

# Karl-Erich Lindenschmidt

## List of Publications by Year in descending order

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122  
papers

2,173  
citations

257357

24  
h-index

330025

37  
g-index

129  
all docs

129  
docs citations

129  
times ranked

2055  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence-based identification of integrated water quality systems. <i>Journal of Environmental Planning and Management</i> , 2023, 66, 1431-1452.	2.4	1
2	Modelling of ice jam floods under past and future climates: A review. <i>Journal of Hydrology X</i> , 2022, 15, 100120.	0.8	5
3	Buffalo Pound Lakeâ€™s Modelling Water Resource Management Scenarios of a Large Multi-Purpose Prairie Reservoir. <i>Water (Switzerland)</i> , 2022, 14, 584.	1.2	6
4	Climate change impacts on ice jam behavior in an inland delta: a new ice jam projection framework. <i>Climatic Change</i> , 2022, 171, 1.	1.7	1
5	Modelling transverse mixing of sediment and vanadium in a river impacted by oil sands mining operations. <i>Journal of Hydrology: Regional Studies</i> , 2022, 40, 101043.	1.0	3
6	Advances in modelling large river basins in cold regions with ModÃ©lisation Environnementale Communautaireâ€™ Surface and Hydrology (MESH), the Canadian hydrological land surface scheme. <i>Hydrological Processes</i> , 2022, 36, .	1.1	14
7	Stochastic bias correction for RADARSAT-2 soil moisture retrieved over vegetated areas. <i>Geocarto International</i> , 2022, 37, 9190-9203.	1.7	2
8	A stochastic modelling approach to forecast real-time ice jam flood severity along the transborder (New Brunswick/Maine) Saint John River of North America. <i>Stochastic Environmental Research and Risk Assessment</i> , 2022, 36, 1903-1915.	1.9	4
9	The impact of a bias-correction approach (delta change) applied directly to hydrological model output when modelling the severity of ice jam flooding under future climate scenarios. <i>Climatic Change</i> , 2022, 172, .	1.7	1
10	Climate change effects on the thermal stratification of Lake Diefenbaker, a large multi-purpose reservoir. <i>Canadian Water Resources Journal</i> , 2021, 46, 1-16.	0.5	6
11	An ice jam flood hazard assessment of a lowland river and its terminus inland delta. <i>Natural Hazards</i> , 2021, 105, 2799-2817.	1.6	3
12	Evaluation of the implications of iceâ€™jam flood mitigation measures. <i>Journal of Flood Risk Management</i> , 2021, 14, e12697.	1.6	5
13	Measuring the skill of an operational ice jam flood forecasting system. <i>International Journal of Disaster Risk Reduction</i> , 2021, 52, 102001.	1.8	6
14	Evaluating transdisciplinary research practices: insights from social network analysis. <i>Sustainability Science</i> , 2021, 16, 631-645.	2.5	15
15	Evaluation of the sensitivity of hydraulic model parameters, boundary conditions and digital elevation models on ice-jam flood delineation. <i>Cold Regions Science and Technology</i> , 2021, 183, 103218.	1.6	2
16	The impacts of changing climate and streamflow on nutrient speciation in a large Prairie reservoir. <i>Journal of Environmental Management</i> , 2021, 288, 112262.	3.8	15
17	A generic approach to evaluate costs and effectiveness of agricultural Beneficial Management Practices to improve water quality management. <i>Journal of Environmental Management</i> , 2021, 287, 112336.	3.8	6
18	Exploring the Potential of Zoning Regulation for Reducing Ice-Jam Flood Risk Using a Stochastic Modelling Framework. <i>Water (Switzerland)</i> , 2021, 13, 2202.	1.2	1

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19	Modelling climatic impacts on ice-jam floods: a review of current models, modelling capabilities, challenges, and future prospects. <i>Environmental Reviews</i> , 2021, 29, 378-390.	2.1	7
20	Synthesis of science: findings on Canadian Prairie wetland drainage. <i>Canadian Water Resources Journal</i> , 2021, 46, 229-241.	0.5	15
21	Proof-of-Concept of a Quasi-2D Water-Quality Modelling Approach to Simulate Transverse Mixing in Rivers. <i>Water (Switzerland)</i> , 2021, 13, 3071.	1.2	0
22	River Ice Processes and Ice Flood Forecasting. , 2020, , .		18
23	Incorporating social dimensions in hydrological and water quality modeling to evaluate the effectiveness of agricultural beneficial management practices in a Prairie River Basin. <i>Environmental Science and Pollution Research</i> , 2020, 27, 14271-14287.	2.7	7
24	Impacts of Varying Dam Outflow Elevations on Water Temperature, Dissolved Oxygen, and Nutrient Distributions in a Large Prairie Reservoir. <i>Environmental Engineering Science</i> , 2020, 37, 78-97.	0.8	20
25	Impacts of future climate on the hydrology of a northern headwaters basin and its implications for a downstream deltaic ecosystem. <i>Hydrological Processes</i> , 2020, 34, 1630-1646.	1.1	13
26	Correlation among parameters and boundary conditions in river ice models. <i>Modeling Earth Systems and Environment</i> , 2020, 6, 499-512.	1.9	5
27	Water Quality Modeling of Phytoplankton and Nutrient Cycles of a Complex Cold-Region River-Lake System. <i>Environmental Modeling and Assessment</i> , 2020, 25, 293-306.	1.2	2
28	Current status and advancement suggestions of ice-jam flood hazard and risk assessment. <i>Environmental Reviews</i> , 2020, 28, 373-379.	2.1	5
29	Sensitivity of boundary data in a shallow prairie lake model. <i>Canadian Water Resources Journal</i> , 2020, 45, 204-215.	0.5	1
30	Ice-Jam Flood Risk Assessment and Hazard Mapping under Future Climate. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2020, 146, .	1.3	21
31	A physically-based modelling framework for operational forecasting of river ice breakup. <i>Advances in Water Resources</i> , 2020, 139, 103554.	1.7	11
32	A multi-objective calibration approach using in-situ soil moisture data for improved hydrological simulation of the Prairies. <i>Hydrological Sciences Journal</i> , 2020, 65, 638-649.	1.2	14
33	Numerical Modelling of River-Ice Processes (Application). , 2020, , 145-174.		1
34	Ice-Cover Monitoring. , 2020, , 39-77.		0
35	Freeze-Up. , 2020, , 11-38.		0
36	Effects of River Geomorphology on River Ice Freeze-up and Break-up Rates Using MODIS Imagery. <i>Canadian Journal of Remote Sensing</i> , 2019, 45, 176-191.	1.1	4

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37	Climatic effects on ice phenology and ice-jam flooding of the Athabasca River in western Canada. <i>Hydrological Sciences Journal</i> , 2019, 64, 1265-1278.	1.2	23
38	Modelling the possible impacts of climate change on the thermal regime and macroinvertebrate species of a regulated prairie river. <i>Ecohydrology</i> , 2019, 12, e2102.	1.1	16
39	Variable withdrawal elevations as a management tool to counter the effects of climate warming in Germany's largest drinking water reservoir. <i>Environmental Sciences Europe</i> , 2019, 31, .	2.6	29
40	Editorial Note "Special Issue on "Advanced Remote Sensing Technologies for Natural Resource Management and Disaster Monitoring - 39th Canadian Symposium on Remote Sensing". <i>Canadian Journal of Remote Sensing</i> , 2019, 45, 113-115.	1.1	0
41	A novel stochastic modelling approach for operational real-time ice-jam flood forecasting. <i>Journal of Hydrology</i> , 2019, 575, 381-394.	2.3	33
42	Vanadium and thallium exhibit biodilution in a northern river food web. <i>Chemosphere</i> , 2019, 233, 381-386.	4.2	14
43	Modelling the effects of climate and flow regulation on ice-affected backwater staging in a large northern river. <i>River Research and Applications</i> , 2019, 35, 587-600.	0.7	19
44	Feasibility of using continuous, stiff materials for reinforcing freshwater ice covers. <i>SN Applied Sciences</i> , 2019, 1, 1.	1.5	1
45	Radar Scatter Decomposition to Differentiate between Running Ice Accumulations and Intact Ice Covers along Rivers. <i>Remote Sensing</i> , 2019, 11, 307.	1.8	11
46	Development of an Ice Jam Flood Forecasting System for the Lower Oder River "Requirements for Real-Time Predictions of Water, Ice and Sediment Transport. <i>Water (Switzerland)</i> , 2019, 11, 95.	1.2	17
47	Potential of RADARSAT-2 to Improve Ice Thickness Calculations in Remote, Poorly Accessible Areas: A Case Study on the Slave River, Canada. <i>Canadian Journal of Remote Sensing</i> , 2019, 45, 234-245.	1.1	7
48	CE-QUAL-W2 model of dam outflow elevation impact on temperature, dissolved oxygen and nutrients in a reservoir. <i>Scientific Data</i> , 2019, 6, 312.	2.4	19
49	Interfacing Stakeholder Involvement into a Surface Water-Quality Modelling System for Water Management and Policy Development. <i>Green Energy and Technology</i> , 2019, , 312-316.	0.4	0
50	Promoting Sustainable Ice-Jam Flood Management along the Peace River and Peace-Athabasca Delta. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2019, 145, .	1.3	24
51	A framework for engaging stakeholders in water quality modeling and management: Application to the Qu'Appelle River Basin, Canada. <i>Journal of Environmental Management</i> , 2019, 231, 1117-1126.	3.8	28
52	Comparison of aquatic ecosystem functioning between eutrophic and hypereutrophic cold-region river-lake systems. <i>Ecological Modelling</i> , 2019, 393, 25-36.	1.2	6
53	Improving in-lake water quality modeling using variable chlorophyll a/algal biomass ratios. <i>Environmental Modelling and Software</i> , 2018, 101, 73-85.	1.9	50
54	Coherence of Radarsat-2, Sentinel-1, and ALOS-1 PALSAR for monitoring spatiotemporal variations of river ice covers. <i>Canadian Journal of Remote Sensing</i> , 2018, 44, 11-25.	1.1	4

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55	Lessons learned from past ice-jam floods concerning the challenges of flood mapping. <i>International Journal of River Basin Management</i> , 2018, 16, 457-468.	1.5	23
56	Ecological patterns of fish distribution in the Slave River Delta region, Northwest Territories, Canada, as relayed by traditional knowledge and Western science. <i>International Journal of Water Resources Development</i> , 2018, 34, 305-324.	1.2	8
57	River and Lake Ice Processesâ€™ Impacts of Freshwater Ice on Aquatic Ecosystems in a Changing Globe. <i>Water (Switzerland)</i> , 2018, 10, 1586.	1.2	16
58	Sustainable Ice-Jam Flood Management for Socio-Economic and Socio-Ecological Systems. <i>Water (Switzerland)</i> , 2018, 10, 135.	1.2	14
59	Potential Changes of Annual-Averaged Nutrient Export in the South Saskatchewan River Basin under Climate and Land-Use Change Scenarios. <i>Water (Switzerland)</i> , 2018, 10, 1438.	1.2	13
60	Water quality modeling of a prairie river-lake system. <i>Environmental Science and Pollution Research</i> , 2018, 25, 31190-31204.	2.7	9
61	Ice-jam flood research: a scoping review. <i>Natural Hazards</i> , 2018, 94, 1439-1457.	1.6	22
62	Geospatial Modeling of River Systems. <i>Water (Switzerland)</i> , 2018, 10, 282.	1.2	5
63	Challenges of modelling water quality in a shallow prairie lake with seasonal ice cover. <i>Ecological Modelling</i> , 2018, 384, 43-52.	1.2	15
64	Trends in the Timing and Magnitude of Ice-Jam Floods in Canada. <i>Scientific Reports</i> , 2018, 8, 5834.	1.6	55
65	Monitoring river ice cover development using the Freemanâ€™ Durden decomposition of quad-pol Radarsat-2 images. <i>Journal of Applied Remote Sensing</i> , 2018, 12, 1.	0.6	13
66	Bridging science and traditional knowledge to assess cumulative impacts of stressors on ecosystem health. <i>Environment International</i> , 2017, 102, 125-137.	4.8	101
67	Comparison and Validation of Digital Elevation Models Derived from InSAR for a Flat Inland Delta in the High Latitudes of Northern Canada. <i>Canadian Journal of Remote Sensing</i> , 2017, 43, 109-123.	1.1	29
68	Air pockets and water lenses in the ice cover of the Slave River. <i>Cold Regions Science and Technology</i> , 2017, 136, 72-80.	1.6	9
69	Using stage frequency distributions as objective functions for model calibration and global sensitivity analyses. <i>Environmental Modelling and Software</i> , 2017, 92, 169-175.	1.9	24
70	Stable sulfur isotopes identify habitat-specific foraging and mercury exposure in a highly mobile fish community. <i>Science of the Total Environment</i> , 2017, 586, 338-346.	3.9	24
71	Parameter Sensitivity of a Surface Water Quality Model of the Lower South Saskatchewan Riverâ€™ Comparison Between Ice-On and Ice-Off Periods. <i>Environmental Modeling and Assessment</i> , 2017, 22, 291-307.	1.2	13
72	The ecohydrological vulnerability of a large inland delta to changing regional streamflows and upstream irrigation expansion. <i>Ecohydrology</i> , 2017, 10, e1824.	1.1	18

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73	Sedimentation and erosion in Lake Diefenbaker, Canada: solutions for shoreline retreat monitoring. Environmental Monitoring and Assessment, 2017, 189, 507.	1.3	8
74	Surface water retention systems for cattail production as a biofuel. Journal of Environmental Management, 2017, 203, 500-509.	3.8	9
75	Improved Understanding of River Ice Processes Using Global Sensitivity Analysis Approaches. Journal of Hydrologic Engineering - ASCE, 2017, 22, .	0.8	24
76	Open-water and under-ice seasonal variations in trace element content and physicochemical associations in fluvial bed sediment. Environmental Toxicology and Chemistry, 2017, 36, 2916-2924.	2.2	2
77	An economic assessment of local farm multi-purpose surface water retention systems in a Canadian Prairie setting. Applied Water Science, 2017, 7, 4461-4478.	2.8	3
78	Sediment plume model—a comparison between use of measured turbidity data and satellite images for model calibration. Environmental Science and Pollution Research, 2017, 24, 19583-19598.	2.7	13
79	An Economic Assessment of Local Farm Multi-Purpose Surface Water Retention Systems under Future Climate Uncertainty. Sustainability, 2017, 9, 456.	1.6	12
80	Modelling Dissolved Oxygen/Sediment Oxygen Demand under Ice in a Shallow Eutrophic Prairie Reservoir. Water (Switzerland), 2017, 9, 131.	1.2	36
81	Impacts of Climate Change on the Water Quality of a Regulated Prairie River. Water (Switzerland), 2017, 9, 199.	1.2	34
82	RIVICE—A Non-Proprietary, Open-Source, One-Dimensional River-Ice Model. Water (Switzerland), 2017, 9, 314.	1.2	58
83	Topography- and nightlight-based national flood risk assessment in Canada. Hydrology and Earth System Sciences, 2017, 21, 2219-2232.	1.9	19
84	Seasonal Variation in Sediment Oxygen Demand in a Northern Chained River-Lake System. Water (Switzerland), 2017, 9, 254.	1.2	18
85	Using Remote Sensing Data to Parameterize Ice Jam Modeling for a Northern Inland Delta. Water (Switzerland), 2017, 9, 306.	1.2	25
86	Using a Geospatial Model to Relate Fluvial Geomorphology to Macroinvertebrate Habitat in a Prairie River—Part 1: Genus-Level Relationships with Geomorphic Typologies. Water (Switzerland), 2016, 8, 42.	1.2	4
87	Using a Geospatial Model to Relate Fluvial Geomorphology to Macroinvertebrate Habitat in a Prairie River—Part 2: Matching Family-Level Indices to Geomorphological Response Units (GRUs). Water (Switzerland), 2016, 8, 107.	1.2	3
88	Quantifying Spatial Changes in the Structure of Water Quality Constituents in a Large Prairie River within Two Frameworks of a Water Quality Model. Water (Switzerland), 2016, 8, 158.	1.2	9
89	Identifying links between Fluvial Geomorphic Response Units (FGRUs) and fish species in the Assiniboine River, Manitoba. Ecohydrology, 2016, 9, 1154-1165.	1.1	3
90	Ice-jam flood risk assessment and mapping. Hydrological Processes, 2016, 30, 3754-3769.	1.1	55

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91	Integration of space-borne and air-borne data in monitoring river ice processes in the Slave River, Canada. <i>Remote Sensing of Environment</i> , 2016, 181, 65-81.	4.6	26
92	Influence of hydrological connectivity on winter limnology in floodplain lakes of the Saskatchewan River Delta, Saskatchewan. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2016, 73, 140-152.	0.7	19
93	Development of geomorphic typologies for identifying Lake Sturgeon ( <i>Acipenser fulvescens</i> ) habitat in the Saskatchewan River System. <i>River Systems</i> , 2015, 21, 215-227.	0.2	8
94	Assessing the transport of total phosphorus from a prairie river basin using SPARROW. <i>Hydrological Processes</i> , 2015, 29, 4144-4160.	1.1	11
95	Geospatial modeling of the Birch River: Distribution of Carmine Shiner ( <i>Notropis percobromus</i> ) in Geomorphic Response Units (GRU). <i>International Review of Hydrobiology</i> , 2015, 100, 129-140.	0.5	9
96	Monitoring the Variation in Ice-Cover Characteristics of the Slave River, Canada Using RADARSAT-2 Data—A Case Study. <i>Remote Sensing</i> , 2015, 7, 13664-13691.	1.8	22
97	The upper Quâ€™Appelle water supply project in Saskatchewan, Canada: upland canal ice study. <i>Osterreichische Wasser- Und Abfallwirtschaft</i> , 2015, 67, 230-239.	0.3	5
98	A geospatial model to determine patterns of ice cover breakup along the Slave River. <i>Canadian Journal of Civil Engineering</i> , 2015, 42, 675-685.	0.7	15
99	Lake Diefenbaker temperature model. <i>Journal of Great Lakes Research</i> , 2015, 41, 8-21.	0.8	34
100	Evidence for internal phosphorus loading in a large prairie reservoir (Lake Diefenbaker.) <i>Tj ETQq0 0 0 rgBT /Overlock, 10 Tf 50,382 Td (Sa</i>	0.8	56
101	A water coverage extraction approach to track inundation in the Saskatchewan River Delta, Canada. <i>International Journal of Remote Sensing</i> , 2015, 36, 764-781.	1.3	29
102	Monitoring the freeze-up and ice cover progression of the Slave River. <i>Canadian Journal of Civil Engineering</i> , 2015, 42, 609-621.	0.7	19
103	Dynamic water quality modelling and uncertainty analysis of phytoplankton and nutrient cycles for the upper South Saskatchewan River. <i>Environmental Science and Pollution Research</i> , 2015, 22, 18239-18251.	2.7	22
104	The importance of RADARSAT-2 imagery in monitoring river ice cover characteristics and behaviour. , 2014, , .		1
105	Geospatial modelling to determine the behaviour of ice cover formation during freeze-up of the Dauphin River in Manitoba. <i>Hydrology Research</i> , 2014, 45, 645-659.	1.1	14
106	The impact of macrophytes on winter flows along the Upper Quâ€™Appelle River. <i>Canadian Water Resources Journal</i> , 2014, 39, 342-355.	0.5	17
107	Evaluating the impact of fluvial geomorphology on river ice cover formation based on a global sensitivity analysis of a river ice model. <i>Canadian Journal of Civil Engineering</i> , 2013, 40, 623-632.	0.7	16
108	A GIS approach to define the hydro-geomorphological regime for instream flow requirements using geomorphic response units (GRU). <i>River Systems</i> , 2013, 20, 261-275.	0.2	11

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109	Modelling ice cover formation of a lake-river system with exceptionally high flows (Lake St. Martin) Tj ETQq1 1 0,784314 rgBT /Ove	1.6	25
110	Analysis of a detention basin impact on dike failure probabilities and flood risk for a channel-dike-floodplain system along the river Elbe, Germany. Journal of Hydrology, 2012, 436-437, 120-131.	2.3	86
111	Ice Jam Modelling of the Lower Red River. Journal of Water Resource and Protection, 2012, 04, 1-11.	0.3	29
112	Measuring Ice Thicknesses along the Red River in Canada Using RADARSAT-2 Satellite Imagery. Journal of Water Resource and Protection, 2010, 02, 923-933.	0.3	20
113	Environmental risk of dissolved oxygen depletion of diverted flood waters in river polder systems - A quasi-2D flood modelling approach. Science of the Total Environment, 2009, 407, 1598-1612.	3.9	24
114	A quasi-2D flood modeling approach to simulate substance transport in polder systems for environment flood risk assessment. Science of the Total Environment, 2008, 397, 86-102.	3.9	20
115	Quasi-2D Approach in Modeling the Transport of Contaminated Sediments in Floodplains during River Flooding - Model Coupling and Uncertainty Analysis. Environmental Engineering Science, 2008, 25, 333-352.	0.8	9
116	Structural uncertainty in a river water quality modelling system. Ecological Modelling, 2007, 204, 289-300.	1.2	77
117	Monitoring, assessment and modelling using water quality data in the Saale River Basin, Germany. Environmental Monitoring and Assessment, 2007, 135, 227-240.	1.3	8
118	Modelling of snowmelt erosion and sediment yield in a small low-mountain catchment in Germany. Catena, 2006, 68, 161-176.	2.2	53
119	The effect of complexity on parameter sensitivity and model uncertainty in river water quality modelling. Ecological Modelling, 2006, 190, 72-86.	1.2	92
120	Impact of morphological parameters on water quality variables of a regulated lowland river. Water Science and Technology, 2005, 52, 187-93.	1.2	5
121	The effect of water column mixing on phytoplankton succession, diversity and similarity. Journal of Plankton Research, 1998, 20, 1927-1951.	0.8	76
122	Effects of quality controlled measured and re-analysed meteorological data on the performance of water temperature simulations. Hydrological Sciences Journal, 0, , .	1.2	3