

Niklas Linde

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7953383/publications.pdf>

Version: 2024-02-01

119
papers

4,923
citations

81839

39
h-index

110317

64
g-index

132
all docs

132
docs citations

132
times ranked

2945
citing authors

#	ARTICLE	IF	CITATIONS
1	Lasting Effects of Soil Compaction on Soil Water Regime Confirmed by Geoelectrical Monitoring. <i>Water Resources Research</i> , 2022, 58, e2021WR030696.	1.7	6
2	Simulating Fully-Integrated Hydrological Dynamics in Complex Alpine Headwaters: Potential and Challenges. <i>Water Resources Research</i> , 2022, 58, .	1.7	12
3	Hydrogeological multiple-point statistics inversion by adaptive sequential Monte Carlo. <i>Advances in Water Resources</i> , 2022, 166, 104252.	1.7	3
4	Bayesian tomography with prior-knowledge-based parametrization and surrogate modelling. <i>Geophysical Journal International</i> , 2022, 231, 673-691.	1.0	5
5	Adaptive sequential Monte Carlo for posterior inference and model selection among complex geological priors. <i>Geophysical Journal International</i> , 2021, 226, 1220-1238.	1.0	6
6	Approaching geoscientific inverse problems with vector-to-image domain transfer networks. <i>Advances in Water Resources</i> , 2021, 152, 103917.	1.7	8
7	Seismic signatures reveal persistence of soil compaction. <i>Vadose Zone Journal</i> , 2021, 20, e20140.	1.3	11
8	Individual and joint inversion of head and flux data by geostatistical hydraulic tomography. <i>Advances in Water Resources</i> , 2021, 154, 103960.	1.7	5
9	Lithological tomography with the correlated pseudo-marginal method. <i>Geophysical Journal International</i> , 2021, 228, 839-856.	1.0	4
10	Using deep generative neural networks to account for model errors in Markov chain Monte Carlo inversion. <i>Geophysical Journal International</i> , 2021, 228, 1098-1118.	1.0	6
11	Heat transport by flow through rough rock fractures: a numerical investigation. <i>Advances in Water Resources</i> , 2021, 156, 104042.	1.7	11
12	GPR-inferred fracture aperture widening in response to a high-pressure tracer injection test at the Åspå Hard Rock Laboratory, Sweden. <i>Engineering Geology</i> , 2021, 292, 106249.	2.9	3
13	Inferring geostatistical properties of hydraulic conductivity fields from saline tracer tests and equivalent electrical conductivity time-series. <i>Advances in Water Resources</i> , 2020, 146, 103758.	1.7	4
14	Which fractures are imaged with Ground Penetrating Radar? Results from an experiment in the Åspå Hardrock Laboratory, Sweden. <i>Engineering Geology</i> , 2020, 273, 105674.	2.9	13
15	Advancing quantitative understanding of self-potential signatures in the critical zone through long-term monitoring. <i>Journal of Hydrology</i> , 2020, 585, 124771.	2.3	16
16	Time-Lapse Seismic and Electrical Monitoring of the Vadose Zone during a Controlled Infiltration Experiment at the Ploemeur Hydrological Observatory, France. <i>Water (Switzerland)</i> , 2020, 12, 1230.	1.2	19
17	Time-lapse cross-hole electrical resistivity tomography (CHERT) for monitoring seawater intrusion dynamics in a Mediterranean aquifer. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 2121-2139.	1.9	45
18	Hydrogeological Model Selection Among Complex Spatial Priors. <i>Water Resources Research</i> , 2019, 55, 6729-6753.	1.7	14

#	ARTICLE	IF	CITATIONS
19	Joint probabilistic inversion of DC resistivity and seismic refraction data applied to bedrock/regolith interface delineation. <i>Journal of Applied Geophysics</i> , 2019, 170, 103839.	0.9	13
20	Gradient-based deterministic inversion of geophysical data with generative adversarial networks: Is it feasible?. <i>Computers and Geosciences</i> , 2019, 133, 104333.	2.0	41
21	Bayesian Inference of Subglacial Channel Structures From Water Pressure and Tracer Transit Time Data: A Numerical Study Based on a Geostatistical Modeling Approach. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 1625-1644.	1.0	6
22	Bayesian full-waveform tomography with application to crosshole ground penetrating radar data. <i>Geophysical Journal International</i> , 2019, 218, 913-931.	1.0	17
23	Simulation of fine-scale electrical conductivity fields using resolution-limited tomograms and area-to-point kriging. <i>Geophysical Journal International</i> , 2019, 218, 1322-1335.	1.0	9
24	Reduction of conceptual model uncertainty using ground-penetrating radar profiles: Field-demonstration for a braided-river aquifer. <i>Journal of Hydrology</i> , 2019, 571, 254-264.	2.3	8
25	The buried caldera boundary of the Vesuvius 1631 eruption revealed by present-day soil CO ₂ concentration. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 375, 43-56.	0.8	2
26	Training an Image Based Geostatistical Inversion Using a Spatial Generative Adversarial Neural Network. <i>Water Resources Research</i> , 2018, 54, 381-406.	1.7	232
27	Impact of small-scale saline tracer heterogeneity on electrical resistivity monitoring in fully and partially saturated porous media: Insights from geoelectrical milli-fluidic experiments. <i>Advances in Water Resources</i> , 2018, 113, 295-309.	1.7	28
28	Impact of petrophysical uncertainty on Bayesian hydrogeophysical inversion and model selection. <i>Advances in Water Resources</i> , 2018, 111, 346-359.	1.7	21
29	Geoelectrical Signatures of Reactive Mixing: A Theoretical Assessment. <i>Geophysical Research Letters</i> , 2018, 45, 3489-3498.	1.5	6
30	Probabilistic inference of fracture-scale flow paths and aperture distribution from hydrogeophysically-monitored tracer tests. <i>Journal of Hydrology</i> , 2018, 567, 305-319.	2.3	8
31	A Review of Geophysical Methods for Soil Structure Characterization. <i>Reviews of Geophysics</i> , 2018, 56, 672-697.	9.0	97
32	A Quantitative Comparison of GPR Sections to Reduce Geological Prior Uncertainty. , 2018, , .		0
33	Probabilistic inversion with graph cuts: Application to the Boise hydrogeophysical Research Site. <i>Water Resources Research</i> , 2017, 53, 1231-1250.	1.7	15
34	Bayesian model selection in hydrogeophysics: Application to conceptual subsurface models of the South Oyster Bacterial Transport Site, Virginia, USA. <i>Advances in Water Resources</i> , 2017, 102, 127-141.	1.7	30
35	Neutrally buoyant tracers in hydrogeophysics: Field demonstration in fractured rock. <i>Geophysical Research Letters</i> , 2017, 44, 3663-3671.	1.5	14
36	Long-Term Soil Structure Observatory for Monitoring Post-Compaction Evolution of Soil Structure. <i>Vadose Zone Journal</i> , 2017, 16, 1-16.	1.3	63

#	ARTICLE	IF	CITATIONS
37	Pore network modeling of the electrical signature of solute transport in dual-domain media. <i>Geophysical Research Letters</i> , 2017, 44, 4908-4916.	1.5	25
38	Inference of multi-Gaussian relative permittivity fields by probabilistic inversion of crosshole ground-penetrating radar data. <i>Geophysics</i> , 2017, 82, H25-H40.	1.4	11
39	On structure-based priors in Bayesian geophysical inversion. <i>Geophysical Journal International</i> , 2017, 208, 1342-1358.	1.0	12
40	Inversion using a new low-dimensional representation of complex binary geological media based on a deep neural network. <i>Advances in Water Resources</i> , 2017, 110, 387-405.	1.7	155
41	On uncertainty quantification in hydrogeology and hydrogeophysics. <i>Advances in Water Resources</i> , 2017, 110, 166-181.	1.7	82
42	The 3-D structure of the Somma-Vesuvius volcanic complex (Italy) inferred from new and historic gravimetric data. <i>Scientific Reports</i> , 2017, 7, 8434.	1.6	18
43	Apparent apertures from ground penetrating radar data and their relation to heterogeneous aperture fields. <i>Geophysical Journal International</i> , 2017, 209, 1418-1430.	1.0	16
44	GEOELECTRICAL MONITORING OF SOLUTE TRANSPORT IN DUAL-DOMAIN MEDIA: A REVIEW. , 2017, , .		1
45	Patch-based iterative conditional geostatistical simulation using graph cuts. <i>Water Resources Research</i> , 2016, 52, 6297-6320.	1.7	30
46	Hydrogeophysical characterization of transport processes in fractured rock by combining push-pull and single-hole ground penetrating radar experiments. <i>Water Resources Research</i> , 2016, 52, 938-953.	1.7	30
47	Streaming potential modeling in fractured rock: Insights into the identification of hydraulically active fractures. <i>Geophysical Research Letters</i> , 2016, 43, 4937-4944.	1.5	33
48	Merging parallel tempering with sequential geostatistical resampling for improved posterior exploration of high-dimensional subsurface categorical fields. <i>Advances in Water Resources</i> , 2016, 90, 57-69.	1.7	28
49	Image synthesis with graph cuts: a fast model proposal mechanism in probabilistic inversion. <i>Geophysical Journal International</i> , 2016, 204, 1179-1190.	1.0	38
50	Electrical Resistivity Monitoring of Saline Tracer Fingering at Pore Scale under Partially Saturated Conditions. , 2016, , .		2
51	Tomogram-based comparison of geostatistical models: Application to the Macrodispersion Experiment (MADE) site. <i>Journal of Hydrology</i> , 2015, 531, 543-556.	2.3	13
52	Probabilistic inference of multi-Gaussian fields from indirect hydrological data using circulant embedding and dimensionality reduction. <i>Water Resources Research</i> , 2015, 51, 4224-4243.	1.7	39
53	Monitoring of saline tracer movement with vertically distributed self-potential measurements at the HOBE agricultural test site, Voulund, Denmark. <i>Journal of Hydrology</i> , 2015, 521, 314-327.	2.3	57
54	Summary statistics from training images as prior information in probabilistic inversion. <i>Geophysical Journal International</i> , 2015, 201, 157-171.	1.0	46

#	ARTICLE	IF	CITATIONS
55	Feature-preserving interpolation and filtering of environmental time series. <i>Environmental Modelling and Software</i> , 2015, 72, 71-76.	1.9	10
56	Effective modeling of ground penetrating radar in fractured media using analytic solutions for propagation, thin-bed interaction and dipolar scattering. <i>Journal of Applied Geophysics</i> , 2015, 116, 206-214.	0.9	17
57	An analytical study of seismoelectric signals produced by 1-D mesoscopic heterogeneities. <i>Geophysical Journal International</i> , 2015, 201, 329-342.	1.0	13
58	Geological realism in hydrogeological and geophysical inverse modeling: A review. <i>Advances in Water Resources</i> , 2015, 86, 86-101.	1.7	152
59	Probabilistic 3-D time-lapse inversion of magnetotelluric data: application to an enhanced geothermal system. <i>Geophysical Journal International</i> , 2015, 203, 1946-1960.	1.0	33
60	Morphological, hydrological, biogeochemical and ecological changes and challenges in river restoration – the Thur River case study. <i>Hydrology and Earth System Sciences</i> , 2014, 18, 2449-2462.	1.9	46
61	Falsification and corroboration of conceptual hydrological models using geophysical data. <i>Wiley Interdisciplinary Reviews: Water</i> , 2014, 1, 151-171.	2.8	16
62	Conditioning of Multiple-Point Statistics Facies Simulations to Tomographic Images. <i>Mathematical Geosciences</i> , 2014, 46, 625-645.	1.4	28
63	3-D density structure and geological evolution of Stromboli volcano (Aeolian Islands, Italy) inferred from land-based and sea-surface gravity data. <i>Journal of Volcanology and Geothermal Research</i> , 2014, 273, 58-69.	0.8	17
64	Two-dimensional probabilistic inversion of plane-wave electromagnetic data: methodology, model constraints and joint inversion with electrical resistivity data. <i>Geophysical Journal International</i> , 2014, 196, 1508-1524.	1.0	60
65	Probabilistic electrical resistivity tomography of a CO ₂ sequestration analog. <i>Journal of Applied Geophysics</i> , 2014, 107, 80-92.	0.9	30
66	Conditioning of stochastic 3-D fracture networks to hydrological and geophysical data. <i>Advances in Water Resources</i> , 2013, 62, 79-89.	1.7	46
67	Distributed Soil Moisture from Crosshole Ground-Penetrating Radar Travel Times using Stochastic Inversion. <i>Vadose Zone Journal</i> , 2013, 12, 1-16.	1.3	47
68	Structure-coupled joint inversion of geophysical and hydrological data. <i>Geophysics</i> , 2013, 78, ID1-ID14.	1.4	39
69	3-D characterization of high-permeability zones in a gravel aquifer using 2-D crosshole GPR full-waveform inversion and waveguide detection. <i>Geophysical Journal International</i> , 2013, 195, 932-944.	1.0	76
70	3D characterization of an aquifer using full-waveform inversion and amplitude analysis. , 2013, , .		0
71	Self-Potentials in Partially Saturated Media: The Importance of Explicit Modeling of Electrode Effects. <i>Vadose Zone Journal</i> , 2013, 12, 1-21.	1.3	36
72	Seismoelectric effects due to mesoscopic heterogeneities. <i>Geophysical Research Letters</i> , 2013, 40, 2033-2037.	1.5	35

#	ARTICLE	IF	CITATIONS
73	Imaging and quantifying salt-tracer transport in a riparian groundwater system by means of 3D ERT monitoring. <i>Geophysics</i> , 2012, 77, B207-B218.	1.4	83
74	Estimating traveltimes and groundwater flow patterns using 3D time-lapse crosshole ERT imaging of electrical resistivity fluctuations induced by infiltrating river water. <i>Geophysics</i> , 2012, 77, E239-E250.	1.4	49
75	Fracture imaging within a granitic rock aquifer using multiple-offset single-hole and cross-hole GPR reflection data. <i>Journal of Applied Geophysics</i> , 2012, 78, 123-132.	0.9	43
76	Constraining 3-D electrical resistance tomography with GPR reflection data for improved aquifer characterization. <i>Journal of Applied Geophysics</i> , 2012, 78, 68-76.	0.9	100
77	A filtering method to correct time-lapse 3D ERT data and improve imaging of natural aquifer dynamics. <i>Journal of Applied Geophysics</i> , 2012, 80, 12-24.	0.9	15
78	Focused time-lapse inversion of radio and audio magnetotelluric data. <i>Journal of Applied Geophysics</i> , 2012, 84, 29-38.	0.9	26
79	Inferring transport characteristics in a fractured rock aquifer by combining single-hole ground-penetrating radar reflection monitoring and tracer test data. <i>Water Resources Research</i> , 2012, 48, .	1.7	40
80	Derivation of Soil-specific Streaming Potential Electrical Parameters from Hydrodynamic Characteristics of Partially Saturated Soils. <i>Vadose Zone Journal</i> , 2012, 11, .	1.3	95
81	Mass conservative three-dimensional water tracer distribution from Markov chain Monte Carlo inversion of time-lapse ground-penetrating radar data. <i>Water Resources Research</i> , 2012, 48, .	1.7	45
82	Single-hole GPR reflection imaging of solute transport in a granitic aquifer. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	35
83	<i>Hydrogeophysics</i> . , 2011, , 401-434.		35
84	Towards improved instrumentation for assessing river-groundwater interactions in a restored river corridor. <i>Hydrology and Earth System Sciences</i> , 2011, 15, 2531-2549.	1.9	47
85	Self-potential investigations of a gravel bar in a restored river corridor. <i>Hydrology and Earth System Sciences</i> , 2011, 15, 729-742.	1.9	32
86	Comment on "Streaming potential dependence on water-content in Fontainebleau sand"™ by V. Allègre, L. Jouniaux, F. Lehmann and P. Sailhac. <i>Geophysical Journal International</i> , 2011, 186, 113-114.	1.0	9
87	3D crosshole ERT for aquifer characterization and monitoring of infiltrating river water. <i>Geophysics</i> , 2011, 76, G49-G59.	1.4	100
88	High resolution imaging of the unsaturated and saturated zones of a gravel aquifer using full-waveform inversion. , 2011, , .		4
89	Full-waveform inversion of cross-hole ground-penetrating radar data to characterize a gravel aquifer close to the Thur River, Switzerland. <i>Near Surface Geophysics</i> , 2010, 8, 635-649.	0.6	92
90	Full-waveform inversion of crosshole ground penetrating radar data to characterize a gravel aquifer close to the Thur River, Switzerland. , 2010, , .		15

#	ARTICLE	IF	CITATIONS
91	The borehole-fluid effect in electrical resistivity imaging. <i>Geophysics</i> , 2010, 75, F107-F114.	1.4	50
92	1. Joint Inversion of Crosshole GPR and Seismic Traveltime Data. , 2010, , 1-16.		8
93	Structural joint inversion of time-lapse crosshole ERT and GPR traveltime data. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	62
94	Zonation for 3D aquifer characterization based on joint inversions of multimethod crosshole geophysical data. <i>Geophysics</i> , 2010, 75, G53-G64.	1.4	134
95	A Multi-borehole 3-D ERT Monitoring System for Aquifer Characterization Using River Flood Events as a Natural Tracer. , 2010, , .		1
96	Critical Steps for the Continuing Advancement of Hydrogeophysics. <i>Eos</i> , 2009, 90, 200-200.	0.1	60
97	Comment on "Characterization of multiphase electrokinetic coupling using a bundle of capillary tubes model" by Mathew D. Jackson. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	15
98	Redox potential distribution inferred from self-potential measurements associated with the corrosion of a burden metallic body. <i>Geophysical Prospecting</i> , 2008, 56, 269-282.	1.0	64
99	Detection and localization of hydromechanical disturbances in a sandbox using the self-potential method. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	52
100	Joint inversion of crosshole radar and seismic traveltimes acquired at the South Oyster Bacterial Transport Site. <i>Geophysics</i> , 2008, 73, G29-G37.	1.4	78
101	Experimental Design for Crosshole Electrical Resistivity Tomography Data Sets. , 2008, , .		9
102	A comment on "Electrical tomography of La Soufri�re of Guadeloupe Volcano: Field experiments, 1D inversion and qualitative interpretation" by Nicollin, F. et al. [<i>Earth Planet. Sci. Lett.</i> 244 (2006) 709-724]. <i>Earth and Planetary Science Letters</i> , 2007, 258, 619-622.	1.8	6
103	Estimation of the water table throughout a catchment using self-potential and piezometric data in a Bayesian framework. <i>Journal of Hydrology</i> , 2007, 334, 88-98.	2.3	56
104	Streaming current generation in two-phase flow conditions. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	122
105	Inverting self-potential data for redox potentials of contaminant plumes. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	63
106	Electrokinetic coupling in unsaturated porous media. <i>Journal of Colloid and Interface Science</i> , 2007, 313, 315-327.	5.0	205
107	Non-intrusive characterization of the redox potential of landfill leachate plumes from self-potential data. <i>Journal of Contaminant Hydrology</i> , 2007, 92, 274-292.	1.6	87
108	Inversion of tracer test data using tomographic constraints. <i>Water Resources Research</i> , 2006, 42, .	1.7	64

#	ARTICLE	IF	CITATIONS
109	Local earthquake (LE) tomography with joint inversion for P- and S-wave velocities using structural constraints. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	59
110	Improved hydrogeophysical characterization using joint inversion of cross-hole electrical resistance and ground-penetrating radar traveltime data. <i>Water Resources Research</i> , 2006, 42, .	1.7	270
111	Chemico-electromechanical coupling in microporous media. <i>Journal of Colloid and Interface Science</i> , 2006, 302, 682-694.	5.0	172
112	HYDROGEOPHYSICAL PARAMETER ESTIMATION APPROACHES FOR FIELD SCALE CHARACTERIZATION. , 2006, , 9-44.		18
113	Evidence of electrical anisotropy in limestone formations using the RMT technique. <i>Geophysics</i> , 2004, 69, 909-916.	1.4	36
114	Chemical denudation in arctic-alpine Latnjavagge (Swedish Lapland) in relation to regolith as assessed by radio magnetotelluric-geophysical profiles. <i>Geomorphology</i> , 2004, 57, 303-319.	1.1	50
115	Characterization of a fractured granite using radio magnetotelluric (RMT) data. <i>Geophysics</i> , 2004, 69, 1155-1165.	1.4	29
116	Assessment of chemical denudation rates using hydrological measurements, water chemistry analysis and electromagnetic geophysical data. <i>Permafrost and Periglacial Processes</i> , 2003, 14, 387-397.	1.5	21
117	Multicriteria Decision Aid in Supporting Decisions Related to Groundwater Protection. <i>Environmental Management</i> , 2003, 32, 589-601.	1.2	11
118	Probabilistic inference of subsurface heterogeneity and interface geometry using geophysical data. <i>Geophysical Journal International</i> , 0, , .	1.0	10
119	Electrical Signatures of Diffusion-Limited Mixing: Insights from a Milli-fluidic Tracer Experiment. <i>Transport in Porous Media</i> , 0, , 1.	1.2	2