Jay T Lennon

List of Publications by Year
in descending order

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110 papers	13,435 citations	53794 45 h-index	24982 109 g-index
172 all docs	172 docs citations	172 times ranked	16266 citing authors

#	Article	IF	Citations
1	Microbial seed banks: the ecological and evolutionary implications of dormancy. Nature Reviews Microbiology, 2011, 9, 119-130.	28.6	1,365
2	Fundamentals of Microbial Community Resistance and Resilience. Frontiers in Microbiology, 2012, 3, 417.	3.5	1,131
3	Scaling laws predict global microbial diversity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5970-5975.	7.1	857
4	Dormancy contributes to the maintenance of microbial diversity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5881-5886.	7.1	732
5	Microbiomes in light of traits: A phylogenetic perspective. Science, 2015, 350, aac9323.	12.6	652
6	Rapid responses of soil microorganisms improve plant fitness in novel environments. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14058-14062.	7.1	607
7	Biodiversity may regulate the temporal variability of ecological systems. Ecology Letters, 2001, 4, 72-85.	6.4	411
8	Temporal variability in soil microbial communities across land-use types. ISME Journal, 2013, 7, 1641-1650.	9.8	408
9	Fungal Traits That Drive Ecosystem Dynamics on Land. Microbiology and Molecular Biology Reviews, 2015, 79, 243-262.	6.6	391
10	Ecosystem Consequences of Changing Inputs of Terrestrial Dissolved Organic Matter to Lakes: Current Knowledge and Future Challenges. Ecosystems, 2015, 18, 376-389.	3.4	382
11	Mapping the niche space of soil microorganisms using taxonomy and traits. Ecology, 2012, 93, 1867-1879.	3.2	373
12	Trait-based approaches for understanding microbial biodiversity and ecosystem functioning. Frontiers in Microbiology, 2014, 5, 251.	3.5	323
13	Evolutionary ecology of plantâ€“microbe interactions: soil microbial structure alters selection on plant traits. New Phytologist, 2011, 192, 215-224.	7.3	313
14	Knowing when to draw the line: designing more informative ecological experiments. Frontiers in Ecology and the Environment, 2005, 3, 145-152.	4.0	298
15	Relationships between protein-encoding gene abundance and corresponding process are commonly assumed yet rarely observed. ISME Journal, 2015, 9, 1693-1699.	9.8	276
16	Re-examination of the relationship between marine virus and microbial cell abundances. Nature Microbiology, 2016, 1, 15024.	13.3	264
17	A multitrophic model to quantify the effects of marine viruses on microbial food webs and ecosystem processes. ISME Journal, 2015, 9, 1352-1364.	9.8	223
18	The generation and maintenance of diversity in microbial communities. American Journal of Botany, 2011, 98, 439-448.	1.7	209

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19	Integrating microbial ecology into ecosystem models: challenges and priorities. Biogeochemistry, 2012, 109, 7-18.	3.5	206
20	Resuscitation of the rare biosphere contributes to pulses of ecosystem activity. Frontiers in Microbiology, 2015, 6, 24.	3.5	174
21	The underâ€ice microbiome of seasonally frozen lakes. Limnology and Oceanography, 2013, 58, 1998-2012.	3.1	173
22	Understanding how microbiomes influence the systems they inhabit. Nature Microbiology, 2018, 3, 977-982.	13.3	169
23	How, When, and Where Relic DNA Affects Microbial Diversity. MBio, 2018, 9, .	4.1	151
24	Linking microbial community structure and microbial processes: an empirical and conceptual overview. FEMS Microbiology Ecology, 2015, 91, fiv113.	2.7	143
25	Crop rotational diversity increases disease suppressive capacity of soil microbiomes. Ecosphere, 2018, 9, e02235.	2.2	134
26	Is there a cost of virus resistance in marine cyanobacteria?. ISME Journal, 2007, 1, 300-312.	9.8	127
27	Evolutionary determinants of genome-wide nucleotide composition. Nature Ecology and Evolution, 2018, 2, 237-240.	7.8	126
28	Sensitivity of soil respiration and microbial communities to altered snowfall. Soil Biology and Biochemistry, 2013, 57, 217-227.	8.8	121
29	Source and supply of terrestrial organic matter affects aquatic microbial metabolism. Aquatic Microbial Ecology, 2005, 39, 107-119.	1.8	119
30	Macroecology to Unite All Life, Large and Small. Trends in Ecology and Evolution, 2018, 33, 731-744.	8.7	118
31	A macroecological theory of microbial biodiversity. Nature Ecology and Evolution, 2017, 1, 107.	7.8	108
32	Resource heterogeneity structures aquatic bacterial communities. ISME Journal, 2019, 13, 2183-2195.	9.8	93
33	Evolution with a seed bank: The population genetic consequences of microbial dormancy. Evolutionary Applications, 2018, 11, 60-75.	3.1	86
34	Influence of Temperature on Exotic Daphnia lumholtzi and Implications for Invasion Success. Journal of Plankton Research, 2001, 23, 425-433.	1.8	78
35	Rapid evolution buffers ecosystem impacts of viruses in a microbial food web^{Â§}. Ecology Letters, 2008, 11, 1178-1188.	6.4	73
36	The relative importance of rapid evolution for plant-microbe interactions depends on ecological context. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20140028.	2.6	72

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37	Microbial mutualism dynamics governed by dose-dependent toxicity of cross-fed nutrients. ISME Journal, 2017, 11, 337-348.	9.8	72
38	Validation of Heavy-Water Stable Isotope Probing for the Characterization of Rapidly Responding Soil Bacteria. Applied and Environmental Microbiology, 2011, 77, 4589-4596.	3.1	70
39	Predator-induced phenotypic plasticity in the exotic cladoceran Daphnia lumholtzi. Freshwater Biology, 2003, 48, 1593-1602.	2.4	69
40	Ecological networks of dissolved organic matter and microorganisms under global change. Nature Communications, 2022, 13, .	12.8	66
41	Dormancy in Metacommunities. American Naturalist, 2019, 194, 135-151.	2.1	62
42	Diversity and Metabolism of Marine Bacteria Cultivated on Dissolved DNA. Applied and Environmental Microbiology, 2007, 73, 2799-2805.	3.1	59
43	Evidence for a temperature acclimation mechanism in bacteria: an empirical test of a membraneâ€mediated tradeâ€off. Functional Ecology, 2010, 24, 898-908.	3.6	58
44	Perennial grain crop roots and nitrogen management shape soil food webs and soil carbon dynamics. Soil Biology and Biochemistry, 2019, 137, 107573.	8.8	56
45	Experimental evidence that terrestrial carbon subsidies increase CO 2 flux from lake ecosystems. Oecologia, 2004, 138, 584-591.	2.0	55
46	Relative importance of CO₂ recycling and CH₄ pathways in lake food webs along a dissolved organic carbon gradient. Limnology and Oceanography, 2006, 51, 1602-1613.	3.1	55
47	Dormancy dampens the microbial distanceâ€“decay relationship. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190243.	4.0	49
48	Microbial ageing and longevity. Nature Reviews Microbiology, 2019, 17, 679-690.	28.6	48
49	Multi-scale ecological filters shape the crayfish microbiome. Symbiosis, 2017, 72, 159-170.	2.3	46
50	Principles of seed banks and the emergence of complexity from dormancy. Nature Communications, 2021, 12, 4807.	12.8	45
51	Microbial rescue effects: How microbiomes can save hosts from extinction. Functional Ecology, 2020, 34, 2055-2064.	3.6	41
52	Invasibility of plankton food webs along a trophic state gradient. Oikos, 2003, 103, 191-203.	2.7	39
53	MICROBIAL PRODUCTIVITY IN VARIABLE RESOURCE ENVIRONMENTS. Ecology, 2008, 89, 1001-1014.	3.2	39
54	Replication, lies and lesserâ€known truths regarding experimental design in environmental microbiology. Environmental Microbiology, 2011, 13, 1383-1386.	3.8	39

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55	Plants Mediate the Sensitivity of Soil Respiration to Rainfall Variability. Ecosystems, 2011, 14, 156-167.	3.4	39
56	Bacterial Dormancy Is More Prevalent in Freshwater than Hypersaline Lakes. Frontiers in Microbiology, 2016, 7, 853.	3.5	39
57	Microbial population dynamics and evolutionary outcomes under extreme energy limitation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	38
58	A Source of Terrestrial Organic Carbon to Investigate the Browning of Aquatic Ecosystems. PLoS ONE, 2013, 8, e75771.	2.5	36
59	Metabolic insight into bacterial community assembly across ecosystem boundaries. Ecology, 2020, 101, e02968.	3.2	34
60	A test of the subsidyâ€"stability hypothesis: the effects of terrestrial carbon in aquatic ecosystems. Ecology, 2015, 96, 1550-1560.	3.2	31
61	Phosphorus release from the drying and reflooding of diverse shallow sediments. Biogeochemistry, 2016, 130, 159-176.	3.5	31
62	Trees harness the power of microbes to survive climate change. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11009-11011.	7.1	28
63	Patterns and drivers of fungal community depth stratification in Sphagnum peat. FEMS Microbiology Ecology, 2017, 93, .	2.7	28
64	Denitrification by sulfur-oxidizing bacteria in a eutrophic lake. Aquatic Microbial Ecology, 2012, 66, 283-293.	1.8	28
65	A traitâ€based approach to bacterial biofilms in soil. Environmental Microbiology, 2016, 18, 2732-2742.	3.8	27
66	Microbial and Environmental Processes Shape the Link between Organic Matter Functional Traits and Composition. Environmental Science & Technology, 2022, 56, 10504-10516.	10.0	27
67	Species sorting along a subsidy gradient alters bacterial community stability. Ecology, 2016, 97, 2034-2043.	3.2	25
68	Nutrient stoichiometry shapes microbial coevolution. Ecology Letters, 2019, 22, 1009-1018.	6.4	25
69	More support for Earthâ€™s massive microbiome. Biology Direct, 2020, 15, 5.	4.6	25
70	Phosphorus resource heterogeneity in microbial food webs. Aquatic Microbial Ecology, 2014, 73, 259-272.	1.8	25
71	Microbial contributions to subterranean methane sinks. Geobiology, 2017, 15, 254-258.	2.4	24
72	The Underestimation of Global Microbial Diversity. MBio, 2016, 7, .	4.1	23

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73	Subterranean microbial oxidation of atmospheric methane in cavernous tropical karst. Chemical Geology, 2017, 466, 229-238.	3.3	23
74	Comparative ecological niche models predict the invasive spread of variable-leaf milfoil (Myriophyllum heterophyllum) and its potential impact on closely related native species. Biological Invasions, 2010, 12, 133-143.	2.4	22
75	Food web structure provides biotic resistance against plankton invasion attempts. Biological Invasions, 2007, 9, 257-267.	2.4	21
76	Genome Sequence of the Soil Bacterium Janthinobacterium sp. KBS0711. Genome Announcements, 2015, 3, .	0.8	21
77	Microscale Insight into Microbial Seed Banks. Frontiers in Microbiology, 2016, 7, 2040.	3.5	20
78	Are the abiotic and biotic characteristics of aquatic mesocosms representative of in situ conditions?. Journal of Limnology, 2014, 73, .	1.1	18
79	Microbial dormancy improves predictability of soil respiration at the seasonal time scale. Biogeochemistry, 2019, 144, 103-116.	3.5	16
80	Microbial community assembly in a multi-layer dendritic metacommunity. Oecologia, 2021, 195, 13-24.	2.0	16
81	Peatland microbial community responses to plant functional group and drought are depthâ€dependent. Molecular Ecology, 2021, 30, 5119-5136.	3.9	15
82	A socialâ€"ecological framework for â€œmicromanagingâ€•microbial services. Frontiers in Ecology and the Environment, 2014, 12, 524-531.	4.0	14
83	Traitâ€based approach to bacterial growth efficiency. Environmental Microbiology, 2020, 22, 3494-3504.	3.8	14
84	Evidence for limited microbial transfer of methane in a planktonic food web. Aquatic Microbial Ecology, 2009, 58, 45-53.	1.8	14
85	Nitrogen transformations in a through-flow wetland revealed using whole-ecosystem pulsed 15 N additions. Limnology and Oceanography, 2012, 57, 221-234.	3.1	13
86	Complete Genome Sequence of Cyanobacterial Siphovirus KBS2A. Genome Announcements, 2013, 1, .	0.8	12
87	Microbial Life Deep Underfoot. MBio, 2020, 11, .	4.1	12
88	Stabilising role of seed banks and the maintenance of bacterial diversity. Ecology Letters, 2021, 24, 2328-2338.	6.4	12
89	A DNA Fingerprinting Approach for Distinguishing Native and Non-native Milfoils. Lake and Reservoir Management, 2006, 22, 1-6.	1.3	11
90	Reply to Willis: Powerful predictions of biodiversity from ecological models and scaling laws. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5097-E5097.	7.1	9

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91	Macroecology for microbiology. Environmental Microbiology Reports, 2017, 9, 38-40.	2.4	9
92	Isotopic evidence for the migration of thermogenic methane into a sulfidic cave, Cueva de Villa Luz, Tabasco, Mexico. Journal of Cave and Karst Studies, 2017, 79, 24-34.	0.6	8
93	Is Hybridization Responsible for Invasive Growth of Non-indigenous Water-milfoils?. Biological Invasions, 2006, 8, 1061-1066.	2.4	7
94	Whole-Genome Sequence of the Soil Bacterium <i>Micrococcus</i> sp. KBS0714. Genome Announcements, 2017, 5, .	0.8	7
95	A Residence Time Theory for Biodiversity. American Naturalist, 2019, 194, 59-72.	2.1	7
96	Differential effects of press vs. pulse seawater intrusion on microbial communities of a tidal freshwater marsh. Limnology and Oceanography Letters, 2023, 8, 154-161.	3.9	7
97	Resuscitation of the microbial seed bank alters plantâ€soil interactions. Molecular Ecology, 2021, 30, 2905-2914.	3.9	6
98	Low costs of adaptation to dietary restriction. Biology Letters, 2020, 16, 20200008.	2.3	5
99	Characterization and microbial mitigation of fugitive methane emissions from oil and gas wells: Example from Indiana, USA. Applied Geochemistry, 2020, 118, 104619.	3.0	5
100	Seed banks alter the molecular evolutionary dynamics of<i>Bacillus subtilis</i>. Genetics, 2022, 221, .	2.9	5
101	Evolutionary Ecology of Microorganisms: From the Tamed to the Wild. , 0, , 4.1.2-1-4.1.2-12.		4
102	Radiolysis via radioactivity is not responsible for rapid methane oxidation in subterranean air. PLoS ONE, 2018, 13, e0206506.	2.5	4
103	Molecular Evolutionary Dynamics of Energy Limited Microorganisms. Molecular Biology and Evolution, 2021, 38, 4532-4545.	8.9	3
104	Predicting Parallelism and Quantifying Divergence in Microbial Evolution Experiments. MSphere, 2022, 7, e0067221.	2.9	3
105	Specialization Versus Diversification: A Trade-Off for Young Scientists?. Eos, 2007, 88, 343.	0.1	2
106	Scaling relationships among drivers of aquatic respiration in temperate lakes: from the smallest to the largest freshwater ecosystems. Inland Waters, 2016, 6, 1-10.	2.2	2
107	Correction to â€˜The relative importance of rapid evolution for plant-microbe interactions depends on ecological contextâ€™. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20141615.	2.6	1
108	Knowing When to Draw the Line: Designing More Informative Ecological Experiments. Frontiers in Ecology and the Environment, 2005, 3, 145.	4.0	1

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109	Microbial trait-based approaches for agroecosystems. Advances in Agronomy, 2022, , 259-299.	5.2	1
110	RAYMOND L. LINDEMAN AWARD TO STUART JONES. Limnology and Oceanography Bulletin, 2012, 21, 61-61.	0.4	0