Martin A Briggs

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Using highâ€resolution distributed temperature sensing to quantify spatial and temporal variability in vertical hyporheic flux. Water Resources Research, 2012, 48, .	4.2	172
2	Automated calculation of vertical pore-water flux from field temperature time series using the VFLUX method and computer program. Journal of Hydrology, 2012, 420-421, 142-158.	5.4	163
3	A physical explanation for the development of redox microzones in hyporheic flow. Geophysical Research Letters, 2015, 42, 4402-4410.	4.0	129
4	A method for estimating surface transient storage parameters for streams with concurrent hyporheic storage. Water Resources Research, 2009, 45, .	4.2	115
5	A comparison of fibreâ€optic distributed temperature sensing to traditional methods of evaluating groundwater inflow to streams. Hydrological Processes, 2012, 26, 1277-1290.	2.6	102
6	A comparison of thermal infrared to fiber-optic distributed temperature sensing for evaluation of groundwater discharge to surface water. Journal of Hydrology, 2015, 530, 153-166.	5.4	100
7	Residence time control on hot moments of net nitrate production and uptake in the hyporheic zone. Hydrological Processes, 2014, 28, 3741-3751.	2.6	96
8	Practical limitations on the use of diurnal temperature signals to quantify groundwater upwelling. Journal of Hydrology, 2014, 519, 1739-1751.	5.4	81
9	Relating hyporheic fluxes, residence times, and redox-sensitive biogeochemical processes upstream of beaver dams. Freshwater Science, 2013, 32, 622-641.	1.8	80
10	Experimental evaluation of the applicability of phase, amplitude, and combined methods to determine water flux and thermal diffusivity from temperature time series using VFLUX 2. Journal of Hydrology, 2015, 531, 728-737.	5.4	75
11	Continental-scale analysis of shallow and deep groundwater contributions to streams. Nature Communications, 2021, 12, 1450.	12.8	74
12	Separation of river networkâ€“scale nitrogen removal among the main channel and two transient storage compartments. Water Resources Research, 2011, 47, .	4.2	72
13	Using Diurnal Temperature Signals to Infer Vertical Groundwaterâ€Surface Water Exchange. Ground Water, 2017, 55, 10-26.	1.3	69
14	Combined use of thermal methods and seepage meters to efficiently locate, quantify, and monitor focused groundwater discharge to a sandâ€bed stream. Water Resources Research, 2016, 52, 4486-4503.	4.2	61
15	New permafrost is forming around shrinking Arctic lakes, but will it last?. Geophysical Research Letters, 2014, 41, 1585-1592.	4.0	57
16	Understanding Water Column and Streambed Thermal Refugia for Endangered Mussels in the Delaware River. Environmental Science & Technology, 2013, 47, 11423-11431.	10.0	53
17	Inferring watershed hydraulics and cold-water habitat persistence using multi-year air and stream temperature signals. Science of the Total Environment, 2018, 636, 1117-1127.	8.0	51
18	Surface and hyporheic transient storage dynamics throughout a coastal stream network. Water Resources Research, 2010, 46, .	4.2	45

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19	<scp>1DTempPro V2</scp>: New Features for Inferring Groundwater/Surfaceâ€Water Exchange. Ground Water, 2016, 54, 434-439.	1.3	44
20	Explicit consideration of preferential groundwater discharges as surface water ecosystem control points. Hydrological Processes, 2018, 32, 2435-2440.	2.6	43
21	Heterogeneity in Hyporheic Flow, Pore Water Chemistry, and Microbial Community Composition in an Alpine Streambed. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3465-3478.	3.0	41
22	Actively heated highâ€resolution fiberâ€opticâ€distributed temperature sensing to quantify streambed flow dynamics in zones of strong groundwater upwelling. Water Resources Research, 2016, 52, 5179-5194.	4.2	38
23	Heat as a groundwater tracer in shallow and deep heterogeneous media: Analytical solution, spreadsheet tool, and field applications. Hydrological Processes, 2017, 31, 2648-2661.	2.6	38
24	Shallow bedrock limits groundwater seepage-based headwater climate refugia. Limnologica, 2018, 68, 142-156.	1.5	35
25	Nitrate uptake dynamics of surface transient storage in stream channels and fluvial wetlands. Biogeochemistry, 2014, 120, 239-257.	3.5	30
26	Surface Geophysical Methods for Characterising Frozen Ground in Transitional Permafrost Landscapes. Permafrost and Periglacial Processes, 2017, 28, 52-65.	3.4	30
27	Paired air-water annual temperature patterns reveal hydrogeological controls on stream thermal regimes at watershed to continental scales. Journal of Hydrology, 2020, 587, 124929.	5.4	30
28	Do transient storage parameters directly scale in longer, combined stream reaches? Reach length dependence of transient storage interpretations. Journal of Hydrology, 2013, 483, 16-25.	5.4	28
29	Potential for Small Unmanned Aircraft Systems Applications for Identifying Groundwaterâ€Surface Water Exchange in a Meandering River Reach. Geophysical Research Letters, 2017, 44, 11,868.	4.0	28
30	Evaluation of Stream and Wetland Restoration Using UAS-Based Thermal Infrared Mapping. Water (Switzerland), 2019, 11, 1568.	2.7	28
31	An ecohydrological typology for thermal refuges in streams and rivers. Ecohydrology, 2021, 14, e2295.	2.4	28
32	Residence time distributions in surface transient storage zones in streams: Estimation via signal deconvolution. Water Resources Research, 2011, 47, .	4.2	26
33	Dualâ€domain massâ€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
34	Thermal infrared video details multiscale groundwater discharge to surface water through macropores and peat pipes. Hydrological Processes, 2016, 30, 2510-2511.	2.6	25
35	Pore network modeling of the electrical signature of solute transport in dualâ€domain media. Geophysical Research Letters, 2017, 44, 4908-4916.	4.0	25
36	Direct Observations of Hydrologic Exchange Occurring With Lessâ€Mobile Porosity and the Development of Anoxic Microzones in Sandy Lakebed Sediments. Water Resources Research, 2018, 54, 4714-4729.	4.2	25

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37	Return flows from beaver ponds enhance floodplain-to-river metals exchange in alluvial mountain catchments. Science of the Total Environment, 2019, 685, 357-369.	8.0	24
38	Experimental shifts of hydrologic residence time in a sandy urban stream sedimentâ€"water interface alter nitrate removal and nitrous oxide fluxes. Biogeochemistry, 2020, 149, 195-219.	3.5	22
39	Residence Time Controls on the Fate of Nitrogen in Flowâ€Through Lakebed Sediments. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 689-707.	3.0	20
40	Using Heat to Trace Vertical Water Fluxes in Sediment Experiencing Concurrent Tidal Pumping and Groundwater Discharge. Water Resources Research, 2021, 57, e2020WR027904.	4.2	20
41	Efficient hydrogeological characterization of remote stream corridors using drones. Hydrological Processes, 2019, 33, 316-319.	2.6	19
42	Hillslope groundwater discharges provide localized stream ecosystem buffers from regional perâ€•and polyfluoroalkyl substances contamination. Hydrological Processes, 2020, 34, 2281-2291.	2.6	19
43	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
44	Seasonal manganese transport in the hyporheic zone of a snowmelt-dominated river (East River,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	2.1	18
45	Characterizing the diverse hydrogeology underlying rivers and estuaries using new floating transient electromagnetic methodology. Science of the Total Environment, 2020, 740, 140074.	8.0	18
46	Formation Criteria for Hyporheic Anoxic Microzones: Assessing Interactions of Hydraulics, Nutrients, and Biofilms. Water Resources Research, 2020, 56, no.	4.2	17
47	Influence of groundwater on distribution of dwarf wedgemussels (<i>Alasmidonta) Tj ETQq1 1 0.784314 rgBT /Overlo and Earth System Sciences, 2016, 20, 4323-4339.	4.9	15
48	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
49	Seasonal Subsurface Thaw Dynamics of an Aufeis Feature Inferred From Geophysical Methods. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005345.	2.8	15
50	Geochemical and geophysical indicators of oil and gas wastewater can trace potential exposure pathways following releases to surface waters. Science of the Total Environment, 2021, 755, 142909.	8.0	15
51	Improved Vertical Streambed Flux Estimation Using Multiple Diurnal Temperature Methods in Series. Ground Water, 2017, 55, 73-80.	1.3	14
52	Rethinking the Use of Seabed Sediment Temperature Profiles to Trace Submarine Groundwater Flow. Water Resources Research, 2018, 54, 4595-4614.	4.2	14
53	Groundwater discharges as a source of phytoestrogens and other agriculturally derived contaminants to streams. Science of the Total Environment, 2021, 755, 142873.	8.0	14
54	Hydrogeochemical controls on brook trout spawning habitats in a coastal stream. Hydrology and Earth System Sciences, 2018, 22, 6383-6398.	4.9	13

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55	Quantitative guidance for efficient vertical flow measurements at the sedimentâ€“water interface using temperatureâ€“depth profiles. Hydrological Processes, 2020, 34, 649-661.	2.6	13
56	Improved Prediction of Managementâ€Relevant Groundwater Discharge Characteristics Throughout River Networks. Water Resources Research, 2020, 56, e2020WR028027.	4.2	13
57	<scp><i>Aufeis</i></scp> fields as novel groundwaterâ€dependent ecosystems in the arctic cryosphere. Limnology and Oceanography, 2021, 66, 607-624.	3.1	12
58	Multi-scale preferential flow processes in an urban streambed under variable hydraulic conditions. Journal of Hydrology, 2019, 573, 168-179.	5.4	11
59	Small atoll fresh groundwater lenses respond to a combination of natural climatic cycles and human modified geology. Science of the Total Environment, 2021, 756, 143838.	8.0	11
60	Simulation of lessâ€mobile porosity dynamics in contrasting sediment water interface porous media. Hydrological Processes, 2018, 32, 2030-2043.	2.6	10
61	Using Ensemble Data Assimilation to Estimate Transient Hydrologic Exchange Flow Under Highly Dynamic Flow Conditions. Water Resources Research, 2022, 58, .	4.2	10
62	Application of Recursive Estimation to Heat Tracing for Groundwater/Surfaceâ€Water Exchange. Water Resources Research, 2022, 58, .	4.2	10
63	Heed the data gap: Guidelines for using incomplete datasets in annual stream temperature analyses. Ecological Indicators, 2021, 122, 107229.	6.3	9
64	Wetlandâ€Scale Mapping of Preferential Fresh Groundwater Discharge to the Colorado River. Ground Water, 2019, 57, 737-748.	1.3	8
65	Exploring Local Riverbank Sediment Controls on the Occurrence of Preferential Groundwater Discharge Points. Water (Switzerland), 2022, 14, 11.	2.7	8
66	Streambed Flux Measurement Informed by Distributed Temperature Sensing Leads to a Significantly Different Characterization of Groundwater Discharge. Water (Switzerland), 2019, 11, 2312.	2.7	7
67	DTSGUI: A Python Program to Process and Visualize Fiberâ€Optic Distributed Temperature Sensing Data. Ground Water, 2020, 58, 799-804.	1.3	7
68	Groundâ€penetrating radar, electromagnetic induction, terrain, and vegetation observations coupled with machine learning to map permafrost distribution at Twelvemile Lake, Alaska. Permafrost and Periglacial Processes, 2021, 32, 407-426.	3.4	7
69	Hot Spots and Hot Moments in the Critical Zone: Identification of and Incorporation into Reactive Transport Models. , 2022, , 9-47.		7
70	<scp>GW</scp>/<scp>SWâ€MST</scp>: A Groundwater/<scp>Surfaceâ€Water</scp> Method Selection Tool. Ground Water, 2022, 60, 784-791.	1.3	6
71	The Dualâ€Domain Porosity Apparatus: Characterizing Dual Porosity at the Sediment/Water Interface. Ground Water, 2019, 57, 640-646.	1.3	5
72	Characterizing Physical Properties of Streambed Interface Sediments Using In Situ Complex Electrical Conductivity Measurements. Water Resources Research, 2021, 57, e2020WR027995.	4.2	5

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73	Investigation of Scale-Dependent Groundwater/Surface-water Exchange in Rivers by Gradient Self-Potential Logging: Numerical Modeling and Field Experiments. Journal of Environmental and Engineering Geophysics, 2021, 26, 83-98.	0.5	5
74	Evaluation of riverbed magnetic susceptibility for mapping biogeochemical hot spots in groundwaterâ€impacted rivers. Hydrological Processes, 2021, 35, e14184.	2.6	4
75	Nearâ€Surface Geophysics Perspectives on Integrated, Coordinated, Open, Networked (ICON) Science. Earth and Space Science, 2022, 9, .	2.6	3
76	GEOELECTRICAL MONITORING OF SOLUTE TRANSPORT IN DUAL-DOMAIN MEDIA: A REVIEW. , 2017, , .		1