110	Detecting dominant changes in irregularly sampled multivariate water quality data sets. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 4401-4424.	1.9	1
111	Model-Based Impact Analysis of Climate and Land Use Changes on the Landscape Water Balance. <i>Environmental Science and Engineering</i> , 2014, , 577-590.	0.1	1
112	Catchment Evapotranspiration and Runoff. <i>Ecological Studies</i> , 2017, , 355-375.	0.4	1
113	Application of a decision support tool for industrial and agricultural water reuse solutions in international case studies. <i>Journal of Water Reuse and Desalination</i> , 2020, 10, 405-418.	1.2	1
114	Data on and methodology for measurements of microclimate and matter dynamics in transition zones between forest and adjacent arable land. <i>One Ecosystem</i> , 0, 3, e24295.	0.0	1
115	Zero emissions region north-eastern Brandenburg – between climate adaptation and challenges for innovative land use. , 2010, , 115-135.		1
116	Long-Term Structures in Southern German Runoff Data. , 2011, , 250-265.		0
117	Investigating soil and groundwater quality at different scales in a forested catchment: the Waldstein case study. , 1998, , 109-118.		0