

Fred D Day-Lewis

List of Publications by Year in descending order

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84
papers

3,062
citations

159585

30
h-index

168389

53
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86
all docs

86
docs citations

86
times ranked

2632
citing authors

#	ARTICLE	IF	CITATIONS
1	Post-remediation geophysical assessment: Investigating long-term electrical geophysical signatures resulting from bioremediation at a chlorinated solvent contaminated site. <i>Journal of Environmental Management</i> , 2022, 302, 113944.	7.8	4
2	<sc>GW</sc>/<sc>SWâ€MST</sc>: A Groundwater/<sc>Surfaceâ€Water</sc> Method Selection Tool. <i>Ground Water</i> , 2022, 60, 784-791.	1.3	6
3	Reframing groundwater hydrology as a <sc>dataâ€driven</sc> science. <i>Ground Water</i> , 2022, 60, 455-456.	1.3	6
4	Incorporating Snowmelt into Daily Estimates of Recharge Using a <sc>Stateâ€Space</sc> Model of Infiltration. <i>Ground Water</i> , 2022, 60, 721-746.	1.3	4
5	Application of Recursive Estimation to Heat Tracing for Groundwater/Surfaceâ€Water Exchange. <i>Water Resources Research</i> , 2022, 58, .	4.2	10
6	Characterizing Physical Properties of Streambed Interface Sediments Using In Situ Complex Electrical Conductivity Measurements. <i>Water Resources Research</i> , 2021, 57, e2020WR027995.	4.2	5
7	Evaluation of riverbed magnetic susceptibility for mapping biogeochemical hot spots in groundwaterâ€impacted rivers. <i>Hydrological Processes</i> , 2021, 35, e14184.	2.6	4
8	Nuclear magnetic resonance logs of fractured bedrock at the Hidden Lane Landfill site, Culpeper Basin, Virginia. , 2021, , .		0
9	Exploring Environmental Factors That Drive Diel Variations in Tree Water Storage Using Wavelet Analysis. <i>Frontiers in Water</i> , 2021, 3, .	2.3	2
10	Estimating and Forecasting Timeâ€Varying Groundwater Recharge in Fractured Rock: A Stateâ€Space Formulation With Preferential and Diffuse Flow to the Water Table. <i>Water Resources Research</i> , 2021, 57, e2020WR029110.	4.2	6
11	Geostatistical mapping of salinity conditioned on borehole logs, Montebello Oil Field, California. <i>Ground Water</i> , 2021, , .	1.3	0
12	DTSGUI: A Python Program to Process and Visualize Fiberâ€Optic Distributed Temperature Sensing Data. <i>Ground Water</i> , 2020, 58, 799-804.	1.3	7
13	A New R Program for Flowâ€Log Analysis of Single Holes (FLASHâ€R). <i>Ground Water</i> , 2020, 58, 987-992.	1.3	2
14	Formation Criteria for Hyporheic Anoxic Microzones: Assessing Interactions of Hydraulics, Nutrients, and Biofilms. <i>Water Resources Research</i> , 2020, 56, no.	4.2	17
15	Experimental shifts of hydrologic residence time in a sandy urban stream sedimentâ€water interface alter nitrate removal and nitrous oxide fluxes. <i>Biogeochemistry</i> , 2020, 149, 195-219.	3.5	22
16	Return flows from beaver ponds enhance floodplain-to-river metals exchange in alluvial mountain catchments. <i>Science of the Total Environment</i> , 2019, 685, 357-369.	8.0	24
17	Geophysical mapping of plume discharge to surface water at a crude oil spill site: Inversion versus machine learning. <i>Geophysics</i> , 2019, 84, EN67-EN80.	2.6	3
18	Multi-scale preferential flow processes in an urban streambed under variable hydraulic conditions. <i>Journal of Hydrology</i> , 2019, 573, 168-179.	5.4	11

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19	Residence Time Controls on the Fate of Nitrogen in Flow Through Lakebed Sediments. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 689-707.	3.0	20
20	The Dual-Domain Porosity Apparatus: Characterizing Dual Porosity at the Sediment/Water Interface. Ground Water, 2019, 57, 640-646.	1.3	5
21	MoisturEC: A New R Program for Moisture Content Estimation from Electrical Conductivity Data. Ground Water, 2018, 56, 823-831.	1.3	6
22	Evaluating long-term patterns of decreasing groundwater discharge through a lake-bottom permeable reactive barrier. Journal of Environmental Management, 2018, 220, 233-245.	7.8	15
23	Direct Observations of Hydrologic Exchange Occurring With Less-Mobile Porosity and the Development of Anoxic Microzones in Sandy Lakebed Sediments. Water Resources Research, 2018, 54, 4714-4729.	4.2	25
24	Simulation of less-mobile porosity dynamics in contrasting sediment water interface porous media. Hydrological Processes, 2018, 32, 2030-2043.	2.6	10
25	Geophysical Tomography: The Current State of Research, Challenges, and Path Forward. , 2018, , .		1
26	Surface Geophysical Methods for Characterising Frozen Ground in Transitional Permafrost Landscapes. Permafrost and Periglacial Processes, 2017, 28, 52-65.	3.4	30
27	An overview of geophysical technologies appropriate for characterization and monitoring at fractured-rock sites. Journal of Environmental Management, 2017, 204, 709-720.	7.8	65
28	Pore network modeling of the electrical signature of solute transport in dual-domain media. Geophysical Research Letters, 2017, 44, 4908-4916.	4.0	25
29	Scenario Evaluator for Electrical Resistivity Survey Pre-modeling Tool. Ground Water, 2017, 55, 885-890.	1.3	4
30	GEOELECTRICAL MONITORING OF SOLUTE TRANSPORT IN DUAL-DOMAIN MEDIA: A REVIEW. , 2017, , .		1
31	<scp>1DTempPro V2</scp>: New Features for Inferring Groundwater/Surface Water Exchange. Ground Water, 2016, 54, 434-439.	1.3	44
32	Imaging Pathways in Fractured Rock Using Three-Dimensional Electrical Resistivity Tomography. Ground Water, 2016, 54, 186-201.	1.3	28
33	A Fractured Rock Geophysical Toolbox Method Selection Tool. Ground Water, 2016, 54, 315-316.	1.3	7
34	APPLICATION OF FREQUENCY- AND TIME-DOMAIN ELECTROMAGNETIC SURVEYS TO CHARACTERIZE THE HYDROSTRATIGRAPHY AND LANDFILL CONSTRUCTION CHARACTERISTICS AT THE AMARGOSA DESERT RESEARCH SITE, BEATTY, NEVADA. , 2016, , .		2
35	A physical explanation for the development of redox microzones in hyporheic flow. Geophysical Research Letters, 2015, 42, 4402-4410.	4.0	129
36	Time-Lapse Electrical Geophysical Monitoring of Amendment-Based Biostimulation. Ground Water, 2015, 53, 920-932.	1.3	22

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37	Advances in interpretation of subsurface processes with time-lapse electrical imaging. Hydrological Processes, 2015, 29, 1549-1576.	2.6	102
38	Anomalous solute transport in saturated porous media: Relating transport model parameters to electrical and nuclear magnetic resonance properties. Water Resources Research, 2015, 51, 1264-1283.	4.2	33
39	Development of a new semi-analytical model for cross-borehole flow experiments in fractured media. Advances in Water Resources, 2015, 76, 97-108.	3.8	13
40	1DTempPro: Analyzing Temperature Profiles for Groundwater/Surface-Water Exchange. Ground Water, 2014, 52, 298-302.	1.3	32
41	Dual-domain mass-transfer parameters from electrical hysteresis: Theory and analytical approach applied to laboratory, synthetic streambed, and groundwater experiments. Water Resources Research, 2014, 50, 8281-8299.	4.2	26
42	New permafrost is forming around shrinking Arctic lakes, but will it last?. Geophysical Research Letters, 2014, 41, 1585-1592.	4.0	57
43	Statistical mapping of zones of focused groundwater/surface-water exchange using fiber-optic distributed temperature sensing. Water Resources Research, 2013, 49, 6979-6984.	4.2	9
44	Understanding Water Column and Streambed Thermal Refugia for Endangered Mussels in the Delaware River. Environmental Science & Technology, 2013, 47, 11423-11431.	10.0	53
45	Simultaneous estimation of local-scale and flow path-scale dual-domain mass transfer parameters using geoelectrical monitoring. Water Resources Research, 2013, 49, 5615-5630.	4.2	18
46	Direct geoelectrical evidence of mass transfer at the laboratory scale. Water Resources Research, 2012, 48, .	4.2	34
47	Spatially variable stage-driven groundwater-surface water interaction inferred from time-frequency analysis of distributed temperature sensing data. Geophysical Research Letters, 2012, 39, .	4.0	27
48	Monitoring groundwater-surface water interaction using time-series and time-frequency analysis of transient three-dimensional electrical resistivity changes. Water Resources Research, 2012, 48, .	4.2	82
49	Monitoring Tracers with Time-Lapse Electrical Methods: Issues with Reactions and Surface Conductance. , 2012, , .		1
50	A distribution-based parametrization for improved tomographic imaging of solute plumes. Geophysical Journal International, 2011, 187, 214-224.	2.4	26
51	A Computer Program for Flow-Log Analysis of Single Holes (FLASH). Ground Water, 2011, 49, 926-931.	1.3	41
52	Inversion of multi-frequency electromagnetic induction data for 3D characterization of hydraulic conductivity. Journal of Applied Geophysics, 2011, 73, 323-335.	2.1	44
53	Quantifying solute transport processes: Are chemically "conservative" tracers electrically conservative?. Geophysics, 2011, 76, F53-F63.	2.6	26
54	Marine electrical resistivity imaging of submarine groundwater discharge: sensitivity analysis and application in Waquoit Bay, Massachusetts, USA. Hydrogeology Journal, 2010, 18, 173-185.	2.1	92

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55	Origin and Extent of Fresh Paleowaters on the Atlantic Continental Shelf, USA. <i>Ground Water</i> , 2010, 48, 143-158.	1.3	116
56	Improved hydrogeophysical characterization and monitoring through parallel modeling and inversion of time-domain resistivity and induced-polarization data. <i>Geophysics</i> , 2010, 75, WA27-WA41.	2.6	159
57	Use of electrical imaging and distributed temperature sensing methods to characterize surface water-groundwater exchange regulating uranium transport at the Hanford 300 Area, Washington. <i>Water Resources Research</i> , 2010, 46, .	4.2	102
58	Geoelectrical measurement and modeling of biogeochemical breakthrough behavior during microbial activity. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	10
59	Investigation of aquifer-estuary interaction using wavelet analysis of fiber-optic temperature data. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	79
60	Advancing process-based watershed hydrological research using near-surface geophysics: a vision for, and review of, electrical and magnetic geophysical methods. <i>Hydrological Processes</i> , 2008, 22, 3604-3635.	2.6	228
61	Implications of Rate-Limited Mass Transfer for Aquifer Storage and Recovery. <i>Ground Water</i> , 2008, 46, 591-605.	1.3	32
62	Geoelectrical inference of mass transfer parameters using temporal moments. <i>Water Resources Research</i> , 2008, 44, .	4.2	43
63	Electrical characterization of non-Fickian transport in groundwater and hyporheic systems. <i>Water Resources Research</i> , 2008, 44, .	4.2	41
64	Monitoring engineered remediation with borehole radar. <i>The Leading Edge</i> , 2007, 26, 1032-1035.	0.7	3
65	Fusion of active and passive hydrologic and geophysical tomographic surveys: The future of subsurface characterization. <i>Geophysical Monograph Series</i> , 2007, , 109-120.	0.1	12
66	Integrating geophysical, hydrochemical, and hydrologic data to understand the freshwater resources on Nantucket Island, Massachusetts. <i>Geophysical Monograph Series</i> , 2007, , 143-159.	0.1	16
67	Integrating hydrologic and geophysical data to constrain coastal surficial aquifer processes at multiple spatial and temporal scales. <i>Geophysical Monograph Series</i> , 2007, , 161-182.	0.1	1
68	Examining watershed processes using spectral analysis methods including the scaled-windowed fourier transform. <i>Geophysical Monograph Series</i> , 2007, , 183-200.	0.1	4
69	Accounting for tomographic resolution in estimating hydrologic properties from geophysical data. <i>Geophysical Monograph Series</i> , 2007, , 227-241.	0.1	12
70	Integrated multi-scale characterization of ground-water flow and chemical transport in fractured crystalline rock at the Mirror Lake Site, New Hampshire. <i>Geophysical Monograph Series</i> , 2007, , 201-225.	0.1	24
71	Geoelectrical evidence of bicontinuum transport in groundwater. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	58
72	Moment inference from tomograms. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	41

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73	An On-Campus Well Field for Hydrogeophysics Education and Undergraduate Research. <i>Journal of Geoscience Education</i> , 2006, 54, 480-486.	1.4	9
74	Geophysical Monitoring of a Field-Scale Biostimulation Pilot Project. <i>Ground Water</i> , 2006, 44, 430-443.	1.3	33
75	Combined interpretation of radar, hydraulic, and tracer data from a fractured-rock aquifer near Mirror Lake, New Hampshire, USA. <i>Hydrogeology Journal</i> , 2006, 14, 1-14.	2.1	63
76	Continuous resistivity profiling to delineate submarine groundwater discharge—examples and limitations. <i>The Leading Edge</i> , 2006, 25, 724-728.	0.7	93
77	SOLUTE TRANSPORT PROCESSES. , 2006, , 117-159.		11
78	Applying petrophysical models to radar travel time and electrical resistivity tomograms: Resolution-dependent limitations. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	256
79	Object-Based Inversion of Crosswell Radar Tomography Data to Monitor Vegetable Oil Injection Experiments. <i>Journal of Environmental and Engineering Geophysics</i> , 2004, 9, 63-77.	0.5	29
80	Assessing the resolution-dependent utility of tomograms for geostatistics. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	81
81	Time-lapse imaging of saline-tracer transport in fractured rock using difference-attenuation radar tomography. <i>Water Resources Research</i> , 2003, 39, .	4.2	132
82	The role of field camp in an evolving geoscience curriculum in the United States. <i>Hydrogeology Journal</i> , 2003, 11, 203-204.	2.1	4
83	<title>Attenuation-difference radar tomography: results of a multiplane experiment at the U.S. Geological Survey Fractured-Rock Research Site, Mirror Lake, New Hampshire</title>. , 2000, , .		15
84	Identifying fracture-zone geometry using simulated annealing and hydraulic-connection data. <i>Water Resources Research</i> , 2000, 36, 1707-1721.	4.2	66