

# Martin Kaltenpoth

## List of Publications by Year in descending order

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Version: 2024-02-01

107  
papers

6,605  
citations

66336

42  
h-index

74160

75  
g-index

115  
all docs

115  
docs citations

115  
times ranked

5223  
citing authors

#	ARTICLE	IF	CITATIONS
1	Beetleâ€“Bacterial Symbioses: Endless Forms Most Functional. Annual Review of Entomology, 2022, 67, 201-219.	11.8	46
2	Nutritional symbionts enhance structural defence against predation and fungal infection in a grain pest beetle. Journal of Experimental Biology, 2022, 225, .	1.7	15
3	Comparative Morphology of the Symbiont Cultivation Glands in the Antennae of Female Digger Wasps of the Genus Philanthus (Hymenoptera: Crabronidae). Frontiers in Physiology, 2022, 13, 815494.	2.8	4
4	Abundance and Localization of Symbiotic Bacterial Communities in the Fly Parasitoid Spalangia cameroni. Applied and Environmental Microbiology, 2022, , e0254921.	3.1	2
5	Incipient genome erosion and metabolic streamlining for antibiotic production in a defensive symbiont. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
6	Biosynthesis of Sinapigladioside, an Antifungal Isothiocyanate from <i>Burkholderia</i> Symbionts. ChemBioChem, 2021, 22, 1920-1924.	2.6	17
7	Inhibition of a nutritional endosymbiont by glyphosate abolishes mutualistic benefit on cuticle synthesis in <i>Oryzaephilus surinamensis</i> . Communications Biology, 2021, 4, 554.	4.4	21
8	Transposon-insertion Sequencing as a Tool to Elucidate Bacterial Colonization Factors in a <i>Burkholderia gladioli</i> Symbiont of <i>Lagria villosa</i> Beetles. Journal of Visualized Experiments, 2021, , .	0.3	1
9	Transmission of Bacterial Symbionts With and Without Genome Erosion Between a Beetle Host and the Plant Environment. Frontiers in Microbiology, 2021, 12, 715601.	3.5	10
10	Versatile and Dynamic Symbioses Between Insects and <i>Burkholderia</i> Bacteria. Annual Review of Entomology, 2020, 65, 145-170.	11.8	56
11	Minimal fermentative metabolism fuels extracellular symbiont in a leaf beetle. ISME Journal, 2020, 14, 866-870.	9.8	19
12	De novo biosynthesis of simple aromatic compounds by an arthropod ( <i>Archegozetes</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (	2.6	4
13	An endosymbiontâ€™s journey through metamorphosis of its insect host. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20994-20996.	7.1	5
14	Bacterial symbionts support larval sap feeding and adult folivory in (semi-)aquatic reed beetles. Nature Communications, 2020, 11, 2964.	12.8	42
15	Honey Bee Suppresses the Parasitic Mite Vitellogenin by Antimicrobial Peptide. Frontiers in Microbiology, 2020, 11, 1037.	3.5	12
16	Insectâ€“Associated Bacteria Assemble the Antifungal Butenolide Gladiofungin by Nonâ€“Canonical Polyketide Chain Termination. Angewandte Chemie, 2020, 132, 23322-23326.	2.0	4
17	Effects, interactions, and localization of Rickettsia and Wolbachia in the house fly parasitoid, Spalangia endius. Microbial Ecology, 2020, 80, 718-728.	2.8	13
18	Insectâ€“Associated Bacteria Assemble the Antifungal Butenolide Gladiofungin by Nonâ€“Canonical Polyketide Chain Termination. Angewandte Chemie - International Edition, 2020, 59, 23122-23126.	13.8	30

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19	Microbial symbionts expanding or constraining abiotic niche space in insects. <i>Current Opinion in Insect Science</i> , 2020, 39, 14-20.	4.4	77
20	Horizontal Gene Transfer to a Defensive Symbiont with a Reduced Genome in a Multipartite Beetle Microbiome. <i>MBio</i> , 2020, 11, .	4.1	52
21	Angiosperm to Gymnosperm host-plant switch entails shifts in microbiota of the <i>Welwitschia</i> bug, <i>Probergrothius angolensis</i> (Distant, 1902). <i>Molecular Ecology</i> , 2019, 28, 5172-5187.	3.9	20
22	Symbiont-Driven Male Mating Success in the Neotropical <i>Drosophila paulistorum</i> Superspecies. <i>Behavior Genetics</i> , 2019, 49, 83-98.	2.1	31
23	Quantitative PCR primer design affects quantification of dsRNA-mediated gene knockdown. <i>Ecology and Evolution</i> , 2019, 9, 8187-8192.	1.9	8
24	Selective advantages favour high genomic AT-contents in intracellular elements. <i>PLoS Genetics</i> , 2019, 15, e1007778.	3.5	45
25	Make EU trade with Brazil sustainable. <i>Science</i> , 2019, 364, 341-341.	12.6	49
26	Established Cotton Stainer Gut Bacterial Mutualists Evade Regulation by Host Antimicrobial Peptides. <i>Applied and Environmental Microbiology</i> , 2019, 85, .	3.1	11
27	Abdominal microbial communities in ants depend on colony membership rather than caste and are linked to colony productivity. <i>Ecology and Evolution</i> , 2019, 9, 13450-13467.	1.9	21
28	Nitric oxide radicals are emitted by wasp eggs to kill mold fungi. <i>ELife</i> , 2019, 8, .	6.0	19
29	Convergent Evolution in Intracellular Elements: Plasmids as Model Endosymbionts. <i>Trends in Microbiology</i> , 2018, 26, 755-768.	7.7	15
30	Evolutionary stability of antibiotic protection in a defensive symbiosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E2020-E2029.	7.1	76
31	Bacterial communities associated with the ectoparasitic mites <i>Varroa destructor</i> and <i>Tropilaelaps mercedesae</i> of the honey bee ( <i>Apis mellifera</i> ). <i>FEMS Microbiology Ecology</i> , 2018, 94, .	2.7	13
32	Influence of microbial symbionts on insect pheromones. <i>Natural Product Reports</i> , 2018, 35, 386-397.	10.3	72
33	Burying beetles regulate the microbiome of carcasses and use it to transmit a core microbiota to their offspring. <i>Molecular Ecology</i> , 2018, 27, 1980-1991.	3.9	71
34	Ancient symbiosis confers desiccation resistance to stored grain pest beetles. <i>Molecular Ecology</i> , 2018, 27, 2095-2108.	3.9	67
35	Effect of antibiotic treatment and gamma-irradiation on cuticular hydrocarbon profiles and mate choice in tsetse flies ( <i>Glossina m. morsitans</i> ). <i>BMC Microbiology</i> , 2018, 18, 145.	3.3	17
36	Microbiome-assisted carrion preservation aids larval development in a burying beetle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 11274-11279.	7.1	91

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37	Unexpected Bacterial Origin of the Antibiotic Icosalide: Two-Tailed Depsipeptide Assembly in Multifarious <i>Burkholderia</i> Symbionts. <i>ACS Chemical Biology</i> , 2018, 13, 2414-2420.	3.4	58
38	Transmission of mutualistic bacteria in social and gregarious insects. <i>Current Opinion in Insect Science</i> , 2018, 28, 50-58.	4.4	61
39	The cotton stainer's gut microbiota suppresses infection of a cotransmitted trypanosomatid parasite. <i>Molecular Ecology</i> , 2018, 27, 3408-3419.	3.9	21
40	An antifungal polyketide associated with horizontally acquired genes supports symbiont-mediated defense in <i>Lagria villosa</i> beetles. <i>Nature Communications</i> , 2018, 9, 2478.	12.8	86
41	Bacterial Symbionts in Lepidoptera: Their Diversity, Transmission, and Impact on the Host. <i>Frontiers in Microbiology</i> , 2018, 9, 556.	3.5	243
42	Antibiotic-producing symbionts dynamically transition between plant pathogenicity and insect-defensive mutualism. <i>Nature Communications</i> , 2017, 8, 15172.	12.8	152
43	The digestive and defensive basis of carcass utilization by the burying beetle and its microbiota. <i>Nature Communications</i> , 2017, 8, 15186.	12.8	112
44	Gut microbiota of the pine weevil degrades conifer diterpenes and increases insect fitness. <i>Molecular Ecology</i> , 2017, 26, 4099-4110.	3.9	143
45	Symbiont Acquisition and Replacement as a Source of Ecological Innovation. <i>Trends in Microbiology</i> , 2017, 25, 375-390.	7.7	244
46	Symbiont dynamics and strain diversity in the defensive mutualism between <i>Lagria</i> beetles and <i>Burkholderia</i> . <i>Environmental Microbiology</i> , 2017, 19, 3674-3688.	3.8	42
47	Drastic Genome Reduction in an Herbivore's Pectinolytic Symbiont. <i>Cell</i> , 2017, 171, 1520-1531.e13.	28.9	148
48	Sex ratio of mirid populations shifts in response to hostplant coinfestation or altered cytokinin signaling. <i>Journal of Integrative Plant Biology</i> , 2017, 59, 44-59.	8.5	14
49	Bacterial Community and PHB-Accumulating Bacteria Associated with the Wall and Specialized Niches of the Hindgut of the Forest Cockchafer ( <i>Melolontha hippocastani</i> ). <i>Frontiers in Microbiology</i> , 2017, 8, 291.	3.5	24
50	Infection of Soybean Plants with the Insect Bacterial Symbiont <i>Burkholderia gladioli</i> and Evaluation of Plant Fitness. <i>Bio-protocol</i> , 2017, 7, e2663.	0.4	0
51	Bacteriome-Localized Intracellular Symbionts in Pollen-Feeding Beetles of the Genus <i>Dasytes</i> (Coleoptera, Dasytidae). <i>Frontiers in Microbiology</i> , 2016, 7, 1486.	3.5	26
52	Microbial Communities of Lycaenid Butterflies Do Not Correlate with Larval Diet. <i>Frontiers in Microbiology</i> , 2016, 7, 1920.	3.5	75
53	The gut microbiota of the pine weevil is similar across Europe and resembles that of other conifer-feeding beetles. <i>Molecular Ecology</i> , 2016, 25, 4014-4031.	3.9	75
54	Chemical parameters and bacterial communities associated with larval habitats of <i>Anopheles</i> , <i>Culex</i> and <i>Aedes</i> mosquitoes (Diptera: Culicidae) in western Kenya. <i>International Journal of Tropical Insect Science</i> , 2016, 36, 146-160.	1.0	27

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55	Potential applications of insect symbionts in biotechnology. Applied Microbiology and Biotechnology, 2016, 100, 1567-1577.	3.6	132
56	Bacterial and fungal symbionts of parasitic <i>Dendroctonus</i> bark beetles. FEMS Microbiology Ecology, 2016, 92, fiw129.	2.7	36
57	Symbiotic <i>Streptomyces</i> Provide Antifungal Defense in Solitary Wasps. Advances in Environmental Microbiology, 2016, , 207-238.	0.3	2
58	A novel intracellular mutualistic bacterium in the invasive ant <i>Cardiocondyla obscurior</i> . ISME Journal, 2016, 10, 376-388.	9.8	67
59	Linking metabolite production to taxonomic identity in environmental samples by (MA)LDI-FISH. ISME Journal, 2016, 10, 527-531.	9.8	32
60	Variability of Bacterial Communities in the Moth <i>Heliothis virescens</i> Indicates Transient Association with the Host. PLoS ONE, 2016, 11, e0154514.	2.5	89
61	Comparative morphology of the postpharyngeal gland in the Philanthinae (Hymenoptera, Crabronidae) and the evolution of an antimicrobial brood protection mechanism. BMC Evolutionary Biology, 2015, 15, 291.	3.2	7
62	Evolutionary transition in symbiotic syndromes enabled diversification of phytophagous insects on an imbalanced diet. ISME Journal, 2015, 9, 2587-2604.	9.8	63
63	Symbiont transmission entails the risk of parasite infection. Biology Letters, 2015, 11, 20150840.	2.3	27
64	Defensive symbioses of animals with prokaryotic and eukaryotic microorganisms. Natural Product Reports, 2015, 32, 904-936.	10.3	329
65	An out-of-body experience: the extracellular dimension for the transmission of mutualistic bacteria in insects. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142957.	2.6	222
66	Microbial Communities of Three Sympatric Australian Stingless Bee Species. PLoS ONE, 2014, 9, e105718.	2.5	56
67	Transcriptomic Immune Response of the Cotton Stainer <i>Dysdercus fasciatus</i> to Experimental Elimination of Vitamin-Supplementing Intestinal Symbionts. PLoS ONE, 2014, 9, e114865.	2.5	18
68	The composition of cuticular compounds indicates body parts, sex and age in the model butterfly <i>Bicyclus anynana</i> (Lepidoptera). Frontiers in Ecology and Evolution, 2014, 2, .	2.2	29
69	Vitamin supplementation by gut symbionts ensures metabolic homeostasis in an insect host. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20141838.	2.6	132
70	Biogeography of a defensive symbiosis. Communicative and Integrative Biology, 2014, 7, e993265.	1.4	5
71	Defensive microbial symbionts in <i>Hymenoptera</i> . Functional Ecology, 2014, 28, 315-327.	3.6	127
72	Unearthing carrion beetles' microbiome: characterization of bacterial and fungal hindgut communities across the <i>Scarabaeidae</i> . Molecular Ecology, 2014, 23, 1251-1267.	3.9	77

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73	New Synthesis: The Chemistry of Partner Choice in Insect-Microbe Mutualisms. <i>Journal of Chemical Ecology</i> , 2014, 40, 99-99.	1.8	22
74	What makes you a potential partner? Insights from convergently evolved ant–ant symbioses. <i>Chemoecology</i> , 2014, 24, 105-119.	1.1	19
75	Mutualistic ants as an indirect defence against leaf pathogens. <i>New Phytologist</i> , 2014, 202, 640-650.	7.3	42
76	Partner choice and fidelity stabilize coevolution in a Cretaceous-age defensive symbiosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6359-6364.	7.1	111
77	Cultivation reveals physiological diversity among defensive <i>Streptomyces philanthi</i> ™ symbionts of beewolf digger wasps (Hymenoptera, Crabronidae). <i>BMC Microbiology</i> , 2014, 14, 202.	3.3	25
78	Dynamics of symbiont-mediated antibiotic production reveal efficient long-term protection for beewolf offspring. <i>Frontiers in Zoology</i> , 2013, 10, 3.	2.0	40
79	Maternal and Environmental Effects on Symbiont-Mediated Antimicrobial Defense. <i>Journal of Chemical Ecology</i> , 2013, 39, 978-988.	1.8	16
80	Worker self-restraint and policing maintain the queen’s reproductive monopoly in a pseudomyrmecine ant. <i>Behavioral Ecology and Sociobiology</i> , 2013, 67, 571-581.	1.4	4
81	Role of Symbiotic Bacteria in the Growth and Development of the Sunn Pest, <i>Eurygaster integriceps</i> . <i>Journal of Insect Science</i> , 2013, 13, 1-12.	0.9	31
82	Actinobacteria as essential symbionts in firebugs and cotton stainers ( <i>Hemiptera</i> , <i>Pyrhocoridae</i> ). <i>Environmental Microbiology</i> , 2013, 15, 1956-1968.	3.8	110
83	Morphology, Chemistry and Function of the Postpharyngeal Gland in the South American Digger Wasps <i>Trachypus boharti</i> and <i>Trachypus elongatus</i> . <i>PLoS ONE</i> , 2013, 8, e82780.	2.5	11
84	Refining the Roots of the Beewolf- <i>Streptomyces</i> Symbiosis: Antennal Symbionts in the Rare Genus <i>Philanthinus</i> (Hymenoptera, Crabronidae). <i>Applied and Environmental Microbiology</i> , 2012, 78, 822-827.	3.1	60
85	Geographical and ecological stability of the symbiotic midgut microbiota in European firebugs, <i>Pyrhocoris apterus</i> ( <i>Hemiptera</i> , <i>Pyrhocoridae</i> ). <i>Molecular Ecology</i> , 2012, 21, 6134-6151.	3.9	121
86	Cuticular Hydrocarbons of the South American Fruit Fly <i>Anastrepha fraterculus</i> : Variability with Sex and Age. <i>Journal of Chemical Ecology</i> , 2012, 38, 1133-1142.	1.8	40
87	Accelerated Evolution of Mitochondrial but Not Nuclear Genomes of Hymenoptera: New Evidence from Crabronid Wasps. <i>PLoS ONE</i> , 2012, 7, e32826.	2.5	55
88	<i>Streptomyces</i> as symbionts: an emerging and widespread theme?. <i>FEMS Microbiology Reviews</i> , 2012, 36, 862-876.	8.6	365
89	Honeybees and bumblebees share similar bacterial symbionts. <i>Molecular Ecology</i> , 2011, 20, 439-440.	3.9	7
90	Rapid Identification of Insect Cuticular Hydrocarbons Using Gas Chromatography–Ion-Trap Mass Spectrometry. <i>Journal of Chemical Ecology</i> , 2011, 37, 420-427.	1.8	19

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91	Is the postpharyngeal gland of a solitary digger wasp homologous to ants? Evidence from chemistry and physiology. <i>Insectes Sociaux</i> , 2010, 57, 285-291.	1.2	17
92	Life cycle and population dynamics of a protective insect symbiont reveal severe bottlenecks during vertical transmission. <i>Evolutionary Ecology</i> , 2010, 24, 463-477.	1.2	56
93	Symbiotic streptomycetes provide antibiotic combination prophylaxis for wasp offspring. <i>Nature Chemical Biology</i> , 2010, 6, 261-263.	8.0	323
94	Larval Rearing Temperature Influences Amount and Composition of the Marking Pheromone of the Male Beewolf, <i>Philanthus triangulum</i> . <i>Journal of Insect Science</i> , 2010, 10, 1-16.	1.5	11
95	Symbiotic streptomycetes in antennal glands of the South American digger wasp genus <i>Trachypus</i> (Hymenoptera, Crabronidae). <i>Physiological Entomology</i> , 2010, 35, 196-200.	1.5	37
96	Hydrocarbons in the antennal gland secretion of female European beewolves, <i>Philanthus triangulum</i> (Hymenoptera, Crabronidae). <i>Chemoecology</i> , 2009, 19, 219-225.	1.1	10
97	Localization and transmission route of <i>Coriobacterium glomerans</i> , the endosymbiont of pyrrhocorid bugs. <i>FEMS Microbiology Ecology</i> , 2009, 69, 373-383.	2.7	101
98	Actinobacteria as mutualists: general healthcare for insects?. <i>Trends in Microbiology</i> , 2009, 17, 529-535.	7.7	238
99	The Chemistry of the Postpharyngeal Gland of Female European Beewolves. <i>Journal of Chemical Ecology</i> , 2008, 34, 575-583.	1.8	25
100	The odor of origin: kinship and geographical distance are reflected in the marking pheromone of male beewolves ( <i>Philanthus triangulum</i> F., Hymenoptera, Crabronidae). <i>BMC Ecology</i> , 2007, 7, 11.	3.0	5
101	Morphology and ultrastructure of a bacteria cultivation organ: The antennal glands of female European beewolves, <i>Philanthus triangulum</i> (Hymenoptera, Crabronidae). <i>Arthropod Structure and Development</i> , 2007, 36, 1-9.	1.4	49
102	The scent of senescence: Age-dependent changes in the composition of the cephalic gland secretion of the male European beewolf, <i>Philanthus triangulum</i> . <i>Journal of Insect Science</i> , 2006, 6, 1-9.	1.5	12
103	â€Candidatus <i>Streptomyces philanthi</i> â€™™, an endosymbiotic streptomycete in the antennae of <i>Philanthus</i> digger wasps. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2006, 56, 1403-1411.	1.7	124
104	Symbiotic Bacteria Protect Wasp Larvae from Fungal Infestation. <i>Current Biology</i> , 2005, 15, 475-479.	3.9	408
105	Symbiotic Bacteria Protect Wasp Larvae from Fungal Infestation. <i>Current Biology</i> , 2005, 15, 882.	3.9	6
106	Lebensweise und Morphometrie der Chinesischen Gottesanbeterin <i>Tenodera aridifolia sinensis</i> (Blattopteroidea: Mantodea). <i>Entomologia Generalis</i> , 2005, 28, 1-16.	3.1	7
107	Polymorphic microsatellite markers for a solitary digger wasp, the European beewolf ( <i>Philanthus</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.7	1