Bernhard Lehner

List of Publications by Year
in descending order

71	16,558	81900 39	95266 68
papers	citations	h-index	g-index

79	79	79	18240
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development and validation of a global database of lakes, reservoirs and wetlands. Journal of Hydrology, 2004, 296, 1-22.	5.4	1,867
2	Highâ€resolution mapping of the world's reservoirs and dams for sustainable riverâ€flow management. Frontiers in Ecology and the Environment, 2011, 9, 494-502.	4.0	1,540
3	New Global Hydrography Derived From Spaceborne Elevation Data. Eos, 2008, 89, 93-94.	0.1	1,405
4	Mapping the worldâ€™s free-flowing rivers. Nature, 2019, 569, 215-221.	27.8	1,249
5	A global hydrological model for deriving water availability indicators: model tuning and validation. Journal of Hydrology, 2003, 270, 105-134.	5.4	911
6	Global river hydrography and network routing: baseline data and new approaches to study the world's large river systems. Hydrological Processes, 2013, 27, 2171-2186.	2.6	871
7	Global mapping of ecosystem services and conservation priorities. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9495-9500.	7.1	823
8	Estimating the volume and age of water stored in global lakes using a geo-statistical approach. Nature Communications, 2016, 7, 13603.	12.8	789
9	Estimating the Impact of Global Change on Flood and Drought Risks in Europe: A Continental, Integrated Analysis. Climatic Change, 2006, 75, 273-299.	3.6	670
10	Development and testing of the WaterGAP 2 global model of water use and availability. Hydrological Sciences Journal, 2003, 48, 317-337.	2.6	663
11	Hyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial water. Water Resources Research, 2011, 47, .	4.2	634
12	Water on an urban planet: Urbanization and the reach of urban water infrastructure. Global Environmental Change, 2014, 27, 96-105.	7.8	511
13	An index-based framework for assessing patterns and trends in river fragmentation and flow regulation by global dams at multiple scales. Environmental Research Letters, 2015, 10, 015001.	5.2	439
14	Unlocking the potential of protected areas for freshwaters. Biological Conservation, 2007, 134, 48-63.	4.1	420
15	Global estimates of water withdrawals and availability under current and future â€œbusiness-as-usualâ€• conditions. Hydrological Sciences Journal, 2003, 48, 339-348.	2.6	353
16	The impact of global change on the hydropower potential of Europe: a model-based analysis. Energy Policy, 2005, 33, 839-855.	8.8	273
17	Global hydro-environmental sub-basin and river reach characteristics at high spatial resolution. Scientific Data, 2019, 6, 283.	5.3	246
18	Global patterns and dynamics of climateâ€“groundwater interactions. Nature Climate Change, 2019, 9, 137-141.	18.8	244

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19	Validation of a new global 30-min drainage direction map. Journal of Hydrology, 2002, 258, 214-231.	5.4	223
20	Global prevalence of non-perennial rivers and streams. Nature, 2021, 594, 391-397.	27.8	221
21	Development of a global inundation map at high spatial resolution from topographic downscaling of coarse-scale remote sensing data. Remote Sensing of Environment, 2015, 158, 348-361.	11.0	213
22	Remote sensing of floodplain geomorphology as a surrogate for biodiversity in a tropical river system (Madre de Dios, Peru). Geomorphology, 2007, 89, 23-38.	2.6	158
23	A Global Assessment of Inland Wetland Conservation Status. BioScience, 2017, 67, 523-533.	4.9	152
24	Freshwater conservation planning in data-poor areas: An example from a remote Amazonian basin (Madre de Dios River, Peru and Bolivia). Biological Conservation, 2007, 135, 484-501.	4.1	104
25	Development of new indicators to evaluate river fragmentation and flow regulation at large scales: A case study for the Mekong River Basin. Ecological Indicators, 2014, 45, 148-159.	6.3	102
26	The Water Planetary Boundary: Interrogation and Revision. One Earth, 2020, 2, 223-234.	6.8	98
27	Illuminating water cycle modifications and Earth system resilience in the Anthropocene. Water Resources Research, 2020, 56, e2019WR024957.	4.2	86
28	High-resolution global topographic index values for use in large-scale hydrological modelling. Hydrology and Earth System Sciences, 2015, 19, 91-104.	4.9	85
29	Looking Beyond the Fenceline: Assessing Protection Gaps for the World's Rivers. Conservation Letters, 2017, 10, 384-394.	5.7	85
30	Climate-related hydrological change and human vulnerability in remote mountain regions: a case study from Khumbu, Nepal. Regional Environmental Change, 2013, 13, 299-310.	2.9	81
31	Evaluating the impacts of climate change and crop land use change on streamflow, nitrates and phosphorus: A modeling study in Bavaria. Journal of Hydrology: Regional Studies, 2015, 4, 60-90.	2.4	74
32	Unexpected large evasion fluxes of carbon dioxide from turbulent streams draining the worldâ€™s mountains. Nature Communications, 2019, 10, 4888.	12.8	71
33	A multidisciplinary framework to derive global river reach classifications at high spatial resolution. Environmental Research Letters, 2019, 14, 024003.	5.2	65
34	A Global Dynamic Long-Term Inundation Extent Dataset at High Spatial Resolution Derived through Downscaling of Satellite Observations. Journal of Hydrometeorology, 2017, 18, 1305-1325.	1.9	62
35	Identifying key ecosystem service providing areas to inform national-scale conservation planning. Environmental Research Letters, 2021, 16, 014038.	5.2	55
36	Simulated impacts of climate change and agricultural land use change on surface water quality with and without adaptation management strategies. Agriculture, Ecosystems and Environment, 2015, 213, 47-60.	5.3	48

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37	Distribution and characteristics of wastewater treatment plants within the global river network. Earth System Science Data, 2022, 14, 559-577.	9.9	45
38	Freshwater biodiversity conservation through source water protection: Quantifying the potential and addressing the challenges. Aquatic Conservation: Marine and Freshwater Ecosystems, 2019, 29, 1022-1038.	2.0	43
39	Risk assessment of down-the-drain chemicals at large spatial scales: Model development and application to contaminants originating from urban areas in the Saint Lawrence River Basin. Science of the Total Environment, 2016, 541, 825-838.	8.0	42
40	Comparison of visible and multi-satellite global inundation datasets at high-spatial resolution. Remote Sensing of Environment, 2018, 216, 427-441.	11.0	42
41	Modeling variable river flow velocity on continental scale: Current situation and climate change impacts in Europe. Journal of Hydrology, 2012, 424-425, 238-251.	5.4	40
42	Natural Lakes Are a Minor Global Source of N₂O to the Atmosphere. Global Biogeochemical Cycles, 2019, 33, 1564-1581.	4.9	40
43	Dams and protected areas: Quantifying the spatial and temporal extent of global dam construction within protected areas. Conservation Letters, 2020, 13, e12719.	5.7	38
44	Exposure of Africa's freshwater biodiversity to a changing climate. Conservation Letters, 2010, 3, 324-331.	5.7	35
45	Navigating trade-offs between dams and river conservation. Global Sustainability, 2021, 4, .	3.3	32
46	Analysis of streamflow characteristics over Northeastern Canada in a changing climate. Climate Dynamics, 2013, 40, 1879-1901.	3.8	31
47	Reply to comment by Keith J. Beven and Hannah L. Cloke on â€œHyperresolution global land surface modeling: Meeting a grand challenge for monitoring Earth's terrestrial waterâ€• Water Resources Research, 2012, 48, .	4.2	26
48	Estimating the eco-toxicological risk of estrogens in China's rivers using a high-resolution contaminant fate model. Water Research, 2018, 145, 707-720.	11.3	25
49	Impacts of loss of free-flowing rivers on global freshwater megafauna. Biological Conservation, 2021, 263, 109335.	4.1	23
50	An Integrated Analysis of Changes in Water Stress in Europe. Integrated Assessment: an International Journal, 2002, 3, 15-29.	0.8	22
51	Modelling crop land use change derived from influencing factors selected and ranked by farmers in North temperate agricultural regions. Science of the Total Environment, 2018, 631-632, 407-420.	8.0	21
52	Global hydro-environmental lake characteristics at high spatial resolution. Scientific Data, 2022, 9, .	5.3	20
53	Opportunities for natural infrastructure to improve urban water security in Latin America. PLoS ONE, 2018, 13, e0209470.	2.5	15
54	Evaluating the Importance of Non-Unique Behavioural Parameter Sets on Surface Water Quality Variables under Climate Change Conditions in a Mesoscale Agricultural Watershed. Water Resources Management, 2018, 32, 619-639.	3.9	14

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55	Multidisciplinary classification of Canadian river reaches to support the sustainable management of freshwater systems. Canadian Journal of Fisheries and Aquatic Sciences, 2020, 77, 326-341.	1.4	9
56	Identifying priority areas for surface water protection in data scarce regions: An integrated spatial analysis for Zambia. Aquatic Conservation: Marine and Freshwater Ecosystems, 2021, 31, 1998-2016.	2.0	9
57	Do we prioritize floodplains for development and farming? Mapping global dependence and exposure to inundation. Global Environmental Change, 2021, 71, 102370.	7.8	8
58	Setting priorities for climate change adaptation of Critical Sites in the Africaâ€Eurasian waterbird flyways. Global Change Biology, 2022, 28, 739-752.	9.5	7
59	Global Dam Watch: curated data and tools for management and decision making. Environmental Research: Infrastructure and Sustainability, 2021, 1, 033003.	2.3	7
60	Climate change exposure of waterbird species in the African-Eurasian flyways. Bird Conservation International, 2022, 32, 1-26.	1.3	6
61	The relationship between watershed protection and water quality: The case of QuÃ©bec, Canada. Freshwater Science, 2021, 40, 382-396.	1.8	6
62	European rivers are fragmented by many more barriers than had been recorded. Nature, 2020, 588, 395-396.	27.8	6
63	Reply to Comment on â€˜An index-based framework for assessing patterns and trends in river fragmentation and flow regulation by global dams at multiple scalesâ€™. Environmental Research Letters, 2017, 12, 038002.	5.2	5
64	Spatial variability of ecosystem exposure to home and personal care chemicals in Asia. Environment International, 2020, 134, 105260.	10.0	5
65	Aquatic areas of ecological importance as inputs into surface water resource protection areas in Zambia. Aquatic Conservation: Marine and Freshwater Ecosystems, 2021, 31, 1983-1997.	2.0	5
66	Freshwater Lakes and Reservoirs. , 2016, , 1-18.		4
67	Indicators for Assessing Threats to Freshwater Biodiversity from Humans and Human-Shaped Landscapes. Ecological Studies, 2011, , 103-124.	1.2	4
68	Freshwater Lakes and Reservoirs. , 2018, , 125-141.		3
69	Determining agricultural land use scenarios in a mesoscale Bavarian watershed for modelling future water quality. Advances in Geosciences, 0, 31, 9-14.	12.0	2
70	Simulated future changes of extreme nutrient loads in a mesoscale agricultural watershed in Bavaria / Simulierte zukÃ¼nftige Ã„nderungen der Extremwerte fÃ¼r NÃhrstofffrachten in einem mesoskaligen landwirtschaftlichen Einzugsgebiet in Bayern. Bodenkultur, 2016, 67, 77-90.	0.2	1
71	Freshwater Lakes and Reservoirs. , 2017, , 1-18.		0