Cameron R Currie

List of Publications by Year
in descending order

102 papers	7,670 citations	53794 45 h-index	56724 83 g-index
104 all docs	104 docs citations	104 times ranked	6714 citing authors

#	Article	IF	Citations
1	Fungus-growing ants use antibiotic-producing bacteria to control garden parasites. Nature, 1999, 398, 701-704.	27.8	705
2	Bacterial Protection of Beetle-Fungus Mutualism. Science, 2008, 322, 63-63.	12.6	411
3	Dentigerumycin: a bacterial mediator of an ant-fungus symbiosis. Nature Chemical Biology, 2009, 5, 391-393.	8.0	360
4	Symbiotic Nitrogen Fixation in the Fungus Gardens of Leaf-Cutter Ants. Science, 2009, 326, 1120-1123.	12.6	310
5	Coevolved Crypts and Exocrine Glands Support Mutualistic Bacteria in Fungus-Growing Ants. Science, 2006, 311, 81-83.	12.6	296
6	A Community of Ants, Fungi, and Bacteria: A Multilateral Approach to Studying Symbiosis. Annual Review of Microbiology, 2001, 55, 357-380.	7.3	272
7	Evolution and Ecology ofActinobacteriaand Their Bioenergy Applications. Annual Review of Microbiology, 2016, 70, 235-254.	7.3	249
8	Weeding and grooming of pathogens in agriculture by ants. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 1033-1039.	2.6	246
9	The antimicrobial potential of Streptomyces from insect microbiomes. Nature Communications, 2019, 10, 516.	12.8	222
10	An Insect Herbivore Microbiome with High Plant Biomass-Degrading Capacity. PLoS Genetics, 2010, 6, e1001129.	3.5	213
11	Minimization of chloroplast contamination in 16S rRNA gene pyrosequencing of insect herbivore bacterial communities. Journal of Microbiological Methods, 2013, 95, 149-155.	1.6	181
12	Cellulose-degrading bacteria associated with the invasive woodwasp Sirex noctilio. ISME Journal, 2011, 5, 1323-1331.	9.8	154
13	Specificity in the symbiotic association between fungus-growing ants and protective Pseudonocardia bacteria. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 1814-1822.	2.6	135
14	Metagenomic and metaproteomic insights into bacterial communities in leaf-cutter ant fungus gardens. ISME Journal, 2012, 6, 1688-1701.	9.8	126
15	Chemical Analyses of Wasp-Associated Streptomyces Bacteria Reveal a Prolific Potential for Natural Products Discovery. PLoS ONE, 2011, 6, e16763.	2.5	125
16	Phylogenetic analysis of mutualistic filamentous bacteria associated with fungus-growing ants. Canadian Journal of Microbiology, 2005, 51, 441-446.	1.7	122
17	Defense contracts: molecular protection in insect-microbe symbioses. Chemical Society Reviews, 2018, 47, 1638-1651.	38.1	122
18	Microbes are trophic analogs of animals. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15119-15124.	7.1	113

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19	Lateral Gene Transfer Dynamics in the Ancient Bacterial Genus Streptomyces. MBio, 2017, 8, .	4.1	110
20	Aerobic deconstruction of cellulosic biomass by an insect-associated Streptomyces. Scientific Reports, 2013, 3, 1030.	3.3	107
21	Lignocellulose pretreatment in a fungus-cultivating termite. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4709-4714.	7.1	107
22	A marine microbiome antifungal targets urgent-threat drug-resistant fungi. Science, 2020, 370, 974-978.	12.6	102
23	Coculture of Marine Invertebrate-Associated Bacteria and Interdisciplinary Technologies Enable Biosynthesis and Discovery of a New Antibiotic, Keyicin. ACS Chemical Biology, 2017, 12, 3093-3102.	3.4	98
24	Functional metagenomics reveals abundant polysaccharide-degrading gene clusters and cellobiose utilization pathways within gut microbiota of a wood-feeding higher termite. ISME Journal, 2019, 13, 104-117.	9.8	93
25	SANDPUMA: ensemble predictions of nonribosomal peptide chemistry reveal biosynthetic diversity across Actinobacteria. Bioinformatics, 2017, 33, 3202-3210.	4.1	89
26	Selvamicin, an atypical antifungal polyene from two alternative genomic contexts. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12940-12945.	7.1	88
27	Variable genetic architectures produce virtually identical molecules in bacterial symbionts of fungus-growing ants. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13150-13154.	7.1	86
28	Stingless Bee Larvae Require Fungal Steroid to Pupate. Scientific Reports, 2018, 8, 1122.	3.3	85
29	Microbial Community Structure of Leaf-Cutter Ant Fungus Gardens and Refuse Dumps. PLoS ONE, 2010, 5, e9922.	2.5	84
30	Natalamycin A, an ansamycin from a termite-associated Streptomyces sp.. Chemical Science, 2014, 5, 4333-4338.	7.4	83
31	A community resource for paired genomic and metabolomic data mining. Nature Chemical Biology, 2021, 17, 363-368.	8.0	81
32	Variation inPseudonocardiaantibiotic defence helps govern parasiteâ€induced morbidity inAcromyrmexleafâ€cutting ants. Environmental Microbiology Reports, 2010, 2, 534-540.	2.4	77
33	Bacterial symbionts in agricultural systems provide a strategic source for antibiotic discovery. Journal of Antibiotics, 2014, 67, 53-58.	2.0	77
34	Emerging evolutionary paradigms in antibiotic discovery. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 257-271.	3.0	76
35	Convergent evolution of complex structures for antâ€“bacterial defensive symbiosis in fungus-farming ants. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10720-10725.	7.1	74
36	Small genome of the fungus Escovopsis weberi , a specialized disease agent of ant agriculture. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3567-3572.	7.1	71

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37	Cellulolytic Streptomyces Strains Associated with Herbivorous Insects Share a Phylogenetically Linked Capacity To Degrade Lignocellulose. Applied and Environmental Microbiology, 2014, 80, 4692-4701.	3.1	70
38	Evolution of substrate specificity in bacterial AA10 lytic polysaccharide monooxygenases. Biotechnology for Biofuels, 2014, 7, 109.	6.2	69
39	Evolution of High Cellulolytic Activity in Symbiotic Streptomyces through Selection of Expanded Gene Content and Coordinated Gene Expression. PLoS Biology, 2016, 14, e1002475.	5.6	68
40	Pollen-borne microbes shape bee fitness. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182894.	2.6	67
41	Tryptorubin A: A Polycyclic Peptide from a Fungus-Derived Streptomycete. Journal of the American Chemical Society, 2017, 139, 12899-12902.	13.7	58
42	Competition among Nasal Bacteria Suggests a Role for Siderophore-Mediated Interactions in Shaping the Human Nasal Microbiota. Applied and Environmental Microbiology, 2019, 85, .	3.1	57
43	Pathogenicity of Escovopsis weberi: The Parasite of the Attine Ant-Microbe Symbiosis Directly Consumes the Ant-Cultivated Fungus. Mycologia, 2004, 96, 955.	1.9	51
44	The Evolutionary Innovation of Nutritional Symbioses in Leaf-Cutter Ants. Insects, 2012, 3, 41-61.	2.2	51
45	Pyrazines from bacteria and ants: convergent chemistry within an ecological niche. Scientific Reports, 2018, 8, 2595.	3.3	51
46	Pathogenicity of Escovopsis weberi: The parasite of the attine ant-microbe symbiosis directly consumes the ant-cultivated fungus. Mycologia, 2004, 96, 955-9.	1.9	46
47	Antagonistic Bacterial Interactions Help Shape Host-Symbiont Dynamics within the Fungus-Growing Ant-Microbe Mutualism. PLoS ONE, 2007, 2, e960.	2.5	44
48	A Rebeccamycin Analog Provides Plasmid-Encoded Niche Defense. Journal of the American Chemical Society, 2015, 137, 14272-14274.	13.7	44
49	Coordination of fungal biofilm development by extracellular vesicle cargo. Nature Communications, 2021, 12, 6235.	12.8	42
50	Taxonomic and Metabolic Incongruence in the Ancient Genus Streptomyces. Frontiers in Microbiology, 2019, 10, 2170.	3.5	40
51	Bacteria influence mountain pine beetle brood development through interactions with symbiotic and antagonistic fungi: implications for climate-driven host range expansion. Oecologia, 2015, 179, 467-485.	2.0	39
52	The fungal cultivar of leafâ€cutter ants produces specific enzymes in response to different plant substrates. Molecular Ecology, 2016, 25, 5795-5805.	3.9	37
53	Symbiont-Mediated Digestion of Plant Biomass in Fungus-Farming Insects. Annual Review of Entomology, 2021, 66, 297-316.	11.8	37
54	Interaction between Workers during a Short Time Window Is Required for Bacterial Symbiont Transmission in Acromyrmex Leaf-Cutting Ants. PLoS ONE, 2014, 9, e103269.	2.5	36

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55	The Population Structure of Antibiotic-Producing Bacterial Symbionts ofApterostigma dentigerumAnts: Impacts of Coevolution and Multipartite Symbiosis. American Naturalist, 2012, 180, 604-617.	2.1	35
56	Linear Peptides Are the Major Products of a Biosynthetic Pathway That Encodes for Cyclic Depsipeptides. Organic Letters, 2017, 19, 1772-1775.	4.6	35
57	Biomineral armor in leaf-cutter ants. Nature Communications, 2020, 11, 5792.	12.8	34
58	Evidence for Widespread Associations between Neotropical Hymenopteran Insects and Actinobacteria. Frontiers in Microbiology, 2017, 8, 2016.	3.5	31
59	Gut Microbial and Metabolic Responses to Salmonella enterica Serovar Typhimurium and Candida albicans. MBio, 2018, 9, .	4.1	31
60	Fungus-growing insects host a distinctive microbiota apparently adapted to the fungiculture environment. Scientific Reports, 2020, 10, 12384.	3.3	31
61	Laryngotracheal Microbiota in Adult Laryngotracheal Stenosis. MSphere, 2019, 4, .	2.9	30
62	Bacteria Contribute to Plant Secondary Compound Degradation in a Generalist Herbivore System. MBio, 2020, 11, .	4.1	30
63	Cellulose-Enriched Microbial Communities from Leaf-Cutter Ant (Atta colombica) Refuse Dumps Vary in Taxonomic Composition and Degradation Ability. PLoS ONE, 2016, 11, e0151840.	2.5	29
64	Enrichment and Broad Representation of Plant Biomass-Degrading Enzymes in the Specialized Hyphal Swellings of Leucoagaricus gongylophorus, the Fungal Symbiont of Leaf-Cutter Ants. PLoS ONE, 2015, 10, e0134752.	2.5	28
65	Substrate Shift Reveals Roles for Members of Bacterial Consortia in Degradation of Plant Cell Wall Polymers. Frontiers in Microbiology, 2018, 9, 364.	3.5	27
66	Pyonitrins Aâ€“D: Chimeric Natural Products Produced by Pseudomonas protegens. Journal of the American Chemical Society, 2019, 141, 17098-17101.	13.7	27
67	Microbial community modulates growth of symbiotic fungus required for stingless bee metamorphosis. PLoS ONE, 2019, 14, e0219696.	2.5	26
68	Microbial Diversity Associated with the Pollen Stores of Captive-Bred Bumble Bee Colonies. Insects, 2020, 11, 250.	2.2	25
69	Imaging with Mass Spectrometry of Bacteria on the Exoskeleton of Fungus-Growing Ants. ACS Chemical Biology, 2017, 12, 1980-1985.	3.4	24
70	Specialized Metabolites Reveal Evolutionary History and Geographic Dispersion of a Multilateral Symbiosis. ACS Central Science, 2021, 7, 292-299.	11.3	23
71	Cycloheximide-Producing Streptomyces Associated With Xyleborinus saxesenii and Xyleborus affinis Fungus-Farming Ambrosia Beetles. Frontiers in Microbiology, 2020, 11, 562140.	3.5	22
72	Local Adaptation of Bacterial Symbionts within a Geographic Mosaic of Antibiotic Coevolution. Applied and Environmental Microbiology, 2019, 85, .	3.1	21

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73	Major changes in microbial diversity and community composition across gut sections of a juvenile Panchlora cockroach. PLoS ONE, 2017, 12, e0177189.	2.5	20
74	Madurastatin D1 and D2, Oxazoline Containing Siderophores Isolated from an Actinomadura sp.. Organic Letters, 2019, 21, 6275-6279.	4.6	19
75	Biochemical Properties and Atomic Resolution Structure of a Proteolytically Processed Î²-Mannanase from Cellulolytic Streptomyces sp. SirexAA-E. PLoS ONE, 2014, 9, e94166.	2.5	18
76	Experimental Microbiomes: Models Not to Scale. MSystems, 2019, 4, .	3.8	17
77	Chemical Exchanges between Multilateral Symbionts. Organic Letters, 2021, 23, 1648-1652.	4.6	16
78	Pollen Streptomyces Produce Antibiotic That Inhibits the Honey Bee Pathogen Paenibacillus larvae. Frontiers in Microbiology, 2021, 12, 632637.	3.5	15
79	Antileishmanial macrolides from ant-associated Streptomyces sp. ISID311. Bioorganic and Medicinal Chemistry, 2021, 32, 116016.	3.0	14
80	Bacillibactins E and F from a Marine Sponge-Associated Bacillus sp.. Journal of Natural Products, 2021, 84, 136-141.	3.0	13
81	Insights Into the Ecological Role of Pseudomonas spp. in an Ant-plant Symbiosis. Frontiers in Microbiology, 2021, 12, 621274.	3.5	13
82	A highâ€quality carabid genome assembly provides insights into beetle genome evolution and cold adaptation. Molecular Ecology Resources, 2021, 21, 2145-2165.	4.8	13
83	Empirical, Metagenomic, and Computational Techniques Illuminate the Mechanisms by which Fungicides Compromise Bee Health. Journal of Visualized Experiments, 2017, , .	0.3	12
84	MS-Derived Isotopic Fine Structure Reveals Forazoline A as a Thioketone-Containing Marine-Derived Natural Product. Organic Letters, 2020, 22, 1275-1279.	4.6	12
85	Unique Honey Bee (Apis mellifera) Hive Component-Based Communities as Detected by a Hybrid of Phospholipid Fatty-Acid and Fatty-Acid Methyl Ester Analyses. PLoS ONE, 2015, 10, e0121697.	2.5	12
86	Symbiont-Mediated Protection of Acromyrmex Leaf-Cutter Ants from the Entomopathogenic Fungus Metarhizium anisopliae. MBio, 2021, 12, e0188521.	4.1	12
87	From Plants to Ants: Fungal Modification of Leaf Lipids for Nutrition and Communication in the Leaf-Cutter Ant Fungal Garden Ecosystem. MSystems, 2021, 6, .	3.8	11
88	Convergent evolution of signal-structure interfaces for maintaining symbioses. Current Opinion in Microbiology, 2019, 50, 71-78.	5.1	10
89	Whole-Genome Sequence of Bacillus sp. SDLI1, Isolated from the Social Bee Scaptotrigona depilis. Genome Announcements, 2016, 4, .	0.8	9
90	Metagenomics Reveals Diet-Specific Specialization of Bacterial Communities in Fungus Gardens of Grass- and Dicot-Cutter Ants. Frontiers in Microbiology, 2020, 11, 570770.	3.5	8

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91	Experimental Warming Reduces Survival, Cold Tolerance, and Gut Prokaryotic Diversity of the Eastern Subterranean Termite, Reticulitermes flavipes (Kollar). Frontiers in Microbiology, 2021, 12, 632715.	3.5	8
92	Burkholderia from Fungus Gardens of Fungus-Growing Ants Produces Antifungals That Inhibit the Specialized Parasite Escovopsis. Applied and Environmental Microbiology, 2021, 87, e0017821.	3.1	8
93	Bacillimidazoles Aâ˜F, Imidazolium-Containing Compounds Isolated from a Marine Bacillus. Marine Drugs, 2022, 20, 43.	4.6	8
94	Complete Genome Sequence of Rhodococcus sp. Strain WMMA185, a Marine Sponge-Associated Bacterium. Genome Announcements, 2016, 4, .	0.8	6
95	Mannose- and Mannobiose-Specific Responses of the Insect-Associated Cellulolytic Bacterium Streptomyces sp. Strain SirexAA-E. Applied and Environmental Microbiology, 2021, 87, e0271920.	3.1	6
96	High Throughput Co-culture Assays for the Investigation of Microbial Interactions. Journal of Visualized Experiments, 2019, , .	0.3	5
97	Long-Term Cellulose Enrichment Selects for Highly Cellulolytic Consortia and Competition for Public Goods. MSystems, 2022, 7, e0151921.	3.8	5
98	Draft Genome Sequence of Micromonospora sp. Strain WMMB235, a Marine Ascidian-Associated Bacterium. Genome Announcements, 2017, 5, .	0.8	3
99	Complete Genome Sequence of Dietzia sp. Strain WMMA184, a Marine Coral-Associated Bacterium. Genome Announcements, 2018, 6, .	0.8	3
100	Biogeography of Bacterial Communities and Specialized Metabolism in Human Aerodigestive Tract Microbiomes. Microbiology Spectrum, 2021, 9, e0166921.	3.0	3
101	Symbiosis research, technology, and education: Proceedings of the 6th International Symbiosis Society Congress held in Madison Wisconsin, USA, August 2009. Symbiosis, 2010, 51, 1-12.	2.3	1
102	Draft Genome Sequence of Micromonospora sp. Strain WMMA1996, a Marine Sponge-Associated Bacterium. Genome Announcements, 2018, 6, .	0.8	1