Thibault Datry

List of Publications by Year
in descending order

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131 papers	7,927 citations	41344 49 h-index	60623 81 g-index
141 all docs	141 docs citations	141 times ranked	4789 citing authors

#	Article	IF	Citations
1	Taxon-specific sensitivities to flow intermittence reveal macroinvertebrates as potential bioindicators of intermittent rivers and streams. Science of the Total Environment, 2022, 804, 150022.	8.0	11
2	From metaâ€system theory to the sustainable management of rivers in the Anthropocene. Frontiers in Ecology and the Environment, 2022, 20, 49-57.	4.0	43
3	Ecological values of intermittent rivers for terrestrial vertebrate fauna. Science of the Total Environment, 2022, 806, 151308.	8.0	8
4	Disentangling responses to natural stressor and human impact gradients in river ecosystems across Europe. Journal of Applied Ecology, 2022, 59, 537-548.	4.0	11
5	Drought in intermittent river and ephemeral stream networks. Ecohydrology, 2022, 15, e2390.	2.4	12
6	A global agenda for advancing freshwater biodiversity research. Ecology Letters, 2022, 25, 255-263.	6.4	95
7	Organizational Principles of Hyporheic Exchange Flow and Biogeochemical Cycling in River Networks Across Scales. Water Resources Research, 2022, 58, .	4.2	26
8	The terrestrial and semiâ€aquatic invertebrates of intermittent rivers and ephemeral streams. Biological Reviews, 2022, 97, 1408-1425.	10.4	19
9	Reconceptualizing the hyporheic zone for nonperennial rivers and streams. Freshwater Science, 2022, 41, 167-182.	1.8	15
10	Passive sampling of environmental DNA in aquatic environments using 3Dâ€printed hydroxyapatite samplers. Molecular Ecology Resources, 2022, 22, 2158-2170.	4.8	11
11	Rethinking ecosystem service indicators for their application to intermittent rivers. Ecological Indicators, 2022, 137, 108693.	6.3	21
12	Assessing placement bias of the global river gauge network. Nature Sustainability, 2022, 5, 586-592.	23.7	51
13	Ecological drivers of macroinvertebrate metacommunity assembly in a subtropical river basin in the Yangtze River Delta, China. Science of the Total Environment, 2022, 837, 155687.	8.0	3
14	Aquatic organic matter decomposition in the terrestrial environments of an intermittent headwater stream. Aquatic Sciences, 2022, 84, .	1.5	5
15	Trends in flow intermittence for European rivers. Hydrological Sciences Journal, 2021, 66, 37-49.	2.6	41
16	Spatial Patterns and Drivers of Nonperennial Flow Regimes in the Contiguous United States. Geophysical Research Letters, 2021, 48, e2020GL090794.	4.0	54
17	Plant Litter Decomposition in Intermittent Rivers and Ephemeral Streams. , 2021, , 73-100.		5
18	Climatic aridity increases temporal nestedness of invertebrate communities in naturally drying rivers. Ecography, 2021, 44, 860-869.	4.5	16

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19	Intermittent rivers and ephemeral streams: Perspectives for critical zone science and research on socioâ€ecosystems. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1523.	6.5	31
20	Dispersal limitation by structures is more important than intermittent drying effects for metacommunity dynamics in a highly fragmented river network. Freshwater Science, 2021, 40, 302-315.	1.8	10
21	Global prevalence of non-perennial rivers and streams. Nature, 2021, 594, 391-397.	27.8	221
22	Pervasive changes in stream intermittency across the United States. Environmental Research Letters, 2021, 16, 084033.	5.2	47
23	Unlocking our understanding of intermittent rivers and ephemeral streams with genomic tools. Frontiers in Ecology and the Environment, 2021, 19, 574-583.	4.0	9
24	A global perspective on the functional responses of stream communities to flow intermittence. Ecography, 2021, 44, 1511-1523.	4.5	24
25	Towards an improved understanding of biogeochemical processes across surface-groundwater interactions in intermittent rivers and ephemeral streams. Earth-Science Reviews, 2021, 220, 103724.	9.1	24
26	Drying in newly intermittent rivers leads to higher variability of invertebrate communities. Freshwater Biology, 2021, 66, 730-744.	2.4	30
27	Intermittent Rivers and Ephemeral Streams. , 2021, , .		0
28	Efficiency of invertebrate-based bioassessment for evaluating the ecological status of streams along a gradient of flow intermittence. Ecological Indicators, 2021, 133, 108440.	6.3	4
29	Enhancing DNA metabarcoding performance and applicability with bait capture enrichment and DNA from conservative ethanol. Molecular Ecology Resources, 2020, 20, 79-96.	4.8	15
30	The method controls the story - Sampling method impacts on the detection of pore-water nitrogen concentrations in streambeds. Science of the Total Environment, 2020, 709, 136075.	8.0	2
31	Drying determines the temporal dynamics of stream invertebrate structural and functional beta diversity. Ecography, 2020, 43, 620-635.	4.5	60
32	Whatâ€™s in a Name? Patterns, Trends, and Suggestions for Defining Non-Perennial Rivers and Streams. Water (Switzerland), 2020, 12, 1980.	2.7	49
33	River ecosystem conceptual models and nonâ€perennial rivers: A critical review. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1473.	6.5	37
34	Fragmentation promotes the role of dispersal in determining 10 intermittent headwater stream metacommunities. Freshwater Biology, 2020, 65, 2169-2185.	2.4	26
35	DISPERSE, a trait database to assess the dispersal potential of European aquatic macroinvertebrates. Scientific Data, 2020, 7, 386.	5.3	73
36	Spatial factors control the structure of fish metacommunity in a Mediterranean intermittent river. Ecohydrology and Hydrobiology, 2020, 20, 346-356.	2.3	8

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37	Assessing metacommunity processes through signatures in spatiotemporal turnover of community composition. Ecology Letters, 2020, 23, 1330-1339.	6.4	47
38	Intermittent Rivers and Ephemeral Streams: A Unique Biome With Important Contributions to Biodiversity and Ecosystem Services. , 2020, , 419-429.		10
39	Accounting for flow intermittency in environmental flows design. Journal of Applied Ecology, 2020, 57, 742-753.	4.0	29
40	Global CO2 emissions from dry inland waters share common drivers across ecosystems. Nature Communications, 2020, 11, 2126.	12.8	73
41	A Metacommunity Approach to Improve Biological Assessments in Highly Dynamic Freshwater Ecosystems. BioScience, 2020, 70, 427-438.	4.9	64
42	Zero or not? Causes and consequences of zeroâ€flow stream gage readings. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1436.	6.5	63
43	Science Gets Up to Speed on Dry Rivers. Eos, 2020, 101, .	0.1	10
44	What's in a Name? Patterns, Trends, and Suggestions for Defining Non-Perennial Rivers and Streams. Water (Switzerland), 2020, 12, 1980.	2.7	4
45	River ecosystem conceptual models and non-perennial rivers: A critical review. Wiley Interdisciplinary Reviews: Water, 2020, 7, .	6.5	0
46	An unexpected source of invertebrate community recovery in intermittent streams from a humid continental climate. Freshwater Biology, 2019, 64, 1971-1983.	2.4	22
47	Exploring the role of hydraulic conductivity on the contribution of the hyporheic zone to inâ€stream nitrogen uptake. Ecohydrology, 2019, 12, e2139.	2.4	12
48	Recognition of stream drying based on benthic macroinvertebrates: A new tool in Central Europe. Ecological Indicators, 2019, 106, 105486.	6.3	18
49	Mediterranean intermittent rivers and ephemeral streams: Challenges in monitoring complexity. Ecohydrology, 2019, 12, e2149.	2.4	30
50	Sediment Respiration Pulses in Intermittent Rivers and Ephemeral Streams. Global Biogeochemical Cycles, 2019, 33, 1251-1263.	4.9	48
51	Parallels and contrasts between intermittently freezing and drying streams: From individual adaptations to biodiversity variation. Freshwater Biology, 2019, 64, 1679-1691.	2.4	20
52	Alpha and beta diversity of connected benthicâ€“subsurface invertebrate communities respond to drying in dynamic river ecosystems. Ecography, 2019, 42, 2060-2073.	4.5	17
53	The three Rs of river ecosystem resilience: Resources, recruitment, and refugia. River Research and Applications, 2019, 35, 107-120.	1.7	86
54	Structural and functional responses of invertebrate communities to climate change and flow regulation in alpine catchments. Global Change Biology, 2019, 25, 1612-1628.	9.5	65

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55	Direct and indirect effects of flood regime on macroinvertebrate assemblages in a floodplain riverscape. Ecohydrology, 2019, 12, e2095.	2.4	16
56	Citizen scientists document long-term streamflow declines in intermittent rivers of the desert southwest, USA. Freshwater Science, 2019, 38, 244-256.	1.8	49
57	Exploring Tracer Information and Model Framework Tradeâ€Offs to Improve Estimation of Stream Transient Storage Processes. Water Resources Research, 2019, 55, 3481-3501.	4.2	26
58	Testing the Mantel statistic with a spatiallyâ€constrained permutation procedure. Methods in Ecology and Evolution, 2019, 10, 532-540.	5.2	40
59	Simulating rewetting events in intermittent rivers and ephemeral streams: A global analysis of leached nutrients and organic matter. Global Change Biology, 2019, 25, 1591-1611.	9.5	71
60	A conceptual framework for understanding the biogeochemistry of dry riverbeds through the lens of soil science. Earth-Science Reviews, 2019, 188, 441-453.	9.1	54
61	A comparison of biotic groups as dry-phase indicators of ecological quality in intermittent rivers and ephemeral streams. Ecological Indicators, 2019, 97, 165-174.	6.3	35
62	Woody debris is related to reachâ€scale hotspots of lowland stream ecosystem respiration under baseflow conditions. Ecohydrology, 2018, 11, e1952.	2.4	31
63	Flow intermittence and ecosystem services in rivers of the Anthropocene. Journal of Applied Ecology, 2018, 55, 353-364.	4.0	113
64	Biomonitoring of intermittent rivers and ephemeral streams in Europe: Current practice and priorities to enhance ecological status assessments. Science of the Total Environment, 2018, 618, 1096-1113.	8.0	113
65	Mesocosm experiments reveal the direction of groundwaterâ€“surface water exchange alters the hyporheic refuge capacity under warming scenarios. Freshwater Biology, 2018, 63, 165-177.	2.4	10
66	Extrapolating regional probability of drying of headwater streams using discrete observations and gauging networks. Hydrology and Earth System Sciences, 2018, 22, 3033-3051.	4.9	29
67	Protecting U.S. temporary waterways. Science, 2018, 361, 856-857.	12.6	29
68	A global analysis of terrestrial plant litter dynamics in non-perennial waterways. Nature Geoscience, 2018, 11, 497-503.	12.9	108
69	Gammarus pulex (Crustacea: Amphipoda) avoids increasing water temperature and intraspecific competition through vertical migration into the hyporheic zone: a mesocosm experiment. Aquatic Sciences, 2017, 79, 45-55.	1.5	19
70	Drying as a primary hydrological determinant of biodiversity in river systems: a broadâ€scale analysis. Ecography, 2017, 40, 487-499.	4.5	109
71	Interpreting betaâ€diversity components over time to conserve metacommunities in highly dynamic ecosystems. Conservation Biology, 2017, 31, 1459-1468.	4.7	79
72	Integrating dispersal proxies in ecological and environmental research in the freshwater realm. Environmental Reviews, 2017, 25, 334-349.	4.5	88

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73	<scp>IRBAS</scp>: An online database to collate, analyze, and synthesize data on the biodiversity and ecology of intermittent rivers worldwide. Ecology and Evolution, 2017, 7, 815-823.	1.9	5
74	Contextâ€dependent resistance of freshwater invertebrate communities to drying. Ecology and Evolution, 2017, 7, 3201-3211.	1.9	17
75	Impacts of water level on metabolism and transient storage in vegetated lowland rivers: Insights from a mesocosm study. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 628-644.	3.0	22
76	Biodiversity in perennial and intermittent rivers: a metaâ€analysis. Oikos, 2017, 126, 1078-1089.	2.7	67
77	Relating hydraulic conductivity and hyporheic zone biogeochemical processing to conserve and restore river ecosystem services. Science of the Total Environment, 2017, 579, 1815-1821.	8.0	51
78	Flow Regimes in Intermittent Rivers and Ephemeral Streams. , 2017, , 51-78.		48
79	Hydrological Connectivity in Intermittent Rivers and Ephemeral Streams. , 2017, , 79-108.		42
80	The Biota of Intermittent Rivers and Ephemeral Streams: Aquatic Invertebrates. , 2017, , 217-243.		67
81	The Biota of Intermittent Rivers and Ephemeral Streams: Terrestrial AND Semiaquatic Invertebrates. , 2017, , 245-271.		8
82	Resistance, Resilience, and Community Recovery in Intermittent Rivers and Ephemeral Streams. , 2017, , 349-376.		66
83	Habitat Fragmentation and Metapopulation, Metacommunity, and Metaecosystem Dynamics in Intermittent Rivers and Ephemeral Streams. , 2017, , 377-403.		25
84	Genetic, Evolutionary, and Biogeographical Processes in Intermittent Rivers and Ephemeral Streams. , 2017, , 405-431.		10
85	Ecosystem Services, Values, and Societal Perceptions of Intermittent Rivers and Ephemeral Streams. , 2017, , 455-476.		24
86	Non-perennial Mediterranean rivers in Europe: Status, pressures, and challenges for research and management. Science of the Total Environment, 2017, 577, 1-18.	8.0	192
87	Challenges, developments and perspectives in intermittent river ecology. Freshwater Biology, 2016, 61, 1171-1180.	2.4	67
88	Is drift the primary process promoting the resilience of river invertebrate communities? A manipulative field experiment in an intermittent alluvial river. Freshwater Biology, 2016, 61, 1276-1292.	2.4	83
89	A landscape approach to advance intermittent river ecology. Freshwater Biology, 2016, 61, 1200-1213.	2.4	111
90	Metacommunity patterns across three Neotropical catchments with varying environmental harshness. Freshwater Biology, 2016, 61, 277-292.	2.4	58

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91	Ecological research and management of intermittent rivers: an historical review and future directions. Freshwater Biology, 2016, 61, 1181-1199.	2.4	190
92	Increased depth to the water table during river drying decreases the resilience of Gammarus pulex and alters ecosystem function. Ecohydrology, 2016, 9, 1177-1186.	2.4	33
93	Variation in reach-scale hydraulic conductivity of streambeds. Geomorphology, 2016, 259, 70-80.	2.6	56
94	Using multi-tracer inference to move beyond single-catchment ecohydrology. Earth-Science Reviews, 2016, 160, 19-42.	9.1	142
95	Stream solute tracer timescales changing with discharge and reach length confound process interpretation. Water Resources Research, 2016, 52, 3227-3245.	4.2	37
96	Invertebrate communities in gravel-bed, braided rivers are highly resilient to flow intermittence. Freshwater Science, 2016, 35, 164-177.	1.8	60
97	Towards understanding the organisation of metacommunities in highly dynamic ecological systems. Oikos, 2016, 125, 149-159.	2.7	174
98	Terrestrial and aquatic invertebrates in the riverbed of an intermittent river: parallels and contrasts in community organisation. Freshwater Biology, 2016, 61, 1308-1320.	2.4	51
99	Determinants of local and regional communities in intermittent and perennial headwaters of the Bolivian Amazon. Freshwater Biology, 2016, 61, 1335-1349.	2.4	54
100	Invertebrate assemblage responses and the dual roles of resistance and resilience to drying in intermittent rivers. Aquatic Sciences, 2016, 78, 291-301.	1.5	78
101	One for All, All for One: A Global River Research Network. Eos, 2016, 97, .	0.1	15
102	Drying responses of microbial litter decomposition and associated fungal and bacterial communities are not affected by emersion frequency. Freshwater Science, 2015, 34, 1233-1244.	1.8	39
103	Estimation of Sediment Hydraulic Conductivity in River Reaches and its Potential Use to Evaluate Streambed Clogging. River Research and Applications, 2015, 31, 880-891.	1.7	48
104	Drying of a temperate, intermittent river has little effect on adjacent riparian arthropod communities. Freshwater Biology, 2014, 59, 666-678.	2.4	26
105	Why Should We Care About Temporary Waterways?. Science, 2014, 343, 1080-1081.	12.6	270
106	Groundâ€dwelling arthropod communities across braided river landscape mosaics: a Mediterranean perspective. Freshwater Biology, 2014, 59, 1308-1322.	2.4	20
107	Intermittent Rivers: A Challenge for Freshwater Ecology. BioScience, 2014, 64, 229-235.	4.9	488
108	Broadâ€scale patterns of invertebrate richness and community composition in temporary rivers: effects of flow intermittence. Ecography, 2014, 37, 94-104.	4.5	174

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109	Benthic and hyporheic invertebrate assemblages along a gradient of increasing streambed colmation by fine sediment. Aquatic Sciences, 2013, 75, 493-507.	1.5	81
110	The macroinvertebrate seedbank promotes community persistence in temporary rivers across climate zones. Freshwater Biology, 2013, 58, 1202-1220.	2.4	98
111	A comparison of pitfall-trap and quadrat methods for sampling ground-dwelling invertebrates in dry riverbeds. Hydrobiologia, 2013, 717, 13-26.	2.0	29
112	Invertebrate distribution across nested geomorphic features in braided-river landscapes. Freshwater Science, 2013, 32, 1188-1204.	1.8	31
113	Regionalization of patterns of flow intermittence from gauging station records. Hydrology and Earth System Sciences, 2013, 17, 2685-2699.	4.9	99
114	Invertebrates and sestonic matter in an advancing wetted front travelling down a dry river bed (Albarine, France). Freshwater Science, 2012, 31, 1187-1201.	1.8	66
115	Benthic and hyporheic invertebrate assemblages along a flow intermittence gradient: effects of duration of dry events. Freshwater Biology, 2012, 57, 563-574.	2.4	153
116	Spatial and temporal aquaticâ€“terrestrial transitions in the temporary Albarine River, France: responses of invertebrates to experimental rewetting. Freshwater Biology, 2012, 57, 716-727.	2.4	42
117	Flow intermittence controls leaf litter breakdown in a French temporary alluvial river: the â€œdrying memoryâ€• Aquatic Sciences, 2011, 73, 471-483.	1.5	103
118	Natural variation in immersion and emersion affects breakdown and invertebrate colonization of leaf litter in a temporary river. Aquatic Sciences, 2011, 73, 537-550.	1.5	90
119	Recent perspectives on temporary river ecology. Aquatic Sciences, 2011, 73, 453-457.	1.5	77
120	Longitudinal river ecohydrology: flow variation down the lengths of alluvial rivers. Ecohydrology, 2011, 4, 532-548.	2.4	67
121	Comparison of Different Techniques to Assess Surface and Subsurface Streambed Colmation with Fine Sediments. International Review of Hydrobiology, 2010, 95, 520-540.	0.9	43
122	Emerging concepts in temporaryâ€•river ecology. Freshwater Biology, 2010, 55, 717-738.	2.4	552
123	Influence of streambed sediment clogging on microbial processes in the hyporheic zone. Freshwater Biology, 2010, 55, 1288-1302.	2.4	79
124	Ecology and management of the hyporheic zone: streamâ€“groundwater interactions of running waters and their floodplains. Journal of the North American Benthological Society, 2010, 29, 26-40.	3.1	307
125	Treating causes not symptoms: restoration of surface - groundwater interactions in rivers. Marine and Freshwater Research, 2009, 60, 976.	1.3	46
126	River flow controls ecological processes and invertebrate assemblages in subsurface flowpaths of an ephemeral river reach. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 1532-1544.	1.4	27

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127	Lateral and longitudinal patterns within the stygoscape of an alluvial river corridor. Fundamental and Applied Limnology, 2008, 171, 335-347.	0.7	22
128	Responses of hyporheic invertebrate assemblages to large-scale variation in flow permanence and surface?subsurface exchange. Freshwater Biology, 2007, 52, 1452-1462.	2.4	73
129	Invertebrate and microbial responses to inundation in an ephemeral river reach in New Zealand: effects of preceding dry periods. Aquatic Sciences, 2007, 69, 554-567.	1.5	76
130	Science and Management of Intermittent Rivers and Ephemeral Streams (SMIRES). Research Ideas and Outcomes, 0, 3, e21774.	1.0	33
131	Securing Biodiversity, Functional Integrity, and Ecosystem Services in Drying River Networks (DRYvER). Research Ideas and Outcomes, 0, 7, .	1.0	4