

Mark O Gessner

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8386050/publications.pdf>

Version: 2024-02-01

99
papers

21,994
citations

34105

52
h-index

34986

98
g-index

105
all docs

105
docs citations

105
times ranked

22167
citing authors

#	ARTICLE	IF	CITATIONS
1	A global agenda for advancing freshwater biodiversity research. <i>Ecology Letters</i> , 2022, 25, 255-263.	6.4	95
2	Pathways for cross-boundary effects of biodiversity on ecosystem functioning. <i>Trends in Ecology and Evolution</i> , 2022, 37, 454-467.	8.7	34
3	Land-use type temporarily affects active pond community structure but not gene expression patterns. <i>Molecular Ecology</i> , 2022, 31, 1716-1734.	3.9	5
4	Global Patterns and Controls of Nutrient Immobilization on Decomposing Cellulose in Riverine Ecosystems. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	4.9	12
5	From microbes to mammals: Pond biodiversity homogenization across different land-use types in an agricultural landscape. <i>Ecological Monographs</i> , 2022, 92, .	5.4	6
6	Dissolved organic matter signatures in urban surface waters: spatio-temporal patterns and drivers. <i>Biogeosciences</i> , 2022, 19, 2841-2853.	3.3	6
7	Latitude dictates plant diversity effects on instream decomposition. <i>Science Advances</i> , 2021, 7, .	10.3	27
8	Making waves. Bridging theory and practice towards multiple stressor management in freshwater ecosystems. <i>Water Research</i> , 2021, 196, 116981.	11.3	32
9	Exploring the Suitability of Ecosystem Metabolomes to Assess Imprints of Brownification and Nutrient Enrichment on Lakes. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG005903.	3.0	5
10	Impacts of detritivore diversity loss on instream decomposition are greatest in the tropics. <i>Nature Communications</i> , 2021, 12, 3700.	12.8	33
11	Importance of exposure route in determining nanosilver impacts on a stream detrital processing chain. <i>Environmental Pollution</i> , 2021, 290, 118088.	7.5	3
12	Design and implementation of an illumination system to mimic skyglow at ecosystem level in a large-scale lake enclosure facility. <i>Scientific Reports</i> , 2021, 11, 23478.	3.3	4
13	Plant phylogenetic history explains in-stream decomposition at a global scale. <i>Journal of Ecology</i> , 2020, 108, 17-35.	4.0	30
14	Changes in food characteristics reveal indirect effects of lake browning on zooplankton performance. <i>Limnology and Oceanography</i> , 2020, 65, 1028-1040.	3.1	12
15	Uptake and physiological effects of the neonicotinoid imidacloprid and its commercial formulation Confidor® in a widespread freshwater oligochaete. <i>Environmental Pollution</i> , 2020, 264, 114793.	7.5	13
16	Impacts of multiple stressors on freshwater biota across spatial scales and ecosystems. <i>Nature Ecology and Evolution</i> , 2020, 4, 1060-1068.	7.8	336
17	Nanosilver impacts on aquatic microbial decomposers and litter decomposition assessed as pollution-induced community tolerance (PICT). <i>Environmental Science: Nano</i> , 2020, 7, 2130-2139.	4.3	11
18	Methane emissions from contrasting urban freshwaters: Rates, drivers, and a whole-city footprint. <i>Global Change Biology</i> , 2019, 25, 4234-4243.	9.5	44

#	ARTICLE	IF	CITATIONS
19	Sediment Respiration Pulses in Intermittent Rivers and Ephemeral Streams. <i>Global Biogeochemical Cycles</i> , 2019, 33, 1251-1263.	4.9	48
20	Biodiversity of leaf litter fungi in streams along a latitudinal gradient. <i>Science of the Total Environment</i> , 2019, 661, 306-315.	8.0	53
21	Integrating Aquatic and Terrestrial Perspectives to Improve Insights Into Organic Matter Cycling at the Landscape Scale. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	22
22	Litter Quality Modulates Effects of Dissolved Nitrogen on Leaf Decomposition by Stream Microbial Communities. <i>Microbial Ecology</i> , 2019, 77, 959-966.	2.8	36
23	Simulating rewetting events in intermittent rivers and ephemeral streams: A global analysis of leached nutrients and organic matter. <i>Global Change Biology</i> , 2019, 25, 1591-1611.	9.5	71
24	Global patterns and drivers of ecosystem functioning in rivers and riparian zones. <i>Science Advances</i> , 2019, 5, eaav0486.	10.3	133
25	A global analysis of terrestrial plant litter dynamics in non-perennial waterways. <i>Nature Geoscience</i> , 2018, 11, 497-503.	12.9	108
26	Long-term exposure to silver nanoparticles affects periphyton community structure and function. <i>Environmental Science: Nano</i> , 2018, 5, 1397-1407.	4.3	16
27	The <i>Alliance for Freshwater Life</i> : A global call to unite efforts for freshwater biodiversity science and conservation. <i>Aquatic Conservation: Marine and Freshwater Ecosystems</i> , 2018, 28, 1015-1022.	2.0	190
28	Synthetic chemicals as agents of global change. <i>Frontiers in Ecology and the Environment</i> , 2017, 15, 84-90.	4.0	457
29	Chronic Exposure Effects of Silver Nanoparticles on Stream Microbial Decomposer Communities and Ecosystem Functions. <i>Environmental Science & Technology</i> , 2017, 51, 2447-2455.	10.0	61
30	River doctors: Learning from medicine to improve ecosystem management. <i>Science of the Total Environment</i> , 2017, 595, 294-302.	8.0	37
31	Importance of advective mass transfer and sediment surface area for streambed microbial communities. <i>Freshwater Biology</i> , 2017, 62, 133-145.	2.4	36
32	Global synthesis of the temperature sensitivity of leaf litter breakdown in streams and rivers. <i>Global Change Biology</i> , 2017, 23, 3064-3075.	9.5	103
33	Widespread Increases in Iron Concentration in European and North American Freshwaters. <i>Global Biogeochemical Cycles</i> , 2017, 31, 1488-1500.	4.9	79
34	Riparian plant litter quality increases with latitude. <i>Scientific Reports</i> , 2017, 7, 10562.	3.3	53
35	Nutrient stoichiometry of aquatic hyphomycetes: Interstrain variation and ergosterol conversion factors. <i>Fungal Ecology</i> , 2017, 29, 96-102.	1.6	11
36	Humic dissolved organic carbon drives oxidative stress and severe fitness impairments in <i>Daphnia</i> . <i>Aquatic Toxicology</i> , 2017, 182, 31-38.	4.0	52

#	ARTICLE	IF	CITATIONS
37	Thermocline deepening boosts ecosystem metabolism: evidence from a large-scale lake enclosure experiment simulating a summer storm. <i>Global Change Biology</i> , 2017, 23, 1448-1462.	9.5	55
38	Flow Cytometric Assessment of Bacterial Abundance in Soils, Sediments and Sludge. <i>Frontiers in Microbiology</i> , 2016, 7, 903.	3.5	84
39	Stoichiometric imbalances between detritus and detritivores are related to shifts in ecosystem functioning. <i>Oikos</i> , 2016, 125, 861-871.	2.7	54
40	Prevalence of indirect toxicity effects of aluminium flakes on a shredder-fungal-leaf decomposition system. <i>Freshwater Biology</i> , 2016, 61, 2013-2025.	2.4	8
41	Biotic and abiotic variables influencing plant litter breakdown in streams: a global study. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20152664.	2.6	86
42	Proteomic evidence of methanotrophy in methane-enriched hypolimnetic lake water. <i>Limnology and Oceanography</i> , 2016, 61, S91.	3.1	6
43	Fostering integration of freshwater ecology with ecotoxicology. <i>Freshwater Biology</i> , 2016, 61, 1991-2001.	2.4	84
44	Density constrains cascading consequences of warming and nitrogen from invertebrate growth to litter decomposition. <i>Ecology</i> , 2016, 97, 1635-1642.	3.2	13
45	Harmful effects of silver nanoparticles on a complex detrital model system. <i>Nanotoxicology</i> , 2016, 10, 728-735.	3.0	42
46	Evaluating the summer night sky brightness at a research field site on Lake Stechlin in northeastern Germany. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 181, 24-32.	2.3	33
47	Latitudinal gradient of nestedness and its potential drivers in stream detritivores. <i>Ecography</i> , 2015, 38, 949-955.	4.5	19
48	Silver Nanoparticle Effects on Stream Periphyton During Short-Term Exposures. <i>Environmental Science & Technology</i> , 2015, 49, 1165-1172.	10.0	71
49	No evidence for leaf-trait dissimilarity effects on litter decomposition, fungal decomposers, and nutrient dynamics. <i>Ecology</i> , 2015, 96, 550-561.	3.2	56
50	Silica decouples fungal growth and litter decomposition without changing responses to climate warming and N enrichment. <i>Ecology</i> , 2014, 95, 3181-3189.	3.2	42
51	Consequences of biodiversity loss for litter decomposition across biomes. <i>Nature</i> , 2014, 509, 218-221.	27.8	600
52	Litter decomposition in a temperate and a tropical stream: the effects of species mixing, litter quality and shredders. <i>Freshwater Biology</i> , 2014, 59, 438-449.	2.4	59
53	Trophic complexity enhances ecosystem functioning in an aquatic detritus-based model system. <i>Journal of Animal Ecology</i> , 2013, 82, 1042-1051.	2.8	65
54	Litter Supply as a Driver of Microbial Activity and Community Structure on Decomposing Leaves: a Test in Experimental Streams. <i>Applied and Environmental Microbiology</i> , 2013, 79, 4965-4973.	3.1	23

#	ARTICLE	IF	CITATIONS
55	Disconnect of microbial structure and function: enzyme activities and bacterial communities in nascent stream corridors. <i>ISME Journal</i> , 2012, 6, 680-691.	9.8	165
56	DECOTAB: a multipurpose standard substrate to assess effects of litter quality on microbial decomposition and invertebrate consumption. <i>Freshwater Science</i> , 2012, 31, 1156-1162.	1.8	39
57	Continental-Scale Effects of Nutrient Pollution on Stream Ecosystem Functioning. <i>Science</i> , 2012, 336, 1438-1440.	12.6	520
58	Stress as a modifier of biodiversity effects on ecosystem processes?. <i>Journal of Animal Ecology</i> , 2012, 81, 1143-1145.	2.8	5
59	Global patterns of stream detritivore distribution: implications for biodiversity loss in changing climates. <i>Global Ecology and Biogeography</i> , 2012, 21, 134-141.	5.8	114
60	Consumer trophic diversity as a fundamental mechanism linking predation and ecosystem functioning. <i>Journal of Animal Ecology</i> , 2012, 81, 1146-1153.	2.8	26
61	Effects of shallow and deep sediment disturbance on whole-stream metabolism in experimental sand-bed flumes. <i>Hydrobiologia</i> , 2012, 683, 297-310.	2.0	16
62	Variability of heterotrophic metabolism in small stream corridors of an early successional watershed. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	16
63	Stream Ecosystem Functioning in an Agricultural Landscape. <i>Advances in Ecological Research</i> , 2011, , 211-276.	2.7	78
64	A global experiment suggests climate warming will not accelerate litter decomposition in streams but might reduce carbon sequestration. <i>Ecology Letters</i> , 2011, 14, 289-294.	6.4	256
65	Litter diversity, fungal decomposers and litter decomposition under simulated stream intermittency. <i>Functional Ecology</i> , 2011, 25, 1269-1277.	3.6	72
66	Leaf-litter colonisation and breakdown in relation to stream typology: insights from Mediterranean low-order streams. <i>Freshwater Biology</i> , 2011, 56, 2594-2608.	2.4	23
67	Global distribution of a key trophic guild contrasts with common latitudinal diversity patterns. <i>Ecology</i> , 2011, 92, 1839-1848.	3.2	162
68	Experimentally Simulated Global Warming and Nitrogen Enrichment Effects on Microbial Litter Decomposers in a Marsh. <i>Applied and Environmental Microbiology</i> , 2011, 77, 803-809.	3.1	29
69	Invasion of <i>Solidago gigantea</i> in contrasting experimental plant communities: effects on soil microbes, nutrients and plant-soil feedbacks. <i>Journal of Ecology</i> , 2010, 98, 1379-1388.	4.0	65
70	Global threats to human water security and river biodiversity. <i>Nature</i> , 2010, 467, 555-561.	27.8	5,284
71	Leaf-litter breakdown in pasture and deciduous woodland streams: a comparison among three European regions. <i>Freshwater Biology</i> , 2010, 55, 1916-1929.	2.4	49
72	Methane emissions from a freshwater marsh in response to experimentally simulated global warming and nitrogen enrichment. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	28

#	ARTICLE	IF	CITATIONS
73	Diversity meets decomposition. <i>Trends in Ecology and Evolution</i> , 2010, 25, 372-380.	8.7	991
74	Placing biodiversity and ecosystem functioning in context: environmental perturbations and the effects of species richness in a stream field experiment. <i>Oecologia</i> , 2009, 160, 757-770.	2.0	64
75	Litter decomposition across multiple spatial scales in stream networks. <i>Oecologia</i> , 2009, 161, 343-351.	2.0	59
76	Resource quality and stoichiometric constraints on stream ecosystem functioning. <i>Freshwater Biology</i> , 2009, 54, 957-970.	2.4	185
77	N:C:P ratios influence litter decomposition and colonization by fungi and bacteria in microcosms. <i>Functional Ecology</i> , 2009, 23, 211-219.	3.6	426
78	Functional leaf traits and biodiversity effects on litter decomposition in a stream. <i>Ecology</i> , 2009, 90, 1641-1649.	3.2	135
79	Temporal dynamics of freshwater bacterio- and virioplankton along a littoral-pelagic gradient. <i>Freshwater Biology</i> , 2008, 53, 1114-1125.	2.4	16
80	Viriobenthos in freshwater and marine sediments: a review. <i>Freshwater Biology</i> , 2008, 53, 1186-1213.	2.4	125
81	Leaf decomposition and invertebrate colonization responses to manipulated litter quantity in streams. <i>Journal of the North American Benthological Society</i> , 2008, 27, 321-331.	3.1	63
82	Chemical properties, microbial respiration, and decomposition of coarse and fine particulate organic matter. <i>Journal of the North American Benthological Society</i> , 2008, 27, 664-673.	3.1	56
83	DECOMPOSITION OF DIVERSE LITTER MIXTURES IN STREAMS. <i>Ecology</i> , 2007, 88, 219-227.	3.2	183
84	Influence of conidial traits and leaf structure on attachment success of aquatic hyphomycetes on leaf litter. <i>Mycologia</i> , 2007, 99, 24-32.	1.9	62
85	Freshwater biodiversity: importance, threats, status and conservation challenges. <i>Biological Reviews</i> , 2006, 81, 163.	10.4	5,448
86	Magnitude and variability of process rates in fungal diversity-litter decomposition relationships. <i>Ecology Letters</i> , 2005, 8, 1129-1137.	6.4	235
87	DIEL MINERALIZATION PATTERNS OF STANDING-DEAD PLANT LITTER: IMPLICATIONS FOR CO ₂ FLUX FROM WETLANDS. <i>Ecology</i> , 2004, 85, 2504-2518.	3.2	81
88	Impacts of stream acidification on litter breakdown: implications for assessing ecosystem functioning. <i>Journal of Applied Ecology</i> , 2004, 41, 365-378.	4.0	222
89	Biodiversity effects on ecosystem functioning: emerging issues and their experimental test in aquatic environments. <i>Oikos</i> , 2004, 104, 423-436.	2.7	320
90	The Role of Biodiversity in the Functioning of Freshwater and Marine Benthic Ecosystems. <i>BioScience</i> , 2004, 54, 767.	4.9	296

#	ARTICLE	IF	CITATIONS
91	Incorporation of Radiolabeled Leucine into Protein to Estimate Bacterial Production in Plant Litter, Sediment, Epiphytic Biofilms, and Water Samples. <i>Microbial Ecology</i> , 2003, 45, 291-301.	2.8	76
92	CONTRIBUTION OF STREAM DETRIVORES, FUNGI, AND BACTERIA TO LEAF BREAKDOWN BASED ON BIOMASS ESTIMATES. <i>Ecology</i> , 2002, 83, 1026-1038.	3.2	577
93	A CASE FOR USING LITTER BREAKDOWN TO ASSESS FUNCTIONAL STREAM INTEGRITY. , 2002, 12, 498-510.		433
94	CONTRIBUTION OF STREAM DETRIVORES, FUNGI, AND BACTERIA TO LEAF BREAKDOWN BASED ON BIOMASS ESTIMATES. , 2002, 83, 1026.		2
95	Nutrient addition accelerates leaf breakdown in an alpine springbrook. <i>Oecologia</i> , 2000, 122, 258-263.	2.0	129
96	A Perspective on Leaf Litter Breakdown in Streams. <i>Oikos</i> , 1999, 85, 377.	2.7	501
97	Towards a budget of leaf litter decomposition in a first-order woodland stream. <i>Comptes Rendus De L'AcadÃ©mie Des Sciences SÃ©rie 3, Sciences De La Vie</i> , 1997, 320, 747-758.	0.8	65
98	Bacteria, Fungi and the Breakdown of Leaf Litter in a Large River. <i>Oikos</i> , 1995, 74, 93.	2.7	217
99	Differences in processing dynamics of fresh and dried leaf litter in a stream ecosystem. <i>Freshwater Biology</i> , 1991, 26, 387-398.	2.4	153