

Am Binley

List of Publications by Year in descending order

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226
papers

15,729
citations

22153

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116
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232
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232
docs citations

232
times ranked

9918
citing authors

#	ARTICLE	IF	CITATIONS
1	The future of distributed models: Model calibration and uncertainty prediction. Hydrological Processes, 1992, 6, 279-298.	2.6	3,485
2	The emergence of hydrogeophysics for improved understanding of subsurface processes over multiple scales. Water Resources Research, 2015, 51, 3837-3866.	4.2	479
3	Temporal and spatial variability of groundwater-surface water fluxes: Development and application of an analytical method using temperature time series. Journal of Hydrology, 2007, 336, 1-16.	5.4	456
4	Vadose zone flow model parameterisation using cross-borehole radar and resistivity imaging. Journal of Hydrology, 2002, 267, 147-159.	5.4	332
5	Cross-hole electrical imaging of a controlled saline tracer injection. Journal of Applied Geophysics, 2000, 44, 85-102.	2.1	328
6	DC Resistivity and Induced Polarization Methods. , 2005, , 129-156.		317
7	Improved hydrogeophysical characterization using joint inversion of cross-hole electrical resistance and ground-penetrating radar traveltime data. Water Resources Research, 2006, 42, .	4.2	270
8	Relationship between spectral induced polarization and hydraulic properties of saturated and unsaturated sandstone. Water Resources Research, 2005, 41, .	4.2	265
9	Applying petrophysical models to radar travel time and electrical resistivity tomograms: Resolution-dependent limitations. Journal of Geophysical Research, 2005, 110, .	3.3	256
10	GLUE: 20-years on. Hydrological Processes, 2014, 28, 5897-5918.	2.6	239
11	An overview of the spectral induced polarization method for near-surface applications. Near Surface Geophysics, 2012, 10, 453-468.	1.2	233
12	Global patterns of nitrate storage in the vadose zone. Nature Communications, 2017, 8, 1416.	12.8	233
13	An overview of a highly versatile forward and stable inverse algorithm for airborne, ground-based and borehole electromagnetic and electric data. Exploration Geophysics, 2015, 46, 223-235.	1.1	230
14	Advancing process-based watershed hydrological research using near-surface geophysics: a vision for, and review of, electrical and magnetic geophysical methods. Hydrological Processes, 2008, 22, 3604-3635.	2.6	228
15	High-resolution characterization of vadose zone dynamics using cross-borehole radar. Water Resources Research, 2001, 37, 2639-2652.	4.2	215
16	Crosshole IP imaging for engineering and environmental applications. Geophysics, 2004, 69, 97-107.	2.6	194
17	A saline trace test monitored via time-lapse surface electrical resistivity tomography. Journal of Applied Geophysics, 2006, 59, 244-259.	2.1	192
18	Seasonal variation of moisture content in unsaturated sandstone inferred from borehole radar and resistivity profiles. Journal of Hydrology, 2002, 267, 160-172.	5.4	172

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19	Examination of Solute Transport in an Undisturbed Soil Column Using Electrical Resistance Tomography. <i>Water Resources Research</i> , 1996, 32, 763-769.	4.2	159
20	A 3D ERT study of solute transport in a large experimental tank. <i>Journal of Applied Geophysics</i> , 2002, 49, 211-229.	2.1	146
21	Complex resistivity tomography for environmental applications. <i>Chemical Engineering Journal</i> , 2000, 77, 11-18.	12.7	144
22	Electrical resistance tomography. <i>The Leading Edge</i> , 2004, 23, 438-442.	0.7	135
23	Quantitative imaging of solute transport in an unsaturated and undisturbed soil monolith with 3D ERT and TDR. <i>Water Resources Research</i> , 2008, 44, .	4.2	133
24	Detection of Leaks in Underground Storage Tanks Using Electrical Resistance Methods. <i>Journal of Environmental and Engineering Geophysics</i> , 1996, 1, 189-203.	0.5	132
25	Tidal influence on behaviour of a coastal aquifer adjacent to a low-relief estuary. <i>Journal of Hydrology</i> , 2006, 327, 110-127.	5.4	131
26	A physically based model of heterogeneous hillslopes: 2. Effective hydraulic conductivities. <i>Water Resources Research</i> , 1989, 25, 1227-1233.	4.2	120
27	Deep roots and soil structure. <i>Plant, Cell and Environment</i> , 2016, 39, 1662-1668.	5.7	115
28	Spatial variations in soil-water carrying capacity of three typical revegetation species on the Loess Plateau, China. <i>Agriculture, Ecosystems and Environment</i> , 2019, 273, 25-35.	5.3	115
29	Monitoring Unsaturated Flow and Transport Using Cross-Borehole Geophysical Methods. <i>Vadose Zone Journal</i> , 2008, 7, 227-237.	2.2	112
30	ERT monitoring of environmental remediation processes. <i>Measurement Science and Technology</i> , 1996, 7, 375-383.	2.6	110
31	A physically based model of heterogeneous hillslopes: 1. Runoff production. <i>Water Resources Research</i> , 1989, 25, 1219-1226.	4.2	105
32	Snowmelt infiltration: monitoring temporal and spatial variability using time-lapse electrical resistivity. <i>Journal of Hydrology</i> , 2004, 297, 174-186.	5.4	105
33	Nitrate concentration changes at the groundwater-surface water interface of a small Cumbrian river. <i>Hydrological Processes</i> , 2009, 23, 2195-2211.	2.6	102
34	Spatio-temporal variations of hyporheic flow in a riffle-step-pool sequence. <i>Hydrological Processes</i> , 2009, 23, 2138-2149.	2.6	100
35	ReslPy, an intuitive open source software for complex geoelectrical inversion/modeling. <i>Computers and Geosciences</i> , 2020, 137, 104423.	4.2	100
36	Identifying Unsaturated Hydraulic Parameters Using an Integrated Data Fusion Approach on Cross-Borehole Geophysical Data. <i>Vadose Zone Journal</i> , 2008, 7, 238-248.	2.2	96

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37	Changing responses in hydrology: Assessing the uncertainty in physically based model predictions. <i>Water Resources Research</i> , 1991, 27, 1253-1261.	4.2	90
38	A saline tracer test monitored via both surface and cross-borehole electrical resistivity tomography: Comparison of time-lapse results. <i>Journal of Applied Geophysics</i> , 2012, 79, 6-16.	2.1	90
39	Resolving spectral information from time domain induced polarization data through 2-D inversion. <i>Geophysical Journal International</i> , 2013, 192, 631-646.	2.4	89
40	Predicting permeability from the characteristic relaxation time and intrinsic formation factor of complex conductivity spectra. <i>Water Resources Research</i> , 2015, 51, 6672-6700.	4.2	86
41	Permeability prediction based on induced polarization: Insights from measurements on sandstone and unconsolidated samples spanning a wide permeability range. <i>Geophysics</i> , 2015, 80, D161-D173.	2.6	86
42	Monitoring snowmelt induced unsaturated flow and transport using electrical resistivity tomography. <i>Journal of Hydrology</i> , 2002, 267, 273-284.	5.4	84
43	Geophysical characterisation of the groundwater-surface water interface. <i>Advances in Water Resources</i> , 2017, 109, 302-319.	3.8	84
44	Imaging and quantifying salt-tracer transport in a riparian groundwater system by means of 3D ERT monitoring. <i>Geophysics</i> , 2012, 77, B207-B218.	2.6	83
45	Electrical resistivity imaging of the architecture of substream sediments. <i>Water Resources Research</i> , 2008, 44, .	4.2	81
46	Textural controls on low-frequency electrical spectra of porous media. <i>Geophysics</i> , 2010, 75, WA113-WA123.	2.6	80
47	The Use of Electromagnetic Induction to Monitor Changes in Soil Moisture Profiles beneath Different Wheat Genotypes. <i>Soil Science Society of America Journal</i> , 2015, 79, 459-466.	2.2	80
48	Root growth in field-grown winter wheat: Some effects of soil conditions, season and genotype. <i>European Journal of Agronomy</i> , 2017, 91, 74-83.	4.1	77
49	Importance and controls of anaerobic ammonium oxidation influenced by riverbed geology. <i>Nature Geoscience</i> , 2016, 9, 357-360.	12.9	76
50	Tools and Techniques: Electrical Methods. , 2015, , 233-259.		74
51	Electrical Imaging of Fractures Using Ground-Water Salinity Change. <i>Ground Water</i> , 1997, 35, 436-442.	1.3	73
52	Recharge and Nitrate Transport Through the Deep Vadose Zone of the Loess Plateau: A Regional-Scale Model Investigation. <i>Water Resources Research</i> , 2018, 54, 4332-4346.	4.2	73
53	Methods to estimate changes in soil water for phenotyping root activity in the field. <i>Plant and Soil</i> , 2017, 415, 407-422.	3.7	72
54	Vadose Zone Flow Model Uncertainty as Conditioned on Geophysical Data. <i>Ground Water</i> , 2003, 41, 119-127.	1.3	71

#	ARTICLE	IF	CITATIONS
55	Flow pathways in porous media: electrical resistance tomography and dye staining image verification. <i>Measurement Science and Technology</i> , 1996, 7, 384-390.	2.6	70
56	Modeling unsaturated flow in a layered formation under quasi-steady state conditions using geophysical data constraints. <i>Advances in Water Resources</i> , 2005, 28, 467-477.	3.8	70
57	Within-river nutrient processing in Chalk streams: The Pang and Lambourn, UK. <i>Journal of Hydrology</i> , 2006, 330, 101-125.	5.4	70
58	Radon in Chalk streams: Spatial and temporal variation of groundwater sources in the Pang and Lambourn catchments, UK. <i>Journal of Hydrology</i> , 2007, 339, 172-182.	5.4	70
59	Mineral N stock and nitrate accumulation in the 50 to 200 m profile on the Loess Plateau. <i>Science of the Total Environment</i> , 2018, 633, 999-1006.	8.0	67
60	Hydrologic and geomorphic controls on hyporheic exchange during base flow recession in a headwater mountain stream. <i>Water Resources Research</i> , 2012, 48, .	4.2	66
61	Revealing the spatial variability of water fluxes at the groundwater-surface water interface. <i>Water Resources Research</i> , 2013, 49, 3978-3992.	4.2	63
62	Structural joint inversion of time-lapse crosshole ERT and GPR traveltimes data. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	62
63	Influence of tree species and forest land use on soil hydraulic conductivity and implications for surface runoff generation. <i>Geoderma</i> , 2018, 310, 120-127.	5.1	61
64	Three-dimensional effects causing artifacts in two-dimensional, cross-borehole, electrical imaging. <i>Journal of Hydrology</i> , 2008, 359, 59-70.	5.4	60
65	Critical Steps for the Continuing Advancement of Hydrogeophysics. <i>Eos</i> , 2009, 90, 200-200.	0.1	60
66	Improved characterisation and modelling of measurement errors in electrical resistivity tomography (ERT) surveys. <i>Journal of Applied Geophysics</i> , 2017, 146, 103-119.	2.1	59
67	Characterizing the heterogeneity of karst critical zone and its hydrological function: An integrated approach. <i>Hydrological Processes</i> , 2018, 32, 2932-2946.	2.6	58
68	Temporal responses of groundwater-surface water exchange to successive storm events. <i>Water Resources Research</i> , 2015, 51, 1112-1126.	4.2	57
69	Synthetic and field-based electrical imaging of a zerovalent iron barrier: Implications for monitoring long-term barrier performance. <i>Geophysics</i> , 2006, 71, B129-B137.	2.6	55
70	Ecohydrologically important subsurface structures in peatlands revealed by ground-penetrating radar and complex conductivity surveys. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	55
71	Noninvasive characterization of the Trecate (Italy) crude-oil contaminated site: links between contamination and geophysical signals. <i>Environmental Science and Pollution Research</i> , 2014, 21, 8914-8931.	5.3	55
72	Coupled and uncoupled hydrogeophysical inversions using ensemble Kalman filter assimilation of ERT-monitored tracer test data. <i>Water Resources Research</i> , 2015, 51, 3277-3291.	4.2	55

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73	Evaluation of permeable reactive barrier (PRB) integrity using electrical imaging methods. <i>Geophysics</i> , 2003, 68, 911-921.	2.6	54
74	A novel grass hybrid to reduce flood generation in temperate regions. <i>Scientific Reports</i> , 2013, 3, 1683.	3.3	53
75	Exploiting the temperature effects on low frequency electrical spectra of sandstone: A comparison of effective diffusion path lengths. <i>Geophysics</i> , 2010, 75, A43-A46.	2.6	49
76	Anisotropic resistivity tomography. <i>Geophysical Journal International</i> , 2004, 158, 409-425.	2.4	48
77	Characterization of the key pathways of dissimilatory nitrate reduction and their response to complex organic substrates in hyporheic sediments. <i>Limnology and Oceanography</i> , 2012, 57, 387-400.	3.1	47
78	Use of small scale electrical resistivity tomography to identify soil-root interactions during deficit irrigation. <i>Journal of Hydrology</i> , 2018, 556, 310-324.	5.4	46
79	Electrical Imaging of Saline Tracer Migration for the Investigation of Unsaturated Zone Transport Mechanisms. <i>Hydrology and Earth System Sciences</i> , 1997, 1, 291-302.	4.9	44
80	The interplay between transport and reaction rates as controls on nitrate attenuation in permeable, streambed sediments. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1093-1109.	3.0	44
81	X-ray computed tomography of peat soils: measuring gas content and peat structure. <i>Hydrological Processes</i> , 2008, 22, 4827-4837.	2.6	41
82	Derivation of lowland riparian wetland deposit architecture using geophysical image analysis and interface detection. <i>Water Resources Research</i> , 2014, 50, 5886-5905.	4.2	41
83	Noninvasive ^3D Transport Characterization in a Sandy Soil Using ERT: 1. Investigating the Validity of ERT-derived Transport Parameters. <i>Vadose Zone Journal</i> , 2009, 8, 711-722.	2.2	40
84	Evaluation of electrical resistivity tomography (ERT) for mapping the soil-rock interface in karstic environments. <i>Environmental Earth Sciences</i> , 2019, 78, 1.	2.7	40
85	Remote Monitoring of Leaks in Storage Tanks using Electrical Resistance Tomography: Application at the Hanford Site. <i>Journal of Environmental and Engineering Geophysics</i> , 2004, 9, 11-24.	0.5	39
86	17. Electrical Resistance Tomography Theory and Practice. , 2005, , 525-550.		38
87	Characterising groundwater-dominated lowland catchments: the UK Lowland Catchment Research Programme (LOCAR). <i>Hydrology and Earth System Sciences</i> , 2007, 11, 108-124.	4.9	38
88	Geoelectrical monitoring of simulated subsurface leakage to support high-hazard nuclear decommissioning at the Sellafield Site, UK. <i>Science of the Total Environment</i> , 2016, 566-567, 350-359.	8.0	37
89	Integrated time-lapse geoelectrical imaging of wetland hydrological processes. <i>Water Resources Research</i> , 2016, 52, 1607-1625.	4.2	36
90	Controls on the spatial and temporal variability of ^{222}Rn in riparian groundwater in a lowland Chalk catchment. <i>Journal of Hydrology</i> , 2009, 376, 58-69.	5.4	35

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91	Reducing monitoring gaps at the aquifer–river interface by modelling groundwater–surface water exchange flow patterns. <i>Hydrological Processes</i> , 2011, 25, 3547-3562.	2.6	35
92	Characterizing solute transport in undisturbed soil cores using electrical and X-ray tomographic methods. , 1999, 13, 211-221.		34
93	Ground Penetrating Radar in Hydrogeophysics. <i>Vadose Zone Journal</i> , 2008, 7, 137-139.	2.2	34
94	Direct geoelectrical evidence of mass transfer at the laboratory scale. <i>Water Resources Research</i> , 2012, 48, .	4.2	34
95	Combined Geophysical Measurements Provide Evidence for Unfrozen Water in Permafrost in the Adventdalen Valley in Svalbard. <i>Geophysical Research Letters</i> , 2018, 45, 7606-7614.	4.0	34
96	Use and application of CFC-11, CFC-12, CFC-113 and SF6 as environmental tracers of groundwater residence time: A review. <i>Geoscience Frontiers</i> , 2019, 10, 1643-1652.	8.4	34
97	Revealing the temporal dynamics of subsurface temperature in a wetland using time-lapse geophysics. <i>Journal of Hydrology</i> , 2011, 396, 258-266.	5.4	33
98	Anomalous solute transport in saturated porous media: Relating transport model parameters to electrical and nuclear magnetic resonance properties. <i>Water Resources Research</i> , 2015, 51, 1264-1283.	4.2	33
99	EMagPy: Open-source standalone software for processing, forward modeling and inversion of electromagnetic induction data. <i>Computers and Geosciences</i> , 2021, 146, 104561.	4.2	33
100	Characterization of peat structure using X-ray computed tomography and its control on the ebullition of biogenic gas bubbles. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	31
101	2-D joint structural inversion of cross-hole electrical resistance and ground penetrating radar data. <i>Journal of Applied Geophysics</i> , 2012, 78, 52-67.	2.1	31
102	Laboratory SIP signatures associated with oxidation of disseminated metal sulfides. <i>Journal of Contaminant Hydrology</i> , 2013, 148, 25-38.	3.3	31
103	A laboratory study to estimate pore geometric parameters of sandstones using complex conductivity and nuclear magnetic resonance for permeability prediction. <i>Water Resources Research</i> , 2016, 52, 4321-4337.	4.2	31
104	Three-dimensional modelling of hillslope hydrology. <i>Hydrological Processes</i> , 1992, 6, 347-359.	2.6	30
105	Detecting Leaks from Environmental Barriers Using Electrical Current Imaging. <i>Journal of Environmental and Engineering Geophysics</i> , 1997, 2, 11-19.	0.5	30
106	Lithologic imaging using complex conductivity: Lessons learned from the Hanford 300 Area. <i>Geophysics</i> , 2012, 77, E397-E409.	2.6	30
107	Stoichiometric constraints on the microbial processing of carbon with soil depth along a riparian hillslope. <i>Biology and Fertility of Soils</i> , 2018, 54, 949-963.	4.3	30
108	Electrical properties of partially saturated sandstones: Novel computational approach with hydrogeophysical applications. <i>Water Resources Research</i> , 2005, 41, .	4.2	29

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109	Streamflow generation in the Pang and Lambourn catchments, Berkshire, UK. <i>Journal of Hydrology</i> , 2006, 330, 71-83.	5.4	29
110	The effect of peat structure on the spatial distribution of biogenic gases within bogs. <i>Hydrological Processes</i> , 2014, 28, 5483-5494.	2.6	29
111	Simulation of soil water flow and heat transport in drip irrigated potato field with raised beds and full plastic-film mulch in a semiarid area. <i>Agricultural Water Management</i> , 2018, 209, 178-187.	5.6	29
112	Integrated hydrogeophysical modelling and data assimilation for geoelectrical leak detection. <i>Journal of Contaminant Hydrology</i> , 2020, 234, 103679.	3.3	29
113	Electrical resistivity imaging of conductive plume dilution in fractured rock. <i>Hydrogeology Journal</i> , 2007, 15, 877-890.	2.1	28
114	Noninvasive 3D Transport Characterization in a Sandy Soil Using ERT: 2. Transport Process Inference. <i>Vadose Zone Journal</i> , 2009, 8, 723-734.	2.2	28
115	Time-lapse geophysical assessment of agricultural practices on soil moisture dynamics. <i>Vadose Zone Journal</i> , 2020, 19, e20080.	2.2	28
116	Resistivity imaging of soil during electrokinetic transport. <i>Engineering Geology</i> , 1999, 53, 205-215.	6.3	27
117	ON THE IMPORTANCE OF CONSIDERING CHANNEL MICROFORMS IN GROUNDWATER MODELS OF HYPORHEIC EXCHANGE. <i>River Research and Applications</i> , 2013, 29, 528-535.	1.7	27
118	Control of river stage on the reactive chemistry of the hyporheic zone. <i>Hydrological Processes</i> , 2014, 28, 4766-4779.	2.6	26
119	Flow and transport in the unsaturated Sherwood Sandstone: characterization using cross-borehole geophysical methods. <i>Geological Society Special Publication</i> , 2006, 263, 219-231.	1.3	25
120	Imaging Brilliant Blue Stained Soil by Means of Electrical Resistivity Tomography. <i>Vadose Zone Journal</i> , 2009, 8, 963-975.	2.2	25
121	Markov-chain Monte Carlo estimation of distributed Debye relaxations in spectral induced polarization. <i>Geophysics</i> , 2012, 77, E159-E170.	2.6	25
122	Hydrological controls on DOC:ammonium-nitrate resource stoichiometry in a lowland, agricultural catchment, southern UK. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 4785-4802.	4.9	25
123	Genetically modified hydrographs: what can grass genetics do for temperate catchment hydrology?. <i>Hydrological Processes</i> , 2007, 21, 2217-2221.	2.6	24
124	Quantifying the influence of static-like errors in least-squares-based inversion and sequential simulation of cross-borehole ground penetrating radar data. <i>Journal of Applied Geophysics</i> , 2009, 68, 71-84.	2.1	24
125	Characterization of karst structures using quasi-3D electrical resistivity tomography. <i>Environmental Earth Sciences</i> , 2019, 78, 1.	2.7	24
126	A comparison of cross-hole electrical and seismic data in fractured rock. <i>Geophysical Prospecting</i> , 2004, 52, 109-121.	1.9	23

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127	Evaluating the effect of using artificial pore water on the quality of laboratory hydraulic conductivity measurements of peat. <i>Hydrological Processes</i> , 2010, 24, 2629-2640.	2.6	23
128	Fine-Scale in Situ Measurement of Riverbed Nitrate Production and Consumption in an Armored Permeable Riverbed. <i>Environmental Science & Technology</i> , 2014, 48, 4425-4434.	10.0	23
129	On the Field Estimation of Moisture Content Using Electrical Geophysics: The Impact of Petrophysical Model Uncertainty. <i>Water Resources Research</i> , 2019, 55, 7196-7211.	4.2	23
130	Geophysical characterization of riverbed hydrostratigraphy using electrical resistance tomography. <i>Near Surface Geophysics</i> , 2010, 8, 493-501.	1.2	22
131	Interpreting spatial patterns in redox and coupled waterâ€“nitrogen fluxes in the streambed of a gaining river reach. <i>Biogeochemistry</i> , 2014, 117, 491-509.	3.5	22
132	The hydrogeologic information in cross-borehole complex conductivity data from an unconsolidated conglomeratic sedimentary aquifer. <i>Geophysics</i> , 2016, 81, E409-E421.	2.6	22
133	Reachâ€“scale river metabolism across contrasting subâ€“catchment geologies: Effect of light and hydrology. <i>Limnology and Oceanography</i> , 2017, 62, S381-S399.	3.1	22
134	Estimating vadose zone hydraulic properties using ground penetrating radar: The impact of prior information. <i>Water Resources Research</i> , 2011, 47, .	4.2	21
135	A Bayesian trans-dimensional approach for the fusion of multiple geophysical datasets. <i>Journal of Applied Geophysics</i> , 2013, 96, 38-54.	2.1	21
136	Electricalâ€“hydraulic relationships observed for unconsolidated sediments in the presence of a cobble framework. <i>Water Resources Research</i> , 2014, 50, 5721-5742.	4.2	21
137	Influence of emergent vegetation on nitrate cycling in sediments of a groundwater-fed river. <i>Biogeochemistry</i> , 2014, 118, 121-134.	3.5	20
138	Advancing hydrological process understanding from longâ€“term resistivity monitoring systems. <i>Wiley Interdisciplinary Reviews: Water</i> , 2021, 8, e1513.	6.5	20
139	Inter-borehole electrical resistivity imaging of englacial drainage. <i>Journal of Glaciology</i> , 1998, 44, 429-435.	2.2	19
140	Electrical Impedance Tomography of Known Targets. <i>Journal of Environmental and Engineering Geophysics</i> , 1999, 4, 11-26.	0.5	19
141	Electrical resistivity monitoring of riverâ€“groundwater interactions in a Chalk river and neighbouring riparian zone. <i>Near Surface Geophysics</i> , 2020, 18, 385-398.	1.2	19
142	A linked geomorphological and geophysical modelling methodology applied to an active landslide. <i>Landslides</i> , 2021, 18, 2689-2704.	5.4	19
143	Inter-borehole electrical resistivity imaging of englacial drainage. <i>Journal of Glaciology</i> , 1998, 44, 429-435.	2.2	18
144	Hydrogeophysical Case Studies in the Vadose Zone. <i>Water Science and Technology Library</i> , 2005, , 413-440.	0.3	18

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145	Geophysical investigation of unsaturated zone transport in the Chalk in Yorkshire. Quarterly Journal of Engineering Geology and Hydrogeology, 1999, 32, 185-198.	1.4	17
146	Borehole cylindrical noise during holeâ€‘surface and holeâ€‘hole resistivity measurements. Journal of Hydrology, 2004, 289, 78-94.	5.4	17
147	Soil Management and Grass Species Effects on the Hydraulic Properties of Shrinking Soils. Soil Science Society of America Journal, 2010, 74, 753-761.	2.2	17
148	Geostatistical inference using crosshole ground-penetrating radar. Geophysics, 2010, 75, J29-J41.	2.6	17
149	Timeâ€‘lapse electrical resistivity imaging of solute transport in a karst conduit. Hydrological Processes, 2015, 29, 4968-4976.	2.6	17
150	Do peatland microforms move through time? Examining the developmental history of a patterned peatland using groundâ€‘penetrating radar. Journal of Geophysical Research, 2012, 117, .	3.3	16
151	Efficient multiscale imaging of subsurface resistivity with uncertainty quantification using ensemble Kalman inversion. Geophysical Journal International, 2021, 225, 887-905.	2.4	16
152	In situ measurement of redox sensitive solutes at high spatial resolution in a riverbed using Diffusive Equilibrium in Thin Films (DET). Ecological Engineering, 2012, 49, 18-26.	3.6	15
153	Fluvial response to Late Pleistocene and Holocene environmental change in a Thames chalkland headwater: the Lambourn of southern England. Proceedings of the Geologists Association, 2015, 126, 683-697.	1.1	15
154	The Performance of Electrical Methods for Assessing the Integrity of Geomembrane Liners in Landfill Caps and Waste Storage Ponds. Journal of Environmental and Engineering Geophysics, 2003, 8, 227-237.	0.5	14
155	Ebullition events monitored from northern peatlands using electrical imaging. Journal of Geophysical Research, 2011, 116, .	3.3	14
156	Comparing Plume Characteristics Inferred from Crossâ€‘Borehole Geophysical Data. Vadose Zone Journal, 2012, 11, vzt2012.0031.	2.2	14
157	Estimation of Recharge from Longâ€‘Term Monitoring of Saline Tracer Transport Using Electrical Resistivity Tomography. Vadose Zone Journal, 2015, 14, 1-13.	2.2	14
158	Determining the Impact of Riparian Wetlands on Nutrient Cycling, Storage and Export in Permeable Agricultural Catchments. Water (Switzerland), 2020, 12, 167.	2.7	14
159	Inâ€‘mine (tunnelâ€‘toâ€‘tunnel) electrical resistance tomography in South African platinum mines. Near Surface Geophysics, 2010, 8, 563-574.	1.2	13
160	Effect of clay content and distribution on hydraulic and geophysical properties of synthetic sand-clay mixtures. Geophysics, 2019, 84, E239-E253.	2.6	13
161	Assessing the dynamics of soil salinity with time-lapse inversion of electromagnetic data guided by hydrological modelling. Hydrology and Earth System Sciences, 2021, 25, 1509-1527.	4.9	13
162	The Application of Electromagnetic Induction Methods to Reveal the Hydrogeological Structure of a Riparian Wetland. Water Resources Research, 2021, 57, e2020WR029221.	4.2	13

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163	UNSATURATED ZONE PROCESSES. , 2006, , 75-116.		13
164	Prospective modelling of 3D hyporheic exchange based on high-resolution topography and stream elevation. Hydrological Processes, 2014, 28, 2579-2594.	2.6	12
165	CHARACTERIZATION OF HETEROGENEITY IN UNSATURATED SANDSTONE USING BOREHOLE LOGS AND CROSS-BOREHOLE TOMOGRAPHY. , 2004, , 129-138.		12
166	Using geophysics to map areas of potential groundwater discharge into Ringkøbing Fjord, Denmark. The Leading Edge, 2013, 32, 792-796.	0.7	11
167	Analysis of time-lapse data error in complex conductivity imaging to alleviate anthropogenic noise for site characterization. Geophysics, 2019, 84, B181-B193.	2.6	11
168	Accounting for heterogeneity in the λ - τ relationship: Application to wheat phenotyping using EMI. Vadose Zone Journal, 2020, 19, e20037.	2.2	11
169	SOLUTE TRANSPORT PROCESSES. , 2006, , 117-159.		11
170	Contrasting Biophysical Controls on Carbon Dioxide and Methane Outgassing From Streams. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	11
171	Hydrogeophysics: An Introduction from the Guest Editors. Vadose Zone Journal, 2004, 3, 1060-1062.	2.2	10
172	Diffusive equilibrium in thin films provides evidence of suppression of hyporheic exchange and large-scale nitrate transformation in a groundwater-fed river. Hydrological Processes, 2015, 29, 1385-1396.	2.6	9
173	Self-potential monitoring of the enhanced biodegradation of an organic contaminant using a bioelectrochemical cell. The Leading Edge, 2015, 34, 198-202.	0.7	9
174	A Comparison of Ground-Penetrating Radar Early-Time Signal Approaches for Mapping Changes in Shallow Soil Water Content. Vadose Zone Journal, 2018, 17, 1-11.	2.2	9
175	Capacity and Distribution of Water Stored in the Vadose Zone of the Chinese Loess Plateau. Vadose Zone Journal, 2019, 18, 180203.	2.2	9
176	Hydrogeophysical Methods at the Laboratory Scale. , 2005, , 441-463.		9
177	Evaluating the joint use of GPR and ERT on mapping shallow subsurface features of karst critical zone in southwest China. Vadose Zone Journal, 2022, 21, e20172.	2.2	9
178	Application of complex resistivity tomography to field data from a kerosene-contaminated site. , 1997, , cp-95-00039.		8
179	The effect of groundwater forcing on hyporheic exchange: Reply to comment on "Munz M, Krause S, Tecklenburg C, Binley A. Reducing monitoring gaps at the aquifer-river interface by modelling groundwater-surfacewater exchange flow patterns. <i>Hydrological Processes</i>. DOI: 10.1002/hyp.8080"™. Hydrological Processes. 2012. 26. 1589-1592.	2.6	8
180	Monitoring redox sensitive conditions at the groundwater interface using electrical resistivity and self-potential. Journal of Contaminant Hydrology, 2019, 226, 103517.	3.3	8

#	ARTICLE	IF	CITATIONS
181	Borehole effect causing artefacts in crossâ€ borehole electrical resistivity tomography: A hydraulic fracturing case study. Near Surface Geophysics, 2020, 18, 445-462.	1.2	8
182	COLD REGIONS HYDROGEOPHYSICS: PHYSICAL CHARACTERISATION AND MONITORING. , 2006, , 195-232.		8
183	Variability of dissolved CO₂ in the Pang and Lambourn Chalk rivers. Hydrology and Earth System Sciences, 2007, 11, 328-339.	4.9	7
184	Anisotropic seismic inversion using a multigrid Monte Carlo approach. Geophysical Journal International, 2010, 183, 267-276.	2.4	7
185	Limitations and considerations for electrical resistivity and induced polarization imaging of riverbed sediments: Observations from laboratory, field, and synthetic experiments. Journal of Applied Geophysics, 2020, 183, 104173.	2.1	7
186	Timeâ€ intensive geoelectrical monitoring under winter wheat. Near Surface Geophysics, 2020, 18, 413-425.	1.2	7
187	Prediction of regionalâ€ scale groundwater recharge and nitrate storage in the vadose zone: A comparison between a global model and a regional model. Hydrological Processes, 2020, 34, 3347-3357.	2.6	7
188	APPLIED HYDROGEOPHYSICS. , 2006, , 1-8.		7
189	ENGINEERED BARRIERS FOR POLLUTANT CONTAINMENT AND REMEDIATION. , 2006, , 293-317.		7
190	On negative induced polarization in frequency domain measurements. Geophysical Journal International, 2021, 225, 342-353.	2.4	7
191	Modelling uncertainty in estimates of recharge to a shallow coastal aquifer. Hydrological Sciences Journal, 1997, 42, 155-168.	2.6	6
192	A Stochastic Analysis of Crossâ€ Hole Groundâ€ Penetrating Radar Zeroâ€ Offset Profiles for Subsurface Characterization. Vadose Zone Journal, 2012, 11, v2j2011.0078.	2.2	6
193	Headwater gas exchange quantified from O₂ mass balances at the reach scale. Limnology and Oceanography: Methods, 2018, 16, 696-709.	2.0	6
194	Estimation of the permeability of hydrocarbon reservoir samples using induced polarization and nuclear magnetic resonance methods. Geophysics, 2019, 84, MR73-MR84.	2.6	6
195	Soil moisture and electrical conductivity relationships under typical Loess Plateau land covers. Vadose Zone Journal, 2022, 21, .	2.2	6
196	Impact of microforms on nitrate transport at the groundwaterâ€ surface water interface in gaining streams. Advances in Water Resources, 2014, 73, 185-197.	3.8	5
197	Characterization of reactive transport by 3-D electrical resistivity tomography (ERT) under unsaturated conditions. Water Resources Research, 2016, 52, 8295-8316.	4.2	5
198	Towards understanding timeâ€ lapse electrical resistivity signals measured during contaminated snowmelt infiltration. Near Surface Geophysics, 2020, 18, 399-412.	1.2	5

#	ARTICLE	IF	CITATIONS
199	Quantifying snow water equivalent using terrestrial ground penetrating radar and unmanned aerial vehicle photogrammetry. <i>Hydrological Processes</i> , 2021, 35, e14190.	2.6	5
200	A Comparative Study of Conceptual Model Complexity to Describe Water Flow and Nitrate Transport in Deep Unsaturated Loess. <i>Water Resources Research</i> , 2021, 57, e2020WR029250.	4.2	5
201	Strategies for characterization of fractured rock using cross-borehole electrical tomography. <i>The Leading Edge</i> , 2013, 32, 784-790.	0.7	4
202	Scenario Evaluator for Electrical Resistivity Survey Pre-modeling Tool. <i>Ground Water</i> , 2017, 55, 885-890.	1.3	4
203	Spatial and temporal dynamics of nitrogen exchange in an upwelling reach of a groundwater-fed river and potential response to perturbations changing rainfall patterns under UK climate change scenarios. <i>Hydrological Processes</i> , 2021, 35, e14135.	2.6	3
204	Hydrological properties predict the composition of microbial communities cycling methane and nitrogen in rivers. <i>ISME Communications</i> , 2022, 2, .	4.2	3
205	Finite element based three-dimensional forward and inverse solvers for electrical impedance tomography. , 1996, , .		2
206	Laboratory spectral induced polarisation signatures associated with iron and manganese oxide dissolution because of anaerobic degradation. <i>Journal of Contaminant Hydrology</i> , 2019, 221, 1-10.	3.3	2
207	A multi-technique approach to determine temporal and spatial variability of groundwater-stream water exchange. <i>Hydrological Processes</i> , 2020, 34, 2612-2627.	2.6	2
208	Cross-gradients Joint Inversion of Time-lapse Crosshole ERT and GPR Data. , 2010, , .		2
209	Integrated Geophysical Characterization of a Hydrocarbon Contaminated Site. , 2010, , .		2
210	Tank Leak Detection Using Electrical Resistance Methods. , 1996, , .		2
211	Preconditioning finite element subsurface flow solutions on distributed memory parallel computers. <i>Advances in Water Resources</i> , 1993, 16, 191-202.	3.8	1
212	MIDA, a distributed hydrological model: Its behavior under some different parameter and data discretization conditions. <i>Physics and Chemistry of the Earth</i> , 1995, 20, 403-414.	0.3	1
213	A Lumped Bubble Capacitance Model Controlled by Matrix Structure to Describe Layered Biogenic Gas Bubble Storage in Shallow Subtropical Peat. <i>Water Resources Research</i> , 2018, 54, 5487-5503.	4.2	1
214	Estimation of vadose zone hydraulic properties from geophysical data using a Bayesian framework: effects of a correlated prior on posterior uncertainties. , 2010, , .		1
215	Geophysical Characterisation of the Riparian Zone in Groundwater Fed Catchments. , 2006, , .		1
216	Supercomputer Simulations of Heterogeneous Hillslopes. <i>Developments in Water Science</i> , 1988, , 185-190.	0.1	0

#	ARTICLE	IF	CITATIONS
217	Electrokinetic Transport in Natural Soil Cores. <i>Studies in Environmental Science</i> , 1997, , 689-698.	0.0	0
218	Laboratory Scale Tests of Electrical Impedance Tomography. , 1999, , .		0
219	HP Volume to honor Keith Beven. <i>Hydrological Processes</i> , 2017, 31, 3762-3764.	2.6	0
220	Static and dynamic aspects of near surface characterization through physics-based integration of GPR, ERT, SIP and SP data in the time-lapse mode. , 2010, , .		0
221	Stochastic Inversion of Vadose Zone Properties: Impact of Parameter Correlation on Uncertainty Estimates. , 2010, , .		0
222	2D Time Domain Inversion of Induced Polarization Data. , 2011, , .		0
223	Stochastic Analysis of Cross-hole GPR Data for Subsurface Characterization. , 2011, , .		0
224	Revealing Potential Flow Pathways within the Pow Catchment Using Geophysics - Initial Results and Conceptualisation. , 2011, , .		0
225	Layered and Laterally Constrained 2D Inversion of Time Domain Induced Polarization Data. , 2012, , .		0
226	Long-term Geoelectrical Monitoring to Support Nuclear Decommissioning at the Sellafield Site, UK. , 2014, , .		0