Ulrich G Mueller

List of Publications by Year
in descending order

67 papers	5,133 citations	87888 38 h-index	98798 67 g-index
69 all docs	69 docs citations	69 times ranked	4106 citing authors

#	Article	IF	Citations
1	The Evolution of Cooperation. Quarterly Review of Biology, 2004, 79, 135-160.	0.1	885
2	The Evolution of Agriculture in Insects. Annual Review of Ecology, Evolution, and Systematics, 2005, 36, 563-595.	8.3	490
3	Ancient Tripartite Coevolution in the Attine Ant-Microbe Symbiosis. Science, 2003, 299, 386-388.	12.6	321
4	The Origin of the Attine Ant-Fungus Mutualism. Quarterly Review of Biology, 2001, 76, 169-197.	0.1	289
5	Generalized antifungal activity and 454-screening ofPseudonocardiaandAmycolatopsisbacteria in nests of fungus-growing ants. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17805-17810.	7.1	199
6	Fungus-farming insects: Multiple origins and diverse evolutionary histories. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15247-15249.	7.1	171
7	Ant versus Fungus versus Mutualism: Antâ€Cultivar Conflict and the Deconstruction of the Attine Antâ€Fungus Symbiosis. American Naturalist, 2002, 160, S67-S98.	2.1	149
8	Cryptic sex and many-to-one coevolution in the fungus-growing ant symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10702-10706.	7.1	137
9	Flowers and Wild Megachilid Bees Share Microbes. Microbial Ecology, 2017, 73, 188-200.	2.8	128
10	COEVOLUTION BETWEEN ATTINE ANTS AND ACTINOMYCETE BACTERIA: A REEVALUATION. Evolution; International Journal of Organic Evolution, 2008, 62, 2894-2912.	2.3	118
11	Evolution of cold-tolerant fungal symbionts permits winter fungiculture by leafcutter ants at the northern frontier of a tropical antâ€“fungus symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4053-4056.	7.1	85
12	Ecology of microfungal communities in gardens of fungus-growing ants (Hymenoptera: Formicidae): a year-long survey of three species of attine ants in Central Texas. FEMS Microbiology Ecology, 2011, 78, 244-255.	2.7	81
13	Paleodistributions and Comparative Molecular Phylogeography of Leafcutter Ants (Atta spp.) Provide New Insight into the Origins of Amazonian Diversity. PLoS ONE, 2008, 3, e2738.	2.5	77
14	Comparative Dating of Attine Ant and Lepiotaceous Cultivar Phylogenies Reveals Coevolutionary Synchrony and Discord. American Naturalist, 2010, 175, E126-E133.	2.1	75
15	Antagonistic interactions between garden yeasts and microfungal garden pathogens of leaf-cutting ants. Antonie Van Leeuwenhoek, 2009, 96, 331-342.	1.7	73
16	Phylogenetic patterns of antâ€“fungus associations indicate that farming strategies, not only a superior fungal cultivar, explain the ecological success of leafcutter ants. Molecular Ecology, 2018, 27, 2414-2434.	3.9	68
17	GEOGRAPHIC VARIATION OF GENETIC AND BEHAVIORAL TRAITS IN NORTHERN AND SOUTHERN TÃšNGARA FROGS. Evolution; International Journal of Organic Evolution, 2006, 60, 1669-1679.	2.3	65
18	EVOLUTIONARY TRANSITIONS IN ENZYME ACTIVITY OF ANT FUNGUS GARDENS. Evolution; International Journal of Organic Evolution, 2010, 64, 2055-69.	2.3	63

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19	Microbiomes of ant castes implicate new microbial roles in the fungus-growing ant Trachymyrmex septentrionalis. Scientific Reports, 2011, 1, 204.	3.3	63
20	EVOLUTION OF ANT-CULTIVAR SPECIALIZATION AND CULTIVAR SWITCHING IN APTEROSTIGMA FUNGUS-GROWING ANTS. Evolution; International Journal of Organic Evolution, 2004, 58, 2252-2265.	2.3	62
21	Phylogeography of postâ€Pleistocene population expansion in a fungusâ€gardening ant and its microbial mutualists. Molecular Ecology, 2008, 17, 4480-4488.	3.9	62
22	Symbiont recruitment versus ant-symbiont co-evolution in the attine antâ€“microbe symbiosis. Current Opinion in Microbiology, 2012, 15, 269-277.	5.1	60
23	Monoculture of Leafcutter Ant Gardens. PLoS ONE, 2010, 5, e12668.	2.5	60
24	Free-living fungal symbionts (Lepiotaceae) of fungus-growing ants (Attini: Formicidae). Mycologia, 2009, 101, 206-210.	1.9	59
25	Symbiont fidelity and the origin of species in fungus-growing ants. Nature Communications, 2012, 3, 840.	12.8	57
26	Complex host-pathogen coevolution in the Apterostigma fungus-growing ant-microbe symbiosis. BMC Evolutionary Biology, 2006, 6, 88.	3.2	54
27	Phylogeny of leafcutter ants in the genus Atta Fabricius (Formicidae: Attini) based on mitochondrial and nuclear DNA sequences. Molecular Phylogenetics and Evolution, 2009, 51, 427-437.	2.7	51
28	Cryptic sexual populations account for genetic diversity and ecological success in a widely distributed, asexual fungus-growing ant. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12366-12371.	7.1	51
29	Blind trust in unblinded observation in Ecology, Evolution, and Behavior. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	50
30	Bacterial microbiomes from vertically transmitted fungal inocula of the leafâ€cutting ant Atta texana. Environmental Microbiology Reports, 2016, 8, 630-640.	2.4	50
31	The molecular phylogenetics of Trachymyrmex Forel ants and their fungal cultivars provide insights into the origin and coevolutionary history of â€˜higherâ€attineâ€™ ant agriculture. Systematic Entomology, 2019, 44, 939-956.	3.9	50
32	Biogeography of mutualistic fungi cultivated by leafcutter ants. Molecular Ecology, 2017, 26, 6921-6937.	3.9	49
33	Specialization and group size: brain and behavioural correlates of colony size in ants lacking morphological castes. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142502.	2.6	46
34	The Most Relictual Fungus-Farming Ant Species Cultivates the Most Recently Evolved and Highly Domesticated Fungal Symbiont Species. American Naturalist, 2015, 185, 693-703.	2.1	45
35	No sex in fungus-farming ants or their crops. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 2611-2616.	2.6	44
36	Bacterial community composition and diversity in an ancestral ant fungus symbiosis. FEMS Microbiology Ecology, 2015, 91, fiv073.	2.7	44

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37	Antifungal Diketopiperazines from Symbiotic Fungus of Fungus-Growing Ant Cyphomyrmex minutus. Journal of Chemical Ecology, 1999, 25, 935-941.	1.8	43
38	Agro-predation: usurpation of attine fungus gardens by Megalomyrmex ants. Die Naturwissenschaften, 2000, 87, 549-554.	1.6	42
39	A breakthrough innovation in animal evolution. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5287-5288.	7.1	40
40	Frontier mutualism: coevolutionary patterns at the northern range limit of the leaf-cutter antâ€“fungus symbiosis. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3050-3059.	2.6	40
41	Spatial Structure of the Mormon Cricket Gut Microbiome and its Predicted Contribution to Nutrition and Immune Function. Frontiers in Microbiology, 2017, 8, 801.	3.5	37
42	Artificial Selection on Microbiomes To Breed Microbiomes That Confer Salt Tolerance to Plants. MSystems, 2021, 6, e0112521.	3.8	36
43	Placement of attine ant-associated Pseudonocardia in a global Pseudonocardia phylogeny (Pseudonocardiaceae, Actinomycetales): a test of two symbiont-association models. Antonie Van Leeuwenhoek, 2010, 98, 195-212.	1.7	34
44	Cooperation, conflict, and coevolution in the attine ant-fungus symbiosis. Behavioral Ecology, 2006, 17, 291-296.	2.2	26
45	Metabolism and the Rise of Fungus Cultivation by Ants. American Naturalist, 2014, 184, 364-373.	2.1	26
46	Microbiome breeding: conceptual and practical issues. Trends in Microbiology, 2022, 30, 997-1011.	7.7	24
47	Sexual transmission of beneficial microbes. Trends in Ecology and Evolution, 2015, 30, 438-440.	8.7	23
48	Shared Escovopsis parasites between leaf-cutting and non-leaf-cutting ants in the higher attine fungus-growing ant symbiosis. Royal Society Open Science, 2015, 2, 150257.	2.4	23
49	Gone to Texas: phylogeography of twoTrachymyrmex(Hymenoptera: Formicidae) species along the southeastern coastal plain of North America. Biological Journal of the Linnean Society, 2015, 114, 689-698.	1.6	21
50	Genetic relationships between native and introduced populations of the little fire ant Wasmannia auropunctata. Diversity and Distributions, 2007, 13, 573-579.	4.1	20
51	Fitness consequences of nest infiltration by the mutualistâ€exploiter Megalomyrmex adamsae. Ecological Entomology, 2012, 37, 453-462.	2.2	19
52	Sperm length evolution in the fungus-growing ants. Behavioral Ecology, 2009, 20, 38-45.	2.2	18
53	Nesting Biology and Fungiculture of the Fungus-Growing Ant,Mycetagroicus cerradensis: New Light on the Origin of Higher Attine Agriculture. Journal of Insect Science, 2011, 11, 1-14.	1.5	18
54	Landscape genomics of an obligate mutualism: Concordant and discordant population structures between the leafcutter ant Atta texana and its two main fungal symbiont types. Molecular Ecology, 2019, 28, 2831-2845.	3.9	18

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55	Polymorphic microsatellite markers for the symbiotic fungi cultivated by leaf cutter ants (Attini,) Tj ETQq1 1 0.784314 rgBT /Overlock	4.8	16
56	Ant-fungal species combinations engineer physiological activity of fungus gardens. Journal of Experimental Biology, 2014, 217, 2540-7.	1.7	16
57	Assessing the role of Î²-ocimene in regulating foraging behavior of the honey bee, Apis mellifera. Apidologie, 2016, 47, 135-144.	2.0	16
58	No evidence for female mate choice based on genetic similarity in the tÃºngara frog Physalaemus pustulosus. Behavioral Ecology and Sociobiology, 2006, 59, 796-804.	1.4	15
59	Construction of chimaeric gardens through fungal intercropping: a symbiont choice experiment in the leafcutter ant Atta texana (Attini, Formicidae). Behavioral Ecology and Sociobiology, 2010, 64, 1125-1133.	1.4	15
60	Fungus-gardening ants prefer native fungal species: do ants control their crops?. Behavioral Ecology, 2012, 23, 1250-1256.	2.2	15
61	Potential Distribution of Six North American Higher-Attine Fungus-Farming Ant (Hymenoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock	1.5	14
62	Sensory ecology of the frog-eating bat, Trachops cirrhosus, from DNA metabarcoding and behavior. Behavioral Ecology, 2020, 31, 1420-1428.	2.2	14
63	High diversity and multiple invasions to North America by fungi grown by the northern-most Trachymyrmex and Mycetomoellerius ant species. Fungal Ecology, 2020, 44, 100878.	1.6	11
64	Effects of substrate, ant and fungal species on plant fiber degradation in a fungus-gardening ant symbiosis. Journal of Insect Physiology, 2017, 98, 301-308.	2.0	9
65	Partitioning the effects of mating and nuptial feeding on the microbiome in giftâ€giving insects. Environmental Microbiology Reports, 2017, 9, 104-112.	2.4	9
66	Intraspecific variation and emendation of Hannaella kunmingensis. Mycological Progress, 2013, 12, 157-165.	1.4	6
67	Nuclear populations of the multinucleate fungus of leafcutter ants can be dekaryotized and recombined to manipulate growth of nutritive hyphal nodules harvested by the ants. Mycologia, 2017, 109, 1-15.	1.9	6